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## **1.1 zap 1.10.0**

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## 1.13 pkg-browser 0.0.0-20210911075715-681adb594b8

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## 1.14 form3tech-oss-jwt-go 3.2.5+incompatible

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# 1.16 json-iterator-go 1.1.12

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# 1.17 modern-go-reflect2 1.0.2

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## 1.20 mux 1.8.0

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## 1.21 gorilla-handlers 1.5.1



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## 1.22 httpsnoop 1.0.1

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## 1.23 grpc-ecosystem-grpc-gateway 1.16.0

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## 1.25 go-uber-org-multierr 1.8.0

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## 1.26 godbus 0.0.0-20190726142602-4481cbc300e2

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## 1.27 [github.com/gsterjov/go-libsecret](https://github.com/gsterjov/go-libsecret) 0.0.0-20161001094733-a6f4afe4910c

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compiler/cpp/src/thrift/generate/t\_netstd\_generator.cc  
compiler/cpp/src/thrift/generate/t\_eri\_generator.cc  
compiler/cpp/src/thrift/generate/t\_hs\_generator.cc  
compiler/cpp/src/thrift/generate/t\_java\_generator.cc  
compiler/cpp/src/thrift/generate/t\_ocaml\_generator.cc  
compiler/cpp/src/thrift/generate/t\_perl\_generator.cc  
compiler/cpp/src/thrift/generate/t\_php\_generator.cc  
compiler/cpp/src/thrift/generate/t\_py\_generator.cc  
compiler/cpp/src/thrift/generate/t\_rb\_generator.cc  
compiler/cpp/src/thrift/generate/t\_st\_generator.cc  
compiler/cpp/src/thrift/generate/t\_xsd\_generator.cc  
compiler/cpp/src/thrift/main.cc  
compiler/cpp/src/thrift/parse/t\_field.h  
compiler/cpp/src/thrift/parse/t\_program.h  
compiler/cpp/src/thrift/platform.h  
compiler/cpp/src/thrift/thrift.ll  
compiler/cpp/src/thrift/thrift.y  
lib/netstd/Thrift/Protocol/TBinaryProtocol.cs  
lib/netstd/Thrift/Protocol/Entities/TField.cs  
lib/netstd/Thrift/Protocol/Entities/TList.cs  
lib/netstd/Thrift/Protocol/Entities/TMap.cs  
lib/netstd/Thrift/Protocol/Entities/TMessage.cs  
lib/netstd/Thrift/Protocol/Entities/TMessageType.cs  
lib/netstd/Thrift/Protocol/TProtocol.cs  
lib/netstd/Thrift/Protocol/TProtocolException.cs  
lib/netstd/Thrift/Protocol/TProtocolFactory.cs  
lib/netstd/Thrift/Protocol/Utilities/TProtocolUtil.cs  
lib/netstd/Thrift/Protocol/Entities/TSet.cs  
lib/netstd/Thrift/Protocol/Entities/TStruct.cs  
lib/netstd/Thrift/Protocol/Entities/TType.cs  
lib/netstd/Thrift/Server/TServer.cs  
lib/netstd/Thrift/Server/TSimpleAsyncServer.cs  
lib/netstd/Thrift/Server/TThreadPoolAsyncServer.cs  
lib/netstd/Thrift/TApplicationException.cs  
lib/netstd/Thrift/Thrift.csproj  
lib/netstd/Thrift.sln  
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lib/netstd/Thrift/Transport/Server/TServerTransport.cs  
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lib/netstd/Thrift/Transport/Client/TStreamTransport.cs  
lib/netstd/Thrift/Transport/TTransport.cs  
lib/netstd/Thrift/Transport/TTransportException.cs  
lib/netstd/Thrift/Transport/TTransportFactory.cs

lib/netstd/Tests/Thrift.PublicInterfaces.Compile.Tests/Properties/AssemblyInfo.cs  
lib/netstd/Tests/Thrift.PublicInterfaces.Compile.Tests/Thrift.PublicInterfaces.Compile.Tests.csproj  
lib/rb/lib/thrift.rb  
lib/st/README.md  
lib/st/thrift.st  
lib/cpp/test/OptionalRequiredTest.cpp  
test/OptionalRequiredTest.thrift  
test/ThriftTest.thrift

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```

-----  
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```
/*
  json_parse.js
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*/
(By Douglas Crockford <douglas@crockford.com>)
```

-----  
For lib/cpp/src/thrift/windows/SocketPair.cpp

```
/* socketpair.c
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*/
```

-----  
For lib/py/compat/win32/stdint.h

```
// ISO C9x compliant stdint.h for Microsoft Visual Studio
// Based on ISO/IEC 9899:TC2 Committee draft (May 6, 2005) WG14/N1124
//
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//
//////////////////////////////////////////////////////////////////
```

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in t\_html\_generator.h

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\*

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## 1.33 github.com/mtibben/percent 0.2.1

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## 1.34 x-errors 0.0.0-20220907171357-04be3eba64a2

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## 1.37 zeebo-xxh3 1.0.2

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## 1.39 go-playground-validator 8.18.2

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# 1.40 aws-aws-sdk-go-v2-aws-protocol-eventstream 1.4.10

## 1.40.1 Available under license :

```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
    "context"
    awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
    "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
    "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
    "github.com/aws/smithy-go/middleware"
    smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists received licenses.
func (c *Client) ListReceivedLicenses(ctx context.Context, params *ListReceivedLicensesInput, optFns
    ..func(*Options)) (*ListReceivedLicensesOutput, error) {
    if params == nil {
        params = &ListReceivedLicensesInput{}
    }

    result, metadata, err := c.invokeOperation(ctx, "ListReceivedLicenses", params, optFns,
    c.addOperationListReceivedLicensesMiddlewares)
    if err != nil {
        return nil, err
    }

    out := result.(*ListReceivedLicensesOutput)
    out.ResultMetadata = metadata
    return out, nil
}

type ListReceivedLicensesInput struct {

    // Filters to scope the results. The following filters are supported:
    //
    //
    // *
    // ProductSKU
    //
    // * Status
    //

```

```

// * Fingerprint
//
// * IssuerName
//
// * Beneficiary
Filters []types.Filter

// Amazon Resource Names (ARNs) of the licenses.
LicenseArns []string

// Maximum number of results to return in a single call.
MaxResults *int32

// Token for the next set of results.
NextToken *string

noSmithyDocumentSerde
}

type ListReceivedLicensesOutput struct {

// Received license details.
Licenses []types.GrantedLicense

// Token for the next set of results.
NextToken *string

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationListReceivedLicensesMiddlewares(stack *middleware.Stack, options Options) (err
error) {
err = stack.Serialize.Add(&awsAwsjson11_serializeOpListReceivedLicenses{ }, middleware.After)
if err != nil {
return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListReceivedLicenses{ }, middleware.After)
if err != nil {
return
err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
return err
}
if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {

```

```

return err
}
if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
return err
}
if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
return err
}
if err = addRetryMiddlewares(stack, options); err != nil {
return err
}
if err = addHTTPSignerV4Middleware(stack, options); err != nil {
return err
}
if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
return err
}
if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
return err
}
if err = addClientUserAgent(stack); err != nil {
return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err !=
nil {
return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListReceivedLicenses(options.Region),
middleware.Before); err != nil {
return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
return err
}
return nil
}

```

```

func newServiceMetadataMiddleware_opListReceivedLicenses(region string)
*awsmiddleware.RegisterServiceMetadata {
return &awsmiddleware.RegisterServiceMetadata{
Region:    region,
ServiceID: ServiceID,
SigningName: "license-manager",
OperationName: "ListReceivedLicenses",
}
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
"context"
awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
"github.com/aws/aws-sdk-go-v2/aws/signer/v4"
"github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
"github.com/aws/smithy-go/middleware"
smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license for offline use.
func (c *Client) CheckoutBorrowLicense(ctx context.Context, params *CheckoutBorrowLicenseInput, optFns
...func(*Options)) (*CheckoutBorrowLicenseOutput, error) {
if params == nil {
params = &CheckoutBorrowLicenseInput{}
}

result, metadata, err := c.invokeOperation(ctx, "CheckoutBorrowLicense", params, optFns,
c.addOperationCheckoutBorrowLicenseMiddlewares)
if err != nil {
return nil, err
}

out := result.(*CheckoutBorrowLicenseOutput)
out.ResultMetadata = metadata
return out, nil
}

type CheckoutBorrowLicenseInput struct {

// Unique, case-sensitive identifier that you
provide to ensure the idempotency of
// the request.
//
// This member is required.

```

```

ClientToken *string

// Digital signature method. The possible value is JSON Web Signature (JWS)
// algorithm PS384. For more information, see RFC 7518 Digital Signature with
// RSASSA-PSS (https://tools.ietf.org/html/rfc7518#section-3.5).
//
// This member is required.
DigitalSignatureMethod types.DigitalSignatureMethod

// License entitlements. Partial checkouts are not supported.
//
// This member is required.
Entitlements []types.EntitlementData

// Amazon Resource Name (ARN) of the license. The license must use the borrow
// consumption configuration.
//
// This member is required.
LicenseArn *string

// Information about constraints.
CheckoutMetadata []types.Metadata

// Node ID.
NodeId *string

noSmithyDocumentSerde
}

type CheckoutBorrowLicenseOutput struct {

// Information about constraints.
CheckoutMetadata []types.Metadata

// Allowed license entitlements.
EntitlementsAllowed
[]types.EntitlementData

// Date and time at which the license checkout expires.
Expiration *string

// Date and time at which the license checkout is issued.
IssuedAt *string

// Amazon Resource Name (ARN) of the license.
LicenseArn *string

// License consumption token.

```

```

LicenseConsumptionToken *string

// Node ID.
NodeId *string

// Signed token.
SignedToken *string

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutBorrowLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutBorrowLicense{ }, middleware.After)
if err != nil {
return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutBorrowLicense{ }, middleware.After)
if err != nil {
return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
return err
}
if err = awsmiddleware.AddClientRequestIDMiddleware(stack);
err != nil {
return err
}
if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
return err
}
if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
return err
}
if err = addRetryMiddlewares(stack, options); err != nil {
return err
}
if err = addHTTPSignerV4Middleware(stack, options); err != nil {
return err
}
if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
return err
}

```

```

}
if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
    return err
}
if err = addClientUserAgent(stack); err != nil {
    return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = addOpCheckoutBorrowLicenseValidationMiddleware(stack); err != nil {
    return err
}
if err
= stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutBorrowLicense(options.Region),
middleware.Before); err != nil {
    return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
    return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
    return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
    return err
}
return nil
}

```

```

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
return &awsmiddleware.RegisterServiceMetadata{
    Region:    region,
    ServiceID: ServiceID,
    SigningName: "license-manager",
    OperationName: "CheckoutBorrowLicense",
}
}
// Code generated by smithy-go-codegen DO NOT EDIT.

```

```

package licensemanager

```

```

import (
    "context"

```

```

awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
"github.com/aws/aws-sdk-go-v2/aws/signer/v4"
"github.com/aws/smithy-go/middleware"
smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks in the specified license. Check in a license when it is no longer in use.
func (c *Client) CheckInLicense(ctx context.Context, params *CheckInLicenseInput, optFns ...func(*Options))
(*CheckInLicenseOutput, error) {
    if params == nil {
        params = &CheckInLicenseInput{}
    }

    result, metadata, err := c.invokeOperation(ctx, "CheckInLicense", params, optFns,
c.addOperationCheckInLicenseMiddlewares)
    if err != nil {
        return nil, err
    }

    out := result.(*CheckInLicenseOutput)
    out.ResultMetadata = metadata
    return out, nil
}

type CheckInLicenseInput struct {

    // License consumption token.
    //
    // This member is required.
    LicenseConsumptionToken *string

    // License beneficiary.
    Beneficiary
    *string

    noSmithyDocumentSerde
}

type CheckInLicenseOutput struct {
    // Metadata pertaining to the operation's result.
    ResultMetadata middleware.Metadata

    noSmithyDocumentSerde
}

func (c *Client) addOperationCheckInLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
    err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckInLicense{ }, middleware.After)
    if err != nil {

```



```

return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckInLicense{ }, middleware.After)
if err != nil {
return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
return err
}
if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
return err
}
if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
return err
}
if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
return err
}
if err = addRetryMiddlewares(stack,
options); err != nil {
return err
}
if err = addHTTPSignerV4Middleware(stack, options); err != nil {
return err
}
if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
return err
}
if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
return err
}
if err = addClientUserAgent(stack); err != nil {
return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
return err
}
if err = addOpCheckInLicenseValidationMiddleware(stack); err != nil {
return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckInLicense(options.Region),
middleware.Before); err != nil {

```

```

return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
return err
}
if err = addRequestResponseLogging(stack, options); err != nil
{
return err
}
return nil
}

func newServiceMetadataMiddleware_opCheckInLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
return &awsmiddleware.RegisterServiceMetadata{
Region:    region,
ServiceID: ServiceID,
SigningName: "license-manager",
OperationName: "CheckInLicense",
}
}
name: License Scan

on: [pull_request]

jobs:
  licensescan:
    name: License Scan
    runs-on: ubuntu-latest
    strategy:
      matrix:
        python-version: [3.9]

    steps:
      - name: Checkout target
        uses: actions/checkout@v2
        with:
          path: sdkbase
          ref: ${{ github.base_ref }}
      - name: Checkout this ref
        uses: actions/checkout@v2
        with:
          path: new-ref
          fetch-depth: 0
      - name: Get Diff

```

```

    run: git --git-dir ./new-ref/.git diff --name-only --diff-filter=ACMRT ${{ github.event.pull_request.base.sha }}
${{ github.sha }} > refDiffFiles.txt
- name: Get Target Files
  run: git --git-dir ./sdkbase/.git ls-files | grep -xf refDiffFiles.txt - > targetFiles.txt
- name: Checkout scancode
  uses: actions/checkout@v2
  with:
    repository: nexB/scancode-toolkit
    path: scancode-toolkit
    fetch-depth: 1
- name: Set up Python ${{ matrix.python-version }}
  uses: actions/setup-python@v2
  with:
    python-version: ${{ matrix.python-version }}
# ScanCode
- name: Self-configure scancode
  working-directory: ./scancode-toolkit
  run: ./scancode --help
- name: Run Scan code on target
  run: cat targetFiles.txt | while read filename; do echo ./sdkbase/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> old-licenses.txt
- name: Run Scan code on pr ref
  run: cat refDiffFiles.txt | while read filename; do echo ./new-ref/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> new-licenses.txt
# compare
- name: License test
  run: if ! cmp old-licenses.txt new-licenses.txt; then echo "Licenses differ! Failing."; exit -1; else echo "Licenses
are the same. Success."; exit 0; fi
// Code generated by smithy-go-codegen DO NOT EDIT.

```

```
package licensemanager
```

```

import (
    "context"
    awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
    "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
    "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
    "github.com/aws/smithy-go/middleware"
    smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Creates a license.
func (c *Client) CreateLicense(ctx context.Context, params *CreateLicenseInput, optFns ...func(*Options))
(*CreateLicenseOutput, error) {
    if params == nil {
        params = &CreateLicenseInput{}
    }
}

```

```

result, metadata, err := c.invokeOperation(ctx, "CreateLicense", params, optFns,
c.addOperationCreateLicenseMiddlewares)
if err != nil {
    return nil, err
}

out := result.(*CreateLicenseOutput)
out.ResultMetadata = metadata
return out, nil
}

type CreateLicenseInput struct {

    // License beneficiary.
    //
    // This member is required.
    Beneficiary *string

    // Unique, case-sensitive identifier that you provide to ensure
    the idempotency of
    // the request.
    //
    // This member is required.
    ClientToken *string

    // Configuration for consumption of the license. Choose a provisional configuration
    // for workloads running with continuous connectivity. Choose a borrow
    // configuration for workloads with offline usage.
    //
    // This member is required.
    ConsumptionConfiguration *types.ConsumptionConfiguration

    // License entitlements.
    //
    // This member is required.
    Entitlements []types.Entitlement

    // Home Region for the license.
    //
    // This member is required.
    HomeRegion *string

    // License issuer.
    //
    // This member is required.
    Issuer *types.Issuer

    // License name.

```

```

//
// This member is required.
LicenseName *string

// Product name.
//
// This member is required.
ProductName *string

// Product SKU.
//
// This member is required.
ProductSKU *string

// Date and time range during which the license is valid, in ISO8601-UTC format.
//
// This member is required.
Validity *types.DatetimeRange

//
// Information about the license.
LicenseMetadata []types.Metadata

noSmithyDocumentSerde
}

type CreateLicenseOutput struct {

// Amazon Resource Name (ARN) of the license.
LicenseArn *string

// License status.
Status types.LicenseStatus

// License version.
Version *string

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationCreateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
err = stack.Serialize.Add(&awsAwsjson11_serializeOpCreateLicense{ }, middleware.After)
if err != nil {
return err
}
}

```

```

err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCreateLicense{ }, middleware.After)
if err != nil {
    return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
    return err
}
if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
    return err
}
if err = smithyhttp.AddComputeContentLengthMiddleware(stack);
err != nil {
    return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
    return err
}
if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
    return err
}
if err = addRetryMiddlewares(stack, options); err != nil {
    return err
}
if err = addHTTPSignerV4Middleware(stack, options); err != nil {
    return err
}
if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
    return err
}
if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
    return err
}
if err = addClientUserAgent(stack); err != nil {
    return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = addOpCreateLicenseValidationMiddleware(stack); err != nil {
    return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCreateLicense(options.Region),
middleware.Before); err != nil {
    return

```

```

err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
    return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
    return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
    return err
}
return nil
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
return &awsmiddleware.RegisterServiceMetadata{
    Region:    region,
    ServiceID: ServiceID,
    SigningName: "license-manager",
    OperationName: "CreateLicense",
}
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
    "context"
    awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
    "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
    "github.com/aws/aws-sdk-go-v2/service/grafana/types"
    "github.com/aws/smithy-go/middleware"
    smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Removes the Grafana Enterprise license from a workspace.
func (c *Client) DisassociateLicense(ctx context.Context, params *DisassociateLicenseInput, optFns
...func(*Options)) (*DisassociateLicenseOutput, error) {
    if params == nil {
        params = &DisassociateLicenseInput{}
    }

    result, metadata, err := c.invokeOperation(ctx, "DisassociateLicense", params, optFns,
c.addOperationDisassociateLicenseMiddlewares)
    if err != nil {
        return nil, err
    }
}

```

```

out := result.(*DisassociateLicenseOutput)
out.ResultMetadata = metadata
return out, nil
}

type DisassociateLicenseInput struct {

// The type of license to remove from the workspace.
//
// This
member is required.
LicenseType types.LicenseType

// The ID of the workspace to remove the Grafana Enterprise license from.
//
// This member is required.
WorkspaceId *string

noSmithyDocumentSerde
}

type DisassociateLicenseOutput struct {

// A structure containing information about the workspace.
//
// This member is required.
Workspace *types.WorkspaceDescription

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationDisassociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
err = stack.Serialize.Add(&awsRestjson1_serializeOpDisassociateLicense{ }, middleware.After)
if err != nil {
return err
}
err = stack.Deserialize.Add(&awsRestjson1_deserializeOpDisassociateLicense{ }, middleware.After)
if err != nil {
return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
return err
}
if err = awsmiddleware.AddClientRequestIDMiddleware(stack);

```



```

err != nil {
    return err
}
if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
    return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
    return err
}
if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
    return err
}
if err = addRetryMiddlewares(stack, options); err != nil {
    return err
}
if err = addHTTPSignerV4Middleware(stack, options); err != nil {
    return err
}
if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
    return err
}
if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
    return err
}
if err = addClientUserAgent(stack); err != nil {
    return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = addOpDisassociateLicenseValidationMiddleware(stack); err != nil {
    return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDisassociateLicense(options.Region),
middleware.Before); err != nil {
    return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
    return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
    return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
    return err
}

```

```

}
return nil
}

func newServiceMetadataMiddleware_opDisassociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
return &awsmiddleware.RegisterServiceMetadata{
Region:    region,
ServiceID: ServiceID,
SigningName: "grafana",
OperationName: "DisassociateLicense",
}
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
"context"
awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
"github.com/aws/aws-sdk-go-v2/aws/signer/v4"
"github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
"github.com/aws/smithy-go/middleware"
smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license. If the account that created the license is the
// same that is performing the check out, you must specify the account as the
// beneficiary.
func (c *Client) CheckoutLicense(ctx context.Context, params *CheckoutLicenseInput, optFns ...func(*Options))
(*CheckoutLicenseOutput, error) {
if params == nil {
params = &CheckoutLicenseInput{}
}

result, metadata, err := c.invokeOperation(ctx, "CheckoutLicense", params, optFns,
c.addOperationCheckoutLicenseMiddlewares)
if err != nil {
return nil, err
}

out := result.(*CheckoutLicenseOutput)
out.ResultMetadata = metadata
return out, nil
}

type

```

```

CheckoutLicenseInput struct {

    // Checkout type.
    //
    // This member is required.
    CheckoutType types.CheckoutType

    // Unique, case-sensitive identifier that you provide to ensure the idempotency of
    // the request.
    //
    // This member is required.
    ClientToken *string

    // License entitlements.
    //
    // This member is required.
    Entitlements []types.EntitlementData

    // Key fingerprint identifying the license.
    //
    // This member is required.
    KeyFingerprint *string

    // Product SKU.
    //
    // This member is required.
    ProductSKU *string

    // License beneficiary.
    Beneficiary *string

    // Node ID.
    NodeId *string

    noSmithyDocumentSerde
}

```

```

type CheckoutLicenseOutput struct {

    // Checkout type.
    CheckoutType types.CheckoutType

    // Allowed license entitlements.
    EntitlementsAllowed []types.EntitlementData

    // Date and time at which the license checkout expires.
    Expiration *string
}

```

```

// Date and time at which the license checkout is issued.
IssuedAt *string

// Amazon Resource Name
(ARN) of the checkout license.
LicenseArn *string

// License consumption token.
LicenseConsumptionToken *string

// Node ID.
NodeId *string

// Signed token.
SignedToken *string

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
    err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutLicense{ }, middleware.After)
    if err != nil {
        return err
    }
    err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutLicense{ }, middleware.After)
    if err != nil {
        return err
    }
    if err = addSetLoggerMiddleware(stack, options); err != nil {
        return err
    }
    if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
        return err
    }
    if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
        return err
    }
    if err = addResolveEndpointMiddleware(stack, options); err != nil {
        return
    }
    err
}
if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
    return err
}
if err = addRetryMiddlewares(stack, options); err != nil {

```

```

return err
}
if err = addHTTPSignerV4Middleware(stack, options); err != nil {
return err
}
if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
return err
}
if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
return err
}
if err = addClientUserAgent(stack); err != nil {
return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
return err
}
if err = addOpCheckoutLicenseValidationMiddleware(stack); err != nil {
return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutLicense(options.Region),
middleware.Before); err != nil {
return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
return err
}
if err = addResponseErrorMiddleware(stack);
err != nil {
return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
return err
}
return nil
}

func newServiceMetadataMiddleware_opCheckoutLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
return &awsmiddleware.RegisterServiceMetadata{
Region:    region,
ServiceID: ServiceID,
SigningName: "license-manager",
OperationName: "CheckoutLicense",
}
}

```

```

}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
    "context"
    awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
    "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
    "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
    "github.com/aws/smithy-go/middleware"
    smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Gets detailed information about the specified license.
func (c *Client) GetLicense(ctx context.Context, params *GetLicenseInput, optFns ...func(*Options))
(*GetLicenseOutput, error) {
    if params == nil {
        params = &GetLicenseInput{}
    }

    result, metadata, err := c.invokeOperation(ctx, "GetLicense", params, optFns,
c.addOperationGetLicenseMiddlewares)
    if err != nil {
        return nil, err
    }

    out := result.(*GetLicenseOutput)
    out.ResultMetadata = metadata
    return out, nil
}

type GetLicenseInput struct {

    // Amazon Resource Name (ARN) of the license.
    //
    // This member is required.
    LicenseArn *string

    // License version.
    Version
    *string

    noSmithyDocumentSerde
}

type GetLicenseOutput struct {

```

```

// License details.
License *types.License

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationGetLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
    err = stack.Serialize.Add(&awsAwsjson11_serializeOpGetLicense{ }, middleware.After)
    if err != nil {
        return err
    }
    err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpGetLicense{ }, middleware.After)
    if err != nil {
        return err
    }
    if err = addSetLoggerMiddleware(stack, options); err != nil {
        return err
    }
    if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
        return err
    }
    if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
        return err
    }
    if err = addResolveEndpointMiddleware(stack, options); err != nil {
        return err
    }
    if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
        return err
    }
    if
    err = addRetryMiddlewares(stack, options); err != nil {
        return err
    }
    if err = addHTTPSignerV4Middleware(stack, options); err != nil {
        return err
    }
    if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
        return err
    }
    if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
        return err
    }
    if err = addClientUserAgent(stack); err != nil {
        return err
    }
}

```

```

}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = addOpGetLicenseValidationMiddleware(stack); err != nil {
    return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opGetLicense(options.Region), middleware.Before);
err != nil {
    return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
    return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
    return err
}
if err = addRequestResponseLogging(stack,
options); err != nil {
    return err
}
return nil
}

```

```

func newServiceMetadataMiddleware_opGetLicense(region string) *awsmiddleware.RegisterServiceMetadata {
return &awsmiddleware.RegisterServiceMetadata{
    Region:    region,
    ServiceID: ServiceID,
    SigningName: "license-manager",
    OperationName: "GetLicense",
}
}

```

AWS SDK for Go

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// Code generated by smithy-go-codegen DO NOT EDIT.

```
package licensemanager
```

```
import (
    "context"
    awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
    "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
    "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
    "github.com/aws/smithy-go/middleware"

```



```

smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists the licenses for your account.
func (c *Client) ListLicenses(ctx context.Context, params *ListLicensesInput, optFns ...func(*Options))
(*ListLicensesOutput, error) {
    if params == nil {
        params = &ListLicensesInput{}
    }

    result, metadata, err := c.invokeOperation(ctx, "ListLicenses", params, optFns,
c.addOperationListLicensesMiddlewares)
    if err != nil {
        return nil, err
    }

    out := result.(*ListLicensesOutput)
    out.ResultMetadata = metadata
    return out, nil
}

type ListLicensesInput struct {

    // Filters to scope the results. The following filters are supported:
    //
    // *
    // Beneficiary
    //
    // * ProductSKU
    //
    // * Fingerprint
    //
    //
    // * Status
    Filters []types.Filter

    // Amazon Resource Names (ARNs) of the licenses.
    LicenseArns []string

    // Maximum number of results to return in a single call.
    MaxResults *int32

    // Token for the next set of results.
    NextToken *string

    noSmithyDocumentSerde
}

```

```

type ListLicensesOutput struct {

    // License details.
    Licenses []types.License

    // Token for the next set of results.
    NextToken *string

    // Metadata pertaining to the operation's result.
    ResultMetadata middleware.Metadata

    noSmithyDocumentSerde
}

func (c *Client) addOperationListLicensesMiddlewares(stack *middleware.Stack, options Options) (err error) {
    err = stack.Serialize.Add(&awsAwsjson11_serializeOpListLicenses{ }, middleware.After)
    if err != nil {
        return err
    }
    err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListLicenses{ }, middleware.After)
    if err != nil {
        return err
    }
    if err = addSetLoggerMiddleware(stack, options); err != nil {
        return err
    }
    if err = awsmiddleware.AddClientRequestIDMiddleware(stack);
    err != nil {
        return err
    }
    if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
        return err
    }
    if err = addResolveEndpointMiddleware(stack, options); err != nil {
        return err
    }
    if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
        return err
    }
    if err = addRetryMiddlewares(stack, options); err != nil {
        return err
    }
    if err = addHTTPSignerV4Middleware(stack, options); err != nil {
        return err
    }
    if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
        return err
    }
}

```

```

if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
    return err
}
if err = addClientUserAgent(stack); err != nil {
    return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListLicenses(options.Region), middleware.Before);
err != nil {
    return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
    return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
    return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
    return err
}
return nil
}

```

```

func newServiceMetadataMiddleware_opListLicenses(region string) *awsmiddleware.RegisterServiceMetadata {
    return &awsmiddleware.RegisterServiceMetadata{
        Region:    region,
        ServiceID: ServiceID,
        SigningName: "license-manager",
        OperationName: "ListLicenses",
    }
}

```

// Code generated by smithy-go-codegen DO NOT EDIT.

```
package licensemanager
```

```

import (
    "context"
    awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
    "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
    "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
    "github.com/aws/smithy-go/middleware"
    smithyhttp "github.com/aws/smithy-go/transport/http"
)

```

```

// Deletes the specified license.
func (c *Client) DeleteLicense(ctx context.Context, params *DeleteLicenseInput, optFns ...func(*Options))
(*DeleteLicenseOutput, error) {
    if params == nil {
        params = &DeleteLicenseInput{}
    }

    result, metadata, err := c.invokeOperation(ctx, "DeleteLicense", params, optFns,
c.addOperationDeleteLicenseMiddlewares)
    if err != nil {
        return nil, err
    }

    out := result.(*DeleteLicenseOutput)
    out.ResultMetadata = metadata
    return out, nil
}

type DeleteLicenseInput struct {

    // Amazon Resource Name (ARN) of the license.
    //
    // This member is required.
    LicenseArn *string

    // Current version of the
    license.
    //
    // This member is required.
    SourceVersion *string

    noSmithyDocumentSerde
}

type DeleteLicenseOutput struct {

    // Date when the license is deleted.
    DeletionDate *string

    // License status.
    Status types.LicenseDeletionStatus

    // Metadata pertaining to the operation's result.
    ResultMetadata middleware.Metadata

    noSmithyDocumentSerde
}

```

```

func (c *Client) addOperationDeleteLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
    err = stack.Serialize.Add(&awsAwsjson11_serializeOpDeleteLicense{ }, middleware.After)
    if err != nil {
        return err
    }
    err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpDeleteLicense{ }, middleware.After)
    if err != nil {
        return err
    }
    if err = addSetLoggerMiddleware(stack, options); err != nil {
        return err
    }
    if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
        return err
    }
    if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
        return err
    }
    if err = addResolveEndpointMiddleware(stack,
options); err != nil {
        return err
    }
    if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
        return err
    }
    if err = addRetryMiddlewares(stack, options); err != nil {
        return err
    }
    if err = addHTTPSignerV4Middleware(stack, options); err != nil {
        return err
    }
    if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
        return err
    }
    if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
        return err
    }
    if err = addClientUserAgent(stack); err != nil {
        return err
    }
    if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
        return err
    }
    if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
        return err
    }
    if err = addOpDeleteLicenseValidationMiddleware(stack); err != nil {

```

```

    return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDeleteLicense(options.Region),
middleware.Before); err != nil {
    return err
}
if err = addRequestIDRetrieverMiddleware(stack);
err != nil {
    return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
    return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
    return err
}
return nil
}

func newServiceMetadataMiddleware_opDeleteLicense(region string) *awsmiddleware.RegisterServiceMetadata {
return &awsmiddleware.RegisterServiceMetadata{
    Region:    region,
    ServiceID: ServiceID,
    SigningName: "license-manager",
    OperationName: "DeleteLicense",
}
}

```

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// Code generated by smithy-go-codegen DO NOT EDIT.

```
package grafana
```

```
import (  
    "context"  
    awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"  
    "github.com/aws/aws-sdk-go-v2/aws/signer/v4"  
    "github.com/aws/aws-sdk-go-v2/service/grafana/types"  
    "github.com/aws/smithy-go/middleware"  
    smithyhttp "github.com/aws/smithy-go/transport/http"  
)
```

```
// Assigns a Grafana Enterprise license to a workspace. Upgrading to Grafana
```

```
// Enterprise incurs additional fees. For more information, see Upgrade a workspace
```

```
// to Grafana Enterprise
```

```
// (https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-Grafana-Enterprise.html).
```

```
func (c *Client) AssociateLicense(ctx context.Context, params *AssociateLicenseInput, optFns ...func(*Options))  
(*AssociateLicenseOutput, error) {  
    if params == nil {  
        params = &AssociateLicenseInput{}  
    }  
}
```

```

    result, metadata, err := c.invokeOperation(ctx, "AssociateLicense", params, optFns,
c.addOperationAssociateLicenseMiddlewares)
    if err != nil {
        return nil, err
    }

    out
    := result.(*AssociateLicenseOutput)
    out.ResultMetadata = metadata
    return out, nil
}

type AssociateLicenseInput struct {

    // The type of license to associate with the workspace.
    //
    // This member is required.
    LicenseType types.LicenseType

    // The ID of the workspace to associate the license with.
    //
    // This member is required.
    WorkspaceId *string

    noSmithyDocumentSerde
}

type AssociateLicenseOutput struct {

    // A structure containing data about the workspace.
    //
    // This member is required.
    Workspace *types.WorkspaceDescription

    // Metadata pertaining to the operation's result.
    ResultMetadata middleware.Metadata

    noSmithyDocumentSerde
}

func (c *Client) addOperationAssociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
    err = stack.Serialize.Add(&awsRestjson1_serializeOpAssociateLicense{ }, middleware.After)
    if err != nil {
        return err
    }
    err = stack.Deserialize.Add(&awsRestjson1_deserializeOpAssociateLicense{ }, middleware.After)
    if

```

```

err != nil {
    return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
    return err
}
if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
    return err
}
if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
    return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
    return err
}
if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
    return err
}
if err = addRetryMiddlewares(stack, options); err != nil {
    return err
}
if err = addHTTPSignerV4Middleware(stack, options); err != nil {
    return err
}
if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
    return err
}
if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
    return err
}
if err = addClientUserAgent(stack); err != nil {
    return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack);
err != nil {
    return err
}
if err = addOpAssociateLicenseValidationMiddleware(stack); err != nil {
    return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opAssociateLicense(options.Region),
middleware.Before); err != nil {
    return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {

```

```

    return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
    return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
    return err
}
return nil
}

func newServiceMetadataMiddleware_opAssociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
return &awsmiddleware.RegisterServiceMetadata{
    Region:    region,
    ServiceID: ServiceID,
    SigningName: "grafana",
    OperationName: "AssociateLicense",
}
}
}

```

## 1.41 aws-aws-sdk-go-v2 1.9.11

### 1.41.1 Available under license :

// Code generated by smithy-go-codegen DO NOT EDIT.

```
package licensemanager
```

```
import (
    "context"
    awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
    "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
    "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
    "github.com/aws/smithy-go/middleware"
    smithyhttp "github.com/aws/smithy-go/transport/http"
)

```

// Lists received licenses.

```
func (c *Client) ListReceivedLicenses(ctx context.Context, params *ListReceivedLicensesInput, optFns
...func(*Options)) (*ListReceivedLicensesOutput, error) {
    if params == nil {
        params = &ListReceivedLicensesInput{}
    }
}

```

```

result, metadata, err := c.invokeOperation(ctx, "ListReceivedLicenses", params, optFns,
c.addOperationListReceivedLicensesMiddlewares)
if err != nil {

```

```

return nil, err
}

out := result.(*ListReceivedLicensesOutput)
out.ResultMetadata = metadata
return out, nil
}

type ListReceivedLicensesInput struct {

// Filters to scope the results. The following filters are supported:
//
//
// *
// ProductSKU
//
// * Status
//
// * Fingerprint
//
// * IssuerName
//
// * Beneficiary
Filters []types.Filter

// Amazon Resource Names (ARNs) of the licenses.
LicenseArns []string

// Maximum number of results to return in a single call.
MaxResults *int32

// Token for the next set of results.
NextToken *string

noSmithyDocumentSerde
}

type ListReceivedLicensesOutput struct {

// Received license details.
Licenses []types.GrantedLicense

// Token for the next set of results.
NextToken *string

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata
}

```

```

noSmithyDocumentSerde
}

func (c *Client) addOperationListReceivedLicensesMiddlewares(stack *middleware.Stack, options Options) (err
error) {
err = stack.Serialize.Add(&awsAwsjson11_serializeOpListReceivedLicenses{ }, middleware.After)
if err != nil {
return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListReceivedLicenses{ }, middleware.After)
if err != nil {
return
err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
return err
}
if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
return err
}
if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
return err
}
if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
return err
}
if err = addRetryMiddlewares(stack, options); err != nil {
return err
}
if err = addHTTPSignerV4Middleware(stack, options); err != nil {
return err
}
if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
return err
}
if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
return err
}
if err = addClientUserAgent(stack); err != nil {
return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err !=

```



```

nil {
    return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListReceivedLicenses(options.Region),
middleware.Before); err != nil {
    return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
    return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
    return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
    return err
}
return nil
}

```

```

func newServiceMetadataMiddleware_opListReceivedLicenses(region string)
*awsmiddleware.RegisterServiceMetadata {
return &awsmiddleware.RegisterServiceMetadata{
    Region:    region,
    ServiceID: ServiceID,
    SigningName: "license-manager",
    OperationName: "ListReceivedLicenses",
}
}

```

AWS SDK for Go

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// Code generated by smithy-go-codegen DO NOT EDIT.

```

package licensemanager

```

```

import (
    "context"
    awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
    "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
    "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
    "github.com/aws/smithy-go/middleware"
    smithyhttp "github.com/aws/smithy-go/transport/http"
)

```

// Checks out the specified license for offline use.

```

func (c *Client) CheckoutBorrowLicense(ctx context.Context, params *CheckoutBorrowLicenseInput, optFns
...func(*Options)) (*CheckoutBorrowLicenseOutput, error) {
    if params == nil {

```

```

params = &CheckoutBorrowLicenseInput{ }
}

result, metadata, err := c.invokeOperation(ctx, "CheckoutBorrowLicense", params, optFns,
c.addOperationCheckoutBorrowLicenseMiddlewares)
if err != nil {
return nil, err
}

out := result.(*CheckoutBorrowLicenseOutput)
out.ResultMetadata = metadata
return out, nil
}

```

```

type CheckoutBorrowLicenseInput struct {

```

```

// Unique, case-sensitive identifier that you
provide to ensure the idempotency of
// the request.

```

```

//

```

```

// This member is required.

```

```

ClientToken *string

```

```

// Digital signature method. The possible value is JSON Web Signature (JWS)
// algorithm PS384. For more information, see RFC 7518 Digital Signature with
// RSASSA-PSS (https://tools.ietf.org/html/rfc7518#section-3.5).

```

```

//

```

```

// This member is required.

```

```

DigitalSignatureMethod types.DigitalSignatureMethod

```

```

// License entitlements. Partial checkouts are not supported.

```

```

//

```

```

// This member is required.

```

```

Entitlements []types.EntitlementData

```

```

// Amazon Resource Name (ARN) of the license. The license must use the borrow
// consumption configuration.

```

```

//

```

```

// This member is required.

```

```

LicenseArn *string

```

```

// Information about constraints.

```

```

CheckoutMetadata []types.Metadata

```

```

// Node ID.

```

```

NodeId *string

```

```

noSmithyDocumentSerde

```

```

}

type CheckoutBorrowLicenseOutput struct {

    // Information about constraints.
    CheckoutMetadata []types.Metadata

    // Allowed license entitlements.
    EntitlementsAllowed
    []types.EntitlementData

    // Date and time at which the license checkout expires.
    Expiration *string

    // Date and time at which the license checkout is issued.
    IssuedAt *string

    // Amazon Resource Name (ARN) of the license.
    LicenseArn *string

    // License consumption token.
    LicenseConsumptionToken *string

    // Node ID.
    NodeId *string

    // Signed token.
    SignedToken *string

    // Metadata pertaining to the operation's result.
    ResultMetadata middleware.Metadata

    noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutBorrowLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
    err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutBorrowLicense{ }, middleware.After)
    if err != nil {
        return err
    }
    err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutBorrowLicense{ }, middleware.After)
    if err != nil {
        return err
    }
    if err = addSetLoggerMiddleware(stack, options); err != nil {
        return err
    }
}

```

```

if err = awsmiddleware.AddClientRequestIDMiddleware(stack);
err != nil {
    return err
}
if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
    return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
    return err
}
if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
    return err
}
if err = addRetryMiddlewares(stack, options); err != nil {
    return err
}
if err = addHTTPSignerV4Middleware(stack, options); err != nil {
    return err
}
if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
    return err
}
if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
    return err
}
if err = addClientUserAgent(stack); err != nil {
    return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = addOpCheckoutBorrowLicenseValidationMiddleware(stack); err != nil {
    return err
}
if err
= stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutBorrowLicense(options.Region),
middleware.Before); err != nil {
    return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
    return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
    return err
}
}

```

```

if err = addRequestResponseLogging(stack, options); err != nil {
    return err
}
return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
return &awsmiddleware.RegisterServiceMetadata{
    Region:    region,
    ServiceID: ServiceID,
    SigningName: "license-manager",
    OperationName: "CheckoutBorrowLicense",
}
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
    "context"
    awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
    "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
    "github.com/aws/smithy-go/middleware"
    smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks in the specified license. Check in a license when it is no longer in use.
func (c *Client) CheckInLicense(ctx context.Context, params *CheckInLicenseInput, optFns ...func(*Options))
(*CheckInLicenseOutput, error) {
    if params == nil {
        params = &CheckInLicenseInput{}
    }

    result, metadata, err := c.invokeOperation(ctx, "CheckInLicense", params, optFns,
c.addOperationCheckInLicenseMiddlewares)
    if err != nil {
        return nil, err
    }

    out := result.(*CheckInLicenseOutput)
    out.ResultMetadata = metadata
    return out, nil
}

type CheckInLicenseInput struct {

    // License consumption token.

```

```

//
// This member is required.
LicenseConsumptionToken *string

// License beneficiary.
Beneficiary
*string

noSmithyDocumentSerde
}

type CheckInLicenseOutput struct {
// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationCheckInLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckInLicense{ }, middleware.After)
if err != nil {
return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckInLicense{ }, middleware.After)
if err != nil {
return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
return err
}
if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
return err
}
if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
return err
}
if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
return err
}
if err = addRetryMiddlewares(stack,
options); err != nil {
return err
}
if err = addHTTPSignerV4Middleware(stack, options); err != nil {
return err
}

```

```

}
if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
    return err
}
if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
    return err
}
if err = addClientUserAgent(stack); err != nil {
    return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = addOpCheckInLicenseValidationMiddleware(stack); err != nil {
    return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckInLicense(options.Region),
middleware.Before); err != nil {
    return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
    return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
    return err
}
if err = addRequestResponseLogging(stack, options); err != nil
{
    return err
}
return nil
}

func newServiceMetadataMiddleware_opCheckInLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
    return &awsmiddleware.RegisterServiceMetadata{
        Region:    region,
        ServiceID: ServiceID,
        SigningName: "license-manager",
        OperationName: "CheckInLicense",
    }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

```

```

import (
    "context"
    awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
    "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
    "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
    "github.com/aws/smithy-go/middleware"
    smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Creates a license.
func (c *Client) CreateLicense(ctx context.Context, params *CreateLicenseInput, optFns ...func(*Options))
(*CreateLicenseOutput, error) {
    if params == nil {
        params = &CreateLicenseInput{}
    }

    result, metadata, err := c.invokeOperation(ctx, "CreateLicense", params, optFns,
c.addOperationCreateLicenseMiddlewares)
    if err != nil {
        return nil, err
    }

    out := result.(*CreateLicenseOutput)
    out.ResultMetadata = metadata
    return out, nil
}

type CreateLicenseInput struct {

    // License beneficiary.
    //
    // This member is required.
    Beneficiary *string

    // Unique, case-sensitive identifier that you provide to ensure
    the idempotency of
    // the request.
    //
    // This member is required.
    ClientToken *string

    // Configuration for consumption of the license. Choose a provisional configuration
    // for workloads running with continuous connectivity. Choose a borrow
    // configuration for workloads with offline usage.
    //
    // This member is required.
    ConsumptionConfiguration *types.ConsumptionConfiguration

```



```

// License entitlements.
//
// This member is required.
Entitlements []types.Entitlement

// Home Region for the license.
//
// This member is required.
HomeRegion *string

// License issuer.
//
// This member is required.
Issuer *types.Issuer

// License name.
//
// This member is required.
LicenseName *string

// Product name.
//
// This member is required.
ProductName *string

// Product SKU.
//
// This member is required.
ProductSKU *string

// Date and time range during which the license is valid, in ISO8601-UTC format.
//
// This member is required.
Validity *types.DatetimeRange

//
Information about the license.
LicenseMetadata []types.Metadata

noSmithyDocumentSerde
}

type CreateLicenseOutput struct {

// Amazon Resource Name (ARN) of the license.
LicenseArn *string

```

```

// License status.
Status types.LicenseStatus

// License version.
Version *string

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationCreateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
    err = stack.Serialize.Add(&awsAwsjson11_serializeOpCreateLicense{ }, middleware.After)
    if err != nil {
        return err
    }
    err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCreateLicense{ }, middleware.After)
    if err != nil {
        return err
    }
    if err = addSetLoggerMiddleware(stack, options); err != nil {
        return err
    }
    if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
        return err
    }
    if err = smithyhttp.AddComputeContentLengthMiddleware(stack);
    err != nil {
        return err
    }
    if err = addResolveEndpointMiddleware(stack, options); err != nil {
        return err
    }
    if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
        return err
    }
    if err = addRetryMiddlewares(stack, options); err != nil {
        return err
    }
    if err = addHTTPSignerV4Middleware(stack, options); err != nil {
        return err
    }
    if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
        return err
    }
    if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
        return err
    }
}

```

```

}
if err = addClientUserAgent(stack); err != nil {
    return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = addOpCreateLicenseValidationMiddleware(stack); err != nil {
    return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCreateLicense(options.Region),
middleware.Before); err != nil {
    return
err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
    return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
    return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
    return err
}
return nil
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
    return &awsmiddleware.RegisterServiceMetadata{
        Region:    region,
        ServiceID: ServiceID,
        SigningName: "license-manager",
        OperationName: "CreateLicense",
    }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
    "context"
    awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
    "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
    "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
    "github.com/aws/smithy-go/middleware"

```

```

smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists the licenses for your account.
func (c *Client) ListLicenses(ctx context.Context, params *ListLicensesInput, optFns ...func(*Options))
(*ListLicensesOutput, error) {
    if params == nil {
        params = &ListLicensesInput{}
    }

    result, metadata, err := c.invokeOperation(ctx, "ListLicenses", params, optFns,
c.addOperationListLicensesMiddlewares)
    if err != nil {
        return nil, err
    }

    out := result.(*ListLicensesOutput)
    out.ResultMetadata = metadata
    return out, nil
}

type ListLicensesInput struct {

    // Filters to scope the results. The following filters are supported:
    //
    // *
    // Beneficiary
    //
    // * ProductSKU
    //
    // * Fingerprint
    //
    //
    // * Status
    Filters []types.Filter

    // Amazon Resource Names (ARNs) of the licenses.
    LicenseArns []string

    // Maximum number of results to return in a single call.
    MaxResults *int32

    // Token for the next set of results.
    NextToken *string

    noSmithyDocumentSerde
}

```

```

type ListLicensesOutput struct {

    // License details.
    Licenses []types.License

    // Token for the next set of results.
    NextToken *string

    // Metadata pertaining to the operation's result.
    ResultMetadata middleware.Metadata

    noSmithyDocumentSerde
}

func (c *Client) addOperationListLicensesMiddlewares(stack *middleware.Stack, options Options) (err error) {
    err = stack.Serialize.Add(&awsAwsjson11_serializeOpListLicenses{ }, middleware.After)
    if err != nil {
        return err
    }
    err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListLicenses{ }, middleware.After)
    if err != nil {
        return err
    }
    if err = addSetLoggerMiddleware(stack, options); err != nil {
        return err
    }
    if err = awsmiddleware.AddClientRequestIDMiddleware(stack);
    err != nil {
        return err
    }
    if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
        return err
    }
    if err = addResolveEndpointMiddleware(stack, options); err != nil {
        return err
    }
    if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
        return err
    }
    if err = addRetryMiddlewares(stack, options); err != nil {
        return err
    }
    if err = addHTTPSignerV4Middleware(stack, options); err != nil {
        return err
    }
    if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
        return err
    }
}

```

```

if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
    return err
}
if err = addClientUserAgent(stack); err != nil {
    return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListLicenses(options.Region), middleware.Before);
err != nil {
    return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
    return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
    return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
    return err
}
return nil
}

```

```

func newServiceMetadataMiddleware_opListLicenses(region string) *awsmiddleware.RegisterServiceMetadata {
    return &awsmiddleware.RegisterServiceMetadata{
        Region:    region,
        ServiceID: ServiceID,
        SigningName: "license-manager",
        OperationName: "ListLicenses",
    }
}

```

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```
package licensemanager
```

```
import (  
    "context"  
    awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"  
    "github.com/aws/aws-sdk-go-v2/aws/signer/v4"  
    "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"  
    "github.com/aws/smithy-go/middleware"  
    smithyhttp "github.com/aws/smithy-go/transport/http"  
)
```

```
// Deletes the specified license.
```

```

func (c *Client) DeleteLicense(ctx context.Context, params *DeleteLicenseInput, optFns ...func(*Options))
(*DeleteLicenseOutput, error) {
    if params == nil {
        params = &DeleteLicenseInput{}
    }

    result, metadata, err := c.invokeOperation(ctx, "DeleteLicense", params, optFns,
c.addOperationDeleteLicenseMiddlewares)
    if err != nil {
        return nil, err
    }

    out := result.(*DeleteLicenseOutput)
    out.ResultMetadata = metadata
    return out, nil
}

type DeleteLicenseInput struct {

    // Amazon Resource Name (ARN) of the license.
    //
    // This member is required.
    LicenseArn *string

    // Current version of the
    license.
    //
    // This member is required.
    SourceVersion *string

    noSmithyDocumentSerde
}

type DeleteLicenseOutput struct {

    // Date on which the license is deleted.
    DeletionDate *string

    // License status.
    Status types.LicenseDeletionStatus

    // Metadata pertaining to the operation's result.
    ResultMetadata middleware.Metadata

    noSmithyDocumentSerde
}

func (c *Client) addOperationDeleteLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {

```

```

err = stack.Serialize.Add(&awsAwsjson11_serializeOpDeleteLicense{ }, middleware.After)
if err != nil {
    return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpDeleteLicense{ }, middleware.After)
if err != nil {
    return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
    return err
}
if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
    return err
}
if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
    return err
}
if err = addResolveEndpointMiddleware(stack,
options); err != nil {
    return err
}
if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
    return err
}
if err = addRetryMiddlewares(stack, options); err != nil {
    return err
}
if err = addHTTPSignerV4Middleware(stack, options); err != nil {
    return err
}
if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
    return err
}
if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
    return err
}
if err = addClientUserAgent(stack); err != nil {
    return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = addOpDeleteLicenseValidationMiddleware(stack); err != nil {
    return err
}
}

```

```

if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDeleteLicense(options.Region),
middleware.Before); err != nil {
    return err
}
if err = addRequestIDRetrieverMiddleware(stack);
err != nil {
    return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
    return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
    return err
}
return nil
}

func newServiceMetadataMiddleware_opDeleteLicense(region string) *awsmiddleware.RegisterServiceMetadata {
return &awsmiddleware.RegisterServiceMetadata{
    Region:    region,
    ServiceID: ServiceID,
    SigningName: "license-manager",
    OperationName: "DeleteLicense",
}
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
    "context"
    awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
    "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
    "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
    "github.com/aws/smithy-go/middleware"
    smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license.
func (c *Client) CheckoutLicense(ctx context.Context, params *CheckoutLicenseInput, optFns ...func(*Options))
(*CheckoutLicenseOutput, error) {
    if params == nil {
        params = &CheckoutLicenseInput{}
    }

    result, metadata, err := c.invokeOperation(ctx, "CheckoutLicense", params, optFns,
c.addOperationCheckoutLicenseMiddlewares)
    if err != nil {

```

```

return nil, err
}

out := result.(*CheckoutLicenseOutput)
out.ResultMetadata = metadata
return out, nil
}

type CheckoutLicenseInput struct {

// Checkout type.
//
// This member is required.
CheckoutType types.CheckoutType

// Unique, case-sensitive
identifier that you provide to ensure the idempotency of
// the request.
//
// This member is required.
ClientToken *string

// License entitlements.
//
// This member is required.
Entitlements []types.EntitlementData

// Key fingerprint identifying the license.
//
// This member is required.
KeyFingerprint *string

// Product SKU.
//
// This member is required.
ProductSKU *string

// License beneficiary.
Beneficiary *string

// Node ID.
NodeId *string

noSmithyDocumentSerde
}

type CheckoutLicenseOutput struct {

```

```

// Checkout type.
CheckoutType types.CheckoutType

// Allowed license entitlements.
EntitlementsAllowed []types.EntitlementData

// Date and time at which the license checkout expires.
Expiration *string

// Date and time at which the license checkout is issued.
IssuedAt *string

// License consumption token.
LicenseConsumptionToken *string

// Node ID.
NodeId *string

// Signed token.
SignedToken *string

// Metadata pertaining to the
operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
    err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutLicense{ }, middleware.After)
    if err != nil {
        return err
    }
    err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutLicense{ }, middleware.After)
    if err != nil {
        return err
    }
    if err = addSetLoggerMiddleware(stack, options); err != nil {
        return err
    }
    if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
        return err
    }
    if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
        return err
    }
    if err = addResolveEndpointMiddleware(stack, options); err != nil {
        return err
    }
}

```



```

}
if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
    return err
}
if err = addRetryMiddlewares(stack, options); err != nil {
    return err
}
if err = addHTTPSignerV4Middleware(stack, options);
err != nil {
    return err
}
if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
    return err
}
if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
    return err
}
if err = addClientUserAgent(stack); err != nil {
    return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = addOpCheckoutLicenseValidationMiddleware(stack); err != nil {
    return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutLicense(options.Region),
middleware.Before); err != nil {
    return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
    return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
    return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
    return err
}
return nil
}

func newServiceMetadataMiddleware_opCheckoutLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
return &awsmiddleware.RegisterServiceMetadata{

```

```

Region:    region,
ServiceID: ServiceID,
SigningName: "license-manager",
OperationName: "CheckoutLicense",
}
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
    "context"
    awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
    "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
    "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
    "github.com/aws/smithy-go/middleware"
    smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Gets detailed information about the specified license.
func (c *Client) GetLicense(ctx context.Context, params *GetLicenseInput, optFns ...func(*Options))
(*GetLicenseOutput, error) {
    if params == nil {
        params = &GetLicenseInput{}
    }

    result, metadata, err := c.invokeOperation(ctx, "GetLicense", params, optFns,
c.addOperationGetLicenseMiddlewares)
    if err != nil {
        return nil, err
    }

    out := result.(*GetLicenseOutput)
    out.ResultMetadata = metadata
    return out, nil
}

type GetLicenseInput struct {

    // Amazon Resource Name (ARN) of the license.
    //
    // This member is required.
    LicenseArn *string

    // License version.
    Version
    *string

```

```

noSmithyDocumentSerde
}

type GetLicenseOutput struct {

// License details.
License *types.License

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationGetLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
err = stack.Serialize.Add(&awsAwsjson11_serializeOpGetLicense{ }, middleware.After)
if err != nil {
return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpGetLicense{ }, middleware.After)
if err != nil {
return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
return err
}
if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
return err
}
if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
return err
}
if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
return err
}
if
err = addRetryMiddlewares(stack, options); err != nil {
return err
}
if err = addHTTPSignerV4Middleware(stack, options); err != nil {
return err
}
if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
return err
}
}

```

```

if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
    return err
}
if err = addClientUserAgent(stack); err != nil {
    return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = addOpGetLicenseValidationMiddleware(stack); err != nil {
    return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opGetLicense(options.Region), middleware.Before);
err != nil {
    return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
    return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
    return err
}
if err = addRequestResponseLogging(stack,
options); err != nil {
    return err
}
return nil
}

func newServiceMetadataMiddleware_opGetLicense(region string) *awsmiddleware.RegisterServiceMetadata {
return &awsmiddleware.RegisterServiceMetadata{
    Region:    region,
    ServiceID: ServiceID,
    SigningName: "license-manager",
    OperationName: "GetLicense",
}
}

```

## 1.42 aws-smithy-go 1.13.5

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## 1.43 open-telemetry-opentelemetry-collector-contrib 0.66.0

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# 1.54 [github.com/klauspost/cpuid/v2](https://github.com/klauspost/cpuid/v2) 2.2.3

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## 1.62 x-text 0.9.0

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## 1.63 atomic 1.7.0

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## 1.64 bridgeutils 1.7.1-r2

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## 1.65 aws-aws-sdk-go-v2-internal-endpoints

### 2.4.25

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```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
    "context"
    "errors"
    "fmt"
    "github.com/aws/aws-sdk-go-v2/aws"
    awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
    "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
    internalauth "github.com/aws/aws-sdk-go-v2/internal/auth"
    "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
    smithyendpoints "github.com/aws/smithy-go/endpoints"
    "github.com/aws/smithy-go/middleware"
    smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license. If the account that created the license is
// the same that is performing the check out, you must specify the account as the
// beneficiary.
func (c *Client) CheckoutLicense(ctx context.Context, params *CheckoutLicenseInput, optFns ...func(*Options))
(*CheckoutLicenseOutput, error) {
    if params == nil {
        params = &CheckoutLicenseInput{}
    }
}
```

```

}

result, metadata, err := c.invokeOperation(ctx, "CheckoutLicense", params, optFns,
c.addOperationCheckoutLicenseMiddlewares)
if
err != nil {
return nil, err
}

out := result.(*CheckoutLicenseOutput)
out.ResultMetadata = metadata
return out, nil
}

type CheckoutLicenseInput struct {

// Checkout type.
//
// This member is required.
CheckoutType types.CheckoutType

// Unique, case-sensitive identifier that you provide to ensure the idempotency of
// the request.
//
// This member is required.
ClientToken *string

// License entitlements.
//
// This member is required.
Entitlements []types.EntitlementData

// Key fingerprint identifying the license.
//
// This member is required.
KeyFingerprint *string

// Product SKU.
//
// This member is required.
ProductSKU *string

// License beneficiary.
Beneficiary *string

// Node ID.
NodeId *string
}

```

```

noSmithyDocumentSerde
}

type CheckoutLicenseOutput struct {

    // Checkout type.
    CheckoutType types.CheckoutType

    // Allowed license entitlements.
    EntitlementsAllowed []types.EntitlementData

    // Date and time
    at which the license checkout expires.
    Expiration *string

    // Date and time at which the license checkout is issued.
    IssuedAt *string

    // Amazon Resource Name (ARN) of the checkout license.
    LicenseArn *string

    // License consumption token.
    LicenseConsumptionToken *string

    // Node ID.
    NodeId *string

    // Signed token.
    SignedToken *string

    // Metadata pertaining to the operation's result.
    ResultMetadata middleware.Metadata

    noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
    err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutLicense{ }, middleware.After)
    if err != nil {
        return err
    }
    err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutLicense{ }, middleware.After)
    if err != nil {
        return err
    }
    if err = addLegacyEndpointContextSetter(stack, options); err != nil {
        return err
    }
}

```

```

if err = addSetLoggerMiddleware(stack, options); err != nil {
    return err
}
if err
= awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
    return err
}
if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
    return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
    return err
}
if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
    return err
}
if err = addRetryMiddlewares(stack, options); err != nil {
    return err
}
if err = addHTTPSignerV4Middleware(stack, options); err != nil {
    return err
}
if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
    return err
}
if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
    return err
}
if err = addClientUserAgent(stack, options); err != nil {
    return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = addCheckoutLicenseResolveEndpointMiddleware(stack, options);
err != nil {
    return err
}
if err = addOpCheckoutLicenseValidationMiddleware(stack); err != nil {
    return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutLicense(options.Region),
middleware.Before); err != nil {
    return err
}
}

```

```

if err = awsmiddleware.AddRecursionDetection(stack); err != nil {
    return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
    return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
    return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
    return err
}
if err = addendpointDisableHTTPSMiddleware(stack, options); err != nil {
    return err
}
return nil
}

func newServiceMetadataMiddleware_opCheckoutLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
    return &awsmiddleware.RegisterServiceMetadata{
        Region:    region,
        ServiceID: ServiceID,
        SigningName: "license-manager",
        OperationName: "CheckoutLicense",
    }
}

type opCheckoutLicenseResolveEndpointMiddleware
struct {
    EndpointResolver EndpointResolverV2
    BuiltInResolver  builtInParameterResolver
}

func (*opCheckoutLicenseResolveEndpointMiddleware) ID() string {
    return "ResolveEndpointV2"
}

func (m *opCheckoutLicenseResolveEndpointMiddleware) HandleSerialize(ctx context.Context, in
middleware.SerializeInput, next middleware.SerializeHandler) (
    out middleware.SerializeOutput, metadata middleware.Metadata, err error,
) {
    if awsmiddleware.GetRequiresLegacyEndpoints(ctx) {
        return next.HandleSerialize(ctx, in)
    }

    req, ok := in.Request.(*smithyhttp.Request)
    if !ok {

```

```

return out, metadata, fmt.Errorf("unknown transport type %T", in.Request)
}

if m.EndpointResolver == nil {
return out, metadata, fmt.Errorf("expected endpoint resolver to not be nil")
}

params := EndpointParameters{}

m.BuiltInResolver.ResolveBuiltIns(&params)

var resolvedEndpoint smithyendpoints.Endpoint
resolvedEndpoint, err = m.EndpointResolver.ResolveEndpoint(ctx, params)
if err != nil
{
return out, metadata, fmt.Errorf("failed to resolve service endpoint, %w", err)
}

req.URL = &resolvedEndpoint.URI

for k := range resolvedEndpoint.Headers {
req.Header.Set(
k,
resolvedEndpoint.Headers.Get(k),
)
}

authSchemes, err := internalauth.GetAuthenticationSchemes(&resolvedEndpoint.Properties)
if err != nil {
var nfe *internalauth.NoAuthenticationSchemesFoundError
if errors.As(err, &nfe) {
// if no auth scheme is found, default to sigv4
signingName := "license-manager"
signingRegion := m.BuiltInResolver.(*builtInResolver).Region
ctx = awsmiddleware.SetSigningName(ctx, signingName)
ctx = awsmiddleware.SetSigningRegion(ctx, signingRegion)
}
var ue *internalauth.UnSupportedAuthenticationSchemeSpecifiedError
if errors.As(err, &ue) {
return out, metadata, fmt.Errorf(
"This operation requests signer version(s) %v but the client only supports %v",
ue.UnsupportedSchemes,
internalauth.SupportedSchemes,
)
}
}
}

```

```

for _, authScheme
:= range authSchemes {
switch authScheme.(type) {
case *internalauth.AuthenticationSchemeV4:
v4Scheme, _ := authScheme.(*internalauth.AuthenticationSchemeV4)
var signingName, signingRegion string
if v4Scheme.SigningName == nil {
signingName = "license-manager"
} else {
signingName = *v4Scheme.SigningName
}
if v4Scheme.SigningRegion == nil {
signingRegion = m.BuiltInResolver.(*builtInResolver).Region
} else {
signingRegion = *v4Scheme.SigningRegion
}
if v4Scheme.DisableDoubleEncoding != nil {
// The signer sets an equivalent value at client initialization time.
// Setting this context value will cause the signer to extract it
// and override the value set at client initialization time.
ctx = internalauth.SetDisableDoubleEncoding(ctx, *v4Scheme.DisableDoubleEncoding)
}
ctx = awsmiddleware.SetSigningName(ctx, signingName)
ctx = awsmiddleware.SetSigningRegion(ctx, signingRegion)
break
case *internalauth.AuthenticationSchemeV4A:
v4aScheme,
_ := authScheme.(*internalauth.AuthenticationSchemeV4A)
if v4aScheme.SigningName == nil {
v4aScheme.SigningName = aws.String("license-manager")
}
if v4aScheme.DisableDoubleEncoding != nil {
// The signer sets an equivalent value at client initialization time.
// Setting this context value will cause the signer to extract it
// and override the value set at client initialization time.
ctx = internalauth.SetDisableDoubleEncoding(ctx, *v4aScheme.DisableDoubleEncoding)
}
ctx = awsmiddleware.SetSigningName(ctx, *v4aScheme.SigningName)
ctx = awsmiddleware.SetSigningRegion(ctx, v4aScheme.SigningRegionSet[0])
break
case *internalauth.AuthenticationSchemeNone:
break
}
}

return next.HandleSerialize(ctx, in)
}

```



```

func addCheckoutLicenseResolveEndpointMiddleware(stack *middleware.Stack, options Options) error {
    return stack.Serialize.Insert(&opCheckoutLicenseResolveEndpointMiddleware{
        EndpointResolver: options.EndpointResolverV2,
        BuiltInResolver:
        &builtInResolver{
            Region:    options.Region,
            UseDualStack: options.EndpointOptions.UseDualStackEndpoint,
            UseFIPS:    options.EndpointOptions.UseFIPSEndpoint,
            Endpoint:  options.BaseEndpoint,
        },
    }, "ResolveEndpoint", middleware.After)
}

```

AWS SDK for Go

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name: License Scan

on: [pull\_request]

jobs:

licensescan:

name: License Scan

runs-on: ubuntu-latest

strategy:

matrix:

python-version: [3.9]

steps:

- name: Checkout target

uses: actions/checkout@v2

with:

path: sdkbase

ref: \${{ github.base\_ref }}

- name: Checkout this ref

uses: actions/checkout@v2

with:

path: new-ref

fetch-depth: 0

- name: Get Diff

run: git --git-dir ./new-ref/.git diff --name-only --diff-filter=ACMRT \${{ github.event.pull\_request.base.sha }}

\${{ github.sha }} > refDiffFiles.txt

- name: Get Target Files

run: git --git-dir ./sdkbase/.git ls-files | grep -xf refDiffFiles.txt - > targetFiles.txt

- name: Checkout scancode

uses: actions/checkout@v2

with:

repository: nexB/scancode-toolkit

path: scancode-toolkit

```

    fetch-depth: 1
  - name: Set up Python ${ { matrix.python-version } }
    uses: actions/setup-python@v2
    with:
      python-version: ${ { matrix.python-version } }
  # ScanCode
  - name: Self-configure scancode
    working-directory: ./scancode-toolkit
    run: ./scancode --help
  - name: Run Scan code on target
    run: cat targetFiles.txt | while read filename; do echo ./sdkbase/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> old-licenses.txt
  - name: Run Scan code on pr ref
    run: cat refDiffFiles.txt | while read filename; do echo ./new-ref/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> new-licenses.txt
  # compare
  - name: License test
    run: if ! cmp old-licenses.txt new-licenses.txt; then echo "Licenses differ! Failing."; exit -1; else echo "Licenses
are the same. Success."; exit 0; fi
// Code generated by smithy-go-codegen DO NOT EDIT.

```

package grafana

```

import (
    "context"
    "errors"
    "fmt"
    "github.com/aws/aws-sdk-go-v2/aws"
    awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
    "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
    internalauth "github.com/aws/aws-sdk-go-v2/internal/auth"
    "github.com/aws/aws-sdk-go-v2/service/grafana/types"
    smithyendpoints "github.com/aws/smithy-go/endpoints"
    "github.com/aws/smithy-go/middleware"
    smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Removes the Grafana Enterprise license from a workspace.
func (c *Client) DisassociateLicense(ctx context.Context, params *DisassociateLicenseInput, optFns
...func(*Options)) (*DisassociateLicenseOutput, error) {
    if params == nil {
        params = &DisassociateLicenseInput{}
    }

    result, metadata, err := c.invokeOperation(ctx, "DisassociateLicense", params, optFns,
c.addOperationDisassociateLicenseMiddlewares)
    if err != nil {
        return nil, err
    }
}

```

```

}

out := result.(*DisassociateLicenseOutput)
out.ResultMetadata
= metadata
return out, nil
}

type DisassociateLicenseInput struct {

// The type of license to remove from the workspace.
//
// This member is required.
LicenseType types.LicenseType

// The ID of the workspace to remove the Grafana Enterprise license from.
//
// This member is required.
WorkspaceId *string

noSmithyDocumentSerde
}

type DisassociateLicenseOutput struct {

// A structure containing information about the workspace.
//
// This member is required.
Workspace *types.WorkspaceDescription

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationDisassociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
err = stack.Serialize.Add(&awsRestjson1_serializeOpDisassociateLicense{ }, middleware.After)
if err != nil {
return err
}
err = stack.Deserialize.Add(&awsRestjson1_deserializeOpDisassociateLicense{ }, middleware.After)
if
err != nil {
return err
}
if err = addLegacyEndpointContextSetter(stack, options); err != nil {

```

```

return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
return err
}
if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
return err
}
if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
return err
}
if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
return err
}
if err = addRetryMiddlewares(stack, options); err != nil {
return err
}
if err = addHTTPSignerV4Middleware(stack, options); err != nil {
return err
}
if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
return err
}
if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
return err
}
if err = addClientUserAgent(stack, options); err != nil {
return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
err != nil {
return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
return err
}
if err = addDisassociateLicenseResolveEndpointMiddleware(stack, options); err != nil {
return err
}
if err = addOpDisassociateLicenseValidationMiddleware(stack); err != nil {
return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDisassociateLicense(options.Region),
middleware.Before); err != nil {
return err
}

```

```

}
if err = awsmiddleware.AddRecursionDetection(stack); err != nil {
    return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
    return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
    return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
    return err
}
if err = addEndpointDisableHTTPSMiddleware(stack, options); err != nil {
    return err
}
return nil
}

func newServiceMetadataMiddleware_opDisassociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata
{
    return &awsmiddleware.RegisterServiceMetadata{
        Region:    region,
        ServiceID: ServiceID,
        SigningName: "grafana",
        OperationName: "DisassociateLicense",
    }
}

type opDisassociateLicenseResolveEndpointMiddleware struct {
    EndpointResolver EndpointResolverV2
    BuiltInResolver  builtInParameterResolver
}

func (*opDisassociateLicenseResolveEndpointMiddleware) ID() string {
    return "ResolveEndpointV2"
}

func (m *opDisassociateLicenseResolveEndpointMiddleware) HandleSerialize(ctx context.Context, in
middleware.SerializeInput, next middleware.SerializeHandler) (
    out middleware.SerializeOutput, metadata middleware.Metadata, err error,
) {
    if awsmiddleware.GetRequiresLegacyEndpoints(ctx) {
        return next.HandleSerialize(ctx, in)
    }

    req, ok := in.Request.(*smithyhttp.Request)

```

```

if !ok {
    return out, metadata, fmt.Errorf("unknown transport type %T", in.Request)
}

if m.EndpointResolver == nil {
    return out, metadata, fmt.Errorf("expected endpoint resolver to
not be nil")
}

params := EndpointParameters{}

m.BuiltInResolver.ResolveBuiltIns(&params)

var resolvedEndpoint smithyendpoints.Endpoint
resolvedEndpoint, err = m.EndpointResolver.ResolveEndpoint(ctx, params)
if err != nil {
    return out, metadata, fmt.Errorf("failed to resolve service endpoint, %w", err)
}

req.URL = &resolvedEndpoint.URI

for k := range resolvedEndpoint.Headers {
    req.Header.Set(
        k,
        resolvedEndpoint.Headers.Get(k),
    )
}

authSchemes, err := internalauth.GetAuthenticationSchemes(&resolvedEndpoint.Properties)
if err != nil {
    var nfe *internalauth.NoAuthenticationSchemesFoundError
    if errors.As(err, &nfe) {
        // if no auth scheme is found, default to sigv4
        signingName := "grafana"
        signingRegion := m.BuiltInResolver.(*builtInResolver).Region
        ctx = awsmiddleware.SetSigningName(ctx, signingName)
        ctx = awsmiddleware.SetSigningRegion(ctx, signingRegion)
    }
    var ue *internalauth.UnSupportedAuthenticationSchemeSpecifiedError
    if errors.As(err,
&ue) {
        return out, metadata, fmt.Errorf(
            "This operation requests signer version(s) %v but the client only supports %v",
            ue.UnsupportedSchemes,
            internalauth.SupportedSchemes,
        )
    }
}

```

```

}

for _, authScheme := range authSchemes {
    switch authScheme.(type) {
    case *internalauth.AuthenticationSchemeV4:
        v4Scheme, _ := authScheme.(*internalauth.AuthenticationSchemeV4)
        var signingName, signingRegion string
        if v4Scheme.SigningName == nil {
            signingName = "grafana"
        } else {
            signingName = *v4Scheme.SigningName
        }
        if v4Scheme.SigningRegion == nil {
            signingRegion = m.BuiltInResolver.(*builtInResolver).Region
        } else {
            signingRegion = *v4Scheme.SigningRegion
        }
        if v4Scheme.DisableDoubleEncoding != nil {
            // The signer sets an equivalent value at client initialization time.
            // Setting this context value will cause the signer to extract it
            // and override the value set at client initialization time.
            ctx = internalauth.SetDisableDoubleEncoding(ctx,
*v4Scheme.DisableDoubleEncoding)
        }
        ctx = awsmiddleware.SetSigningName(ctx, signingName)
        ctx = awsmiddleware.SetSigningRegion(ctx, signingRegion)
        break
    case *internalauth.AuthenticationSchemeV4A:
        v4aScheme, _ := authScheme.(*internalauth.AuthenticationSchemeV4A)
        if v4aScheme.SigningName == nil {
            v4aScheme.SigningName = aws.String("grafana")
        }
        if v4aScheme.DisableDoubleEncoding != nil {
            // The signer sets an equivalent value at client initialization time.
            // Setting this context value will cause the signer to extract it
            // and override the value set at client initialization time.
            ctx = internalauth.SetDisableDoubleEncoding(ctx, *v4aScheme.DisableDoubleEncoding)
        }
        ctx = awsmiddleware.SetSigningName(ctx, *v4aScheme.SigningName)
        ctx = awsmiddleware.SetSigningRegion(ctx, v4aScheme.SigningRegionSet[0])
        break
    case *internalauth.AuthenticationSchemeNone:
        break
    }
}

return next.HandleSerialize(ctx, in)
}

```

```

func
addDisassociateLicenseResolveEndpointMiddleware(stack *middleware.Stack, options Options) error {
return stack.Serialize.Insert(&opDisassociateLicenseResolveEndpointMiddleware{
EndpointResolver: options.EndpointResolverV2,
BuiltInResolver: &builtInResolver{
Region: options.Region,
UseDualStack: options.EndpointOptions.UseDualStackEndpoint,
UseFIPS: options.EndpointOptions.UseFIPSEndpoint,
Endpoint: options.BaseEndpoint,
},
}, "ResolveEndpoint", middleware.After)
}
// Code generated by smithy-go-codegen DO NOT EDIT.

```

```

package licensemanager

```

```

import (
"context"
"errors"
"fmt"
"github.com/aws/aws-sdk-go-v2/aws"
awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
"github.com/aws/aws-sdk-go-v2/aws/signer/v4"
internalauth "github.com/aws/aws-sdk-go-v2/internal/auth"
"github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
smithyendpoints "github.com/aws/smithy-go/endpoints"
"github.com/aws/smithy-go/middleware"
smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Gets detailed information about the specified license.
func (c *Client) GetLicense(ctx context.Context, params *GetLicenseInput, optFns ...func(*Options))
(*GetLicenseOutput, error) {
if params == nil {
params = &GetLicenseInput{}
}

result, metadata, err := c.invokeOperation(ctx, "GetLicense", params, optFns,
c.addOperationGetLicenseMiddlewares)
if err != nil {
return nil, err
}

out := result.(*GetLicenseOutput)
out.ResultMetadata = metadata
return out,

```



```

nil
}

type GetLicenseInput struct {

    // Amazon Resource Name (ARN) of the license.
    //
    // This member is required.
    LicenseArn *string

    // License version.
    Version *string

    noSmithyDocumentSerde
}

type GetLicenseOutput struct {

    // License details.
    License *types.License

    // Metadata pertaining to the operation's result.
    ResultMetadata middleware.Metadata

    noSmithyDocumentSerde
}

func (c *Client) addOperationGetLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
    err = stack.Serialize.Add(&awsAwsjson11_serializeOpGetLicense{ }, middleware.After)
    if err != nil {
        return err
    }
    err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpGetLicense{ }, middleware.After)
    if err != nil {
        return err
    }
    if err = addLegacyEndpointContextSetter(stack, options); err != nil {
        return err
    }
    if err = addSetLoggerMiddleware(stack, options); err != nil {
        return err
    }
    if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
        return err
    }
    if
    err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
        return err
    }
}

```

```

}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
    return err
}
if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
    return err
}
if err = addRetryMiddlewares(stack, options); err != nil {
    return err
}
if err = addHTTPSignerV4Middleware(stack, options); err != nil {
    return err
}
if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
    return err
}
if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
    return err
}
if err = addClientUserAgent(stack, options); err != nil {
    return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = addGetLicenseResolveEndpointMiddleware(stack, options); err != nil {
    return err
}
if err = addOpGetLicenseValidationMiddleware(stack); err !=
nil {
    return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opGetLicense(options.Region), middleware.Before);
err != nil {
    return err
}
if err = awsmiddleware.AddRecursionDetection(stack); err != nil {
    return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
    return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
    return err
}
}

```

```

if err = addRequestResponseLogging(stack, options); err != nil {
    return err
}
if err = addendpointDisableHTTPSMiddleware(stack, options); err != nil {
    return err
}
return nil
}

func newServiceMetadataMiddleware_opGetLicense(region string) *awsmiddleware.RegisterServiceMetadata {
return &awsmiddleware.RegisterServiceMetadata{
    Region:    region,
    ServiceID: ServiceID,
    SigningName: "license-manager",
    OperationName: "GetLicense",
}
}

type opGetLicenseResolveEndpointMiddleware struct {
    EndpointResolver EndpointResolverV2
    BuiltInResolver  builtInParameterResolver
}

func
(*opGetLicenseResolveEndpointMiddleware) ID() string {
return "ResolveEndpointV2"
}

func (m *opGetLicenseResolveEndpointMiddleware) HandleSerialize(ctx context.Context, in
middleware.SerializeInput, next middleware.SerializeHandler) (
out middleware.SerializeOutput, metadata middleware.Metadata, err error,
) {
if awsmiddleware.GetRequiresLegacyEndpoints(ctx) {
return next.HandleSerialize(ctx, in)
}

req, ok := in.Request.(*smithyhttp.Request)
if !ok {
return out, metadata, fmt.Errorf("unknown transport type %T", in.Request)
}

if m.EndpointResolver == nil {
return out, metadata, fmt.Errorf("expected endpoint resolver to not be nil")
}

params := EndpointParameters{}

m.BuiltInResolver.ResolveBuiltIns(&params)

```

```

var resolvedEndpoint smithyendpoints.Endpoint
resolvedEndpoint, err = m.EndpointResolver.ResolveEndpoint(ctx, params)
if err != nil {
    return out, metadata, fmt.Errorf("failed to resolve service endpoint, %w", err)
}

req.URL = &resolvedEndpoint.URI

for
k := range resolvedEndpoint.Headers {
    req.Header.Set(
        k,
        resolvedEndpoint.Headers.Get(k),
    )
}

authSchemes, err := internalauth.GetAuthenticationSchemes(&resolvedEndpoint.Properties)
if err != nil {
    var nfe *internalauth.NoAuthenticationSchemesFoundError
    if errors.As(err, &nfe) {
        // if no auth scheme is found, default to sigv4
        signingName := "license-manager"
        signingRegion := m.BuiltInResolver.(*builtInResolver).Region
        ctx = awsmiddleware.SetSigningName(ctx, signingName)
        ctx = awsmiddleware.SetSigningRegion(ctx, signingRegion)
    }
    var ue *internalauth.UnsupportedAuthenticationSchemeSpecifiedError
    if errors.As(err, &ue) {
        return out, metadata, fmt.Errorf(
            "This operation requests signer version(s) %v but the client only supports %v",
            ue.UnsupportedSchemes,
            internalauth.SupportedSchemes,
        )
    }
}

for _, authScheme := range authSchemes {
    switch authScheme.(type) {
    case *internalauth.AuthenticationSchemeV4:
        v4Scheme, _ := authScheme.(*internalauth.AuthenticationSchemeV4)
        var
        signingName, signingRegion string
        if v4Scheme.SigningName == nil {
            signingName = "license-manager"
        } else {
            signingName = *v4Scheme.SigningName
        }
    }
}

```

```

}
if v4Scheme.SigningRegion == nil {
    signingRegion = m.BuiltInResolver.(*builtInResolver).Region
} else {
    signingRegion = *v4Scheme.SigningRegion
}
if v4Scheme.DisableDoubleEncoding != nil {
    // The signer sets an equivalent value at client initialization time.
    // Setting this context value will cause the signer to extract it
    // and override the value set at client initialization time.
    ctx = internalauth.SetDisableDoubleEncoding(ctx, *v4Scheme.DisableDoubleEncoding)
}
ctx = awsmiddleware.SetSigningName(ctx, signingName)
ctx = awsmiddleware.SetSigningRegion(ctx, signingRegion)
break
case *internalauth.AuthenticationSchemeV4A:
    v4aScheme, _ := authScheme.(*internalauth.AuthenticationSchemeV4A)
    if v4aScheme.SigningName ==
nil {
        v4aScheme.SigningName = aws.String("license-manager")
    }
    if v4aScheme.DisableDoubleEncoding != nil {
        // The signer sets an equivalent value at client initialization time.
        // Setting this context value will cause the signer to extract it
        // and override the value set at client initialization time.
        ctx = internalauth.SetDisableDoubleEncoding(ctx, *v4aScheme.DisableDoubleEncoding)
    }
    ctx = awsmiddleware.SetSigningName(ctx, *v4aScheme.SigningName)
    ctx = awsmiddleware.SetSigningRegion(ctx, v4aScheme.SigningRegionSet[0])
    break
case *internalauth.AuthenticationSchemeNone:
    break
}
}

return next.HandleSerialize(ctx, in)
}

func addGetLicenseResolveEndpointMiddleware(stack *middleware.Stack, options Options) error {
return stack.Serialize.Insert(&opGetLicenseResolveEndpointMiddleware{
    EndpointResolver: options.EndpointResolverV2,
    BuiltInResolver: &builtInResolver{
        Region:    options.Region,
        UseDualStack: options.EndpointOptions.UseDualStackEndpoint,
        UseFIPS:
            options.EndpointOptions.UseFIPSEndpoint,
        Endpoint:  options.BaseEndpoint,
    },
},

```

```

    }, "ResolveEndpoint", middleware.After)
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
    "context"
    "errors"
    "fmt"
    "github.com/aws/aws-sdk-go-v2/aws"
    awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
    "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
    internalauth "github.com/aws/aws-sdk-go-v2/internal/auth"
    "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
    smithyendpoints "github.com/aws/smithy-go/endpoints"
    "github.com/aws/smithy-go/middleware"
    smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license for offline use.
func (c *Client) CheckoutBorrowLicense(ctx context.Context, params *CheckoutBorrowLicenseInput, optFns
...func(*Options)) (*CheckoutBorrowLicenseOutput, error) {
    if params == nil {
        params = &CheckoutBorrowLicenseInput{}
    }

    result, metadata, err := c.invokeOperation(ctx, "CheckoutBorrowLicense", params, optFns,
c.addOperationCheckoutBorrowLicenseMiddlewares)
    if err != nil {
        return nil, err
    }

    out := result.(*CheckoutBorrowLicenseOutput)
    out.ResultMetadata
    = metadata
    return out, nil
}

type CheckoutBorrowLicenseInput struct {

    // Unique, case-sensitive identifier that you provide to ensure the idempotency of
    // the request.
    //
    // This member is required.
    ClientToken *string

    // Digital signature method. The possible value is JSON Web Signature (JWS)

```

```

// algorithm PS384. For more information, see RFC 7518 Digital Signature with
// RSASSA-PSS (https://tools.ietf.org/html/rfc7518#section-3.5) .
//
// This member is required.
DigitalSignatureMethod types.DigitalSignatureMethod

// License entitlements. Partial checkouts are not supported.
//
// This member is required.
Entitlements []types.EntitlementData

// Amazon Resource Name (ARN) of the license. The license must use the borrow
// consumption configuration.
//
// This member is required.
LicenseArn *string

// Information about constraints.
CheckoutMetadata []types.Metadata

// Node ID.
NodeId *string

noSmithyDocumentSerde
}

type
CheckoutBorrowLicenseOutput struct {

// Information about constraints.
CheckoutMetadata []types.Metadata

// Allowed license entitlements.
EntitlementsAllowed []types.EntitlementData

// Date and time at which the license checkout expires.
Expiration *string

// Date and time at which the license checkout is issued.
IssuedAt *string

// Amazon Resource Name (ARN) of the license.
LicenseArn *string

// License consumption token.
LicenseConsumptionToken *string

// Node ID.

```

```

NodeId *string

// Signed token.
SignedToken *string

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutBorrowLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
    err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutBorrowLicense{ }, middleware.After)
    if err != nil {
        return err
    }
    err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutBorrowLicense{ },
middleware.After)
    if err != nil {
        return err
    }
    if err = addLegacyEndpointContextSetter(stack, options); err != nil {
        return err
    }
    if err = addSetLoggerMiddleware(stack, options); err != nil {
        return err
    }
    if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
        return err
    }
    if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
        return err
    }
    if err = addResolveEndpointMiddleware(stack, options); err != nil {
        return err
    }
    if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
        return err
    }
    if err = addRetryMiddlewares(stack, options); err != nil {
        return err
    }
    if err = addHTTPSignerV4Middleware(stack, options); err != nil {
        return err
    }
    if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
        return err
    }
}

```



```

}
if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
    return err
}
if err = addClientUserAgent(stack, options); err != nil {
    return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
err != nil {
    return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = addCheckoutBorrowLicenseResolveEndpointMiddleware(stack, options); err != nil {
    return err
}
if err = addOpCheckoutBorrowLicenseValidationMiddleware(stack); err != nil {
    return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutBorrowLicense(options.Region),
middleware.Before); err != nil {
    return err
}
if err = awsmiddleware.AddRecursionDetection(stack); err != nil {
    return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
    return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
    return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
    return err
}
if err = addendpointDisableHTTPSMiddleware(stack, options); err != nil {
    return err
}
return nil
}

```

```

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region
string) *awsmiddleware.RegisterServiceMetadata {
return &awsmiddleware.RegisterServiceMetadata{
    Region:    region,
    ServiceID: ServiceID,
    SigningName: "license-manager",
}
}

```

```

    OperationName: "CheckoutBorrowLicense",
  }
}

type opCheckoutBorrowLicenseResolveEndpointMiddleware struct {
  EndpointResolver EndpointResolverV2
  BuiltInResolver  builtInParameterResolver
}

func (*opCheckoutBorrowLicenseResolveEndpointMiddleware) ID() string {
  return "ResolveEndpointV2"
}

func (m *opCheckoutBorrowLicenseResolveEndpointMiddleware) HandleSerialize(ctx context.Context, in
middleware.SerializeInput, next middleware.SerializeHandler) (
  out middleware.SerializeOutput, metadata middleware.Metadata, err error,
) {
  if awsmiddleware.GetRequiresLegacyEndpoints(ctx) {
    return next.HandleSerialize(ctx, in)
  }

  req, ok := in.Request.(*smithyhttp.Request)
  if !ok {
    return out, metadata, fmt.Errorf("unknown transport type %T", in.Request)
  }

  if m.EndpointResolver == nil {
    return out, metadata,
    fmt.Errorf("expected endpoint resolver to not be nil")
  }

  params := EndpointParameters{}

  m.BuiltInResolver.ResolveBuiltIns(&params)

  var resolvedEndpoint smithyendpoints.Endpoint
  resolvedEndpoint, err = m.EndpointResolver.ResolveEndpoint(ctx, params)
  if err != nil {
    return out, metadata, fmt.Errorf("failed to resolve service endpoint, %w", err)
  }

  req.URL = &resolvedEndpoint.URI

  for k := range resolvedEndpoint.Headers {
    req.Header.Set(
      k,
      resolvedEndpoint.Headers.Get(k),
    )
  }
}

```

```

}

authSchemes, err := internalauth.GetAuthenticationSchemes(&resolvedEndpoint.Properties)
if err != nil {
    var nfe *internalauth.NoAuthenticationSchemesFoundError
    if errors.As(err, &nfe) {
        // if no auth scheme is found, default to sigv4
        signingName := "license-manager"
        signingRegion := m.BuiltInResolver.(*builtInResolver).Region
        ctx = awsmiddleware.SetSigningName(ctx, signingName)
        ctx = awsmiddleware.SetSigningRegion(ctx, signingRegion)

    }

    var ue *internalauth.UnSupportedAuthenticationSchemeSpecifiedError
    if
errors.As(err, &ue) {
        return out, metadata, fmt.Errorf(
            "This operation requests signer version(s) %v but the client only supports %v",
            ue.UnsupportedSchemes,
            internalauth.SupportedSchemes,
        )
    }
}

for _, authScheme := range authSchemes {
    switch authScheme.(type) {
    case *internalauth.AuthenticationSchemeV4:
        v4Scheme, _ := authScheme.(*internalauth.AuthenticationSchemeV4)
        var signingName, signingRegion string
        if v4Scheme.SigningName == nil {
            signingName = "license-manager"
        } else {
            signingName = *v4Scheme.SigningName
        }
        if v4Scheme.SigningRegion == nil {
            signingRegion = m.BuiltInResolver.(*builtInResolver).Region
        } else {
            signingRegion = *v4Scheme.SigningRegion
        }
        if v4Scheme.DisableDoubleEncoding != nil {
            // The signer sets an equivalent value at client initialization time.
            // Setting this context value will cause the signer to extract it
            // and override the
value set at client initialization time.
            ctx = internalauth.SetDisableDoubleEncoding(ctx, *v4Scheme.DisableDoubleEncoding)
        }
        ctx = awsmiddleware.SetSigningName(ctx, signingName)
        ctx = awsmiddleware.SetSigningRegion(ctx, signingRegion)
    }
}

```

```

break
case *internalauth.AuthenticationSchemeV4A:
v4aScheme, _ := authScheme.(*internalauth.AuthenticationSchemeV4A)
if v4aScheme.SigningName == nil {
v4aScheme.SigningName = aws.String("license-manager")
}
if v4aScheme.DisableDoubleEncoding != nil {
// The signer sets an equivalent value at client initialization time.
// Setting this context value will cause the signer to extract it
// and override the value set at client initialization time.
ctx = internalauth.SetDisableDoubleEncoding(ctx, *v4aScheme.DisableDoubleEncoding)
}
ctx = awsmiddleware.SetSigningName(ctx, *v4aScheme.SigningName)
ctx = awsmiddleware.SetSigningRegion(ctx, v4aScheme.SigningRegionSet[0])
break
case *internalauth.AuthenticationSchemeNone:
break
}
}

return
next.HandleSerialize(ctx, in)
}

func addCheckoutBorrowLicenseResolveEndpointMiddleware(stack *middleware.Stack, options Options) error {
return stack.Serialize.Insert(&opCheckoutBorrowLicenseResolveEndpointMiddleware{
EndpointResolver: options.EndpointResolverV2,
BuiltInResolver: &builtInResolver{
Region: options.Region,
UseDualStack: options.EndpointOptions.UseDualStackEndpoint,
UseFIPS: options.EndpointOptions.UseFIPSEndpoint,
Endpoint: options.BaseEndpoint,
},
}, "ResolveEndpoint", middleware.After)
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
"context"
"errors"
"fmt"
"github.com/aws/aws-sdk-go-v2/aws"
awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
"github.com/aws/aws-sdk-go-v2/aws/signer/v4"
internalauth "github.com/aws/aws-sdk-go-v2/internal/auth"
"github.com/aws/aws-sdk-go-v2/service/licensemanager/types"

```

```

smithyendpoints "github.com/aws/smithy-go/endpoints"
"github.com/aws/smithy-go/middleware"
smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists the licenses for your account.
func (c *Client) ListLicenses(ctx context.Context, params *ListLicensesInput, optFns ...func(*Options))
(*ListLicensesOutput, error) {
    if params == nil {
        params = &ListLicensesInput{}
    }

    result, metadata, err := c.invokeOperation(ctx, "ListLicenses", params, optFns,
c.addOperationListLicensesMiddlewares)
    if err != nil {
        return nil, err
    }

    out := result.(*ListLicensesOutput)
    out.ResultMetadata = metadata
    return out, nil
}

type
ListLicensesInput struct {

    // Filters to scope the results. The following filters are supported:
    // - Beneficiary
    // - ProductSKU
    // - Fingerprint
    // - Status
    Filters []types.Filter

    // Amazon Resource Names (ARNs) of the licenses.
    LicenseArns []string

    // Maximum number of results to return in a single call.
    MaxResults *int32

    // Token for the next set of results.
    NextToken *string

    noSmithyDocumentSerde
}

type ListLicensesOutput struct {

    // License details.

```

Licenses []types.License

// Token for the next set of results.

NextToken \*string

// Metadata pertaining to the operation's result.

ResultMetadata middleware.Metadata

noSmithyDocumentSerde

}

func (c \*Client) addOperationListLicensesMiddlewares(stack \*middleware.Stack, options Options) (err error) {

err = stack.Serialize.Add(&awsAwsjson11\_serializeOpListLicenses{ }, middleware.After)

if err != nil {

return err

}

err = stack.Deserialize.Add(&awsAwsjson11\_deserializeOpListLicenses{ }, middleware.After)

if

err != nil {

return err

}

if err = addLegacyEndpointContextSetter(stack, options); err != nil {

return err

}

if err = addSetLoggerMiddleware(stack, options); err != nil {

return err

}

if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {

return err

}

if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {

return err

}

if err = addResolveEndpointMiddleware(stack, options); err != nil {

return err

}

if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {

return err

}

if err = addRetryMiddlewares(stack, options); err != nil {

return err

}

if err = addHTTPSignerV4Middleware(stack, options); err != nil {

return err

}

if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {

return err

}

```

if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
    return err
}
if err = addClientUserAgent(stack, options); err != nil {
    return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
err != nil {
    return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = addListLicensesResolveEndpointMiddleware(stack, options); err != nil {
    return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListLicenses(options.Region), middleware.Before);
err != nil {
    return err
}
if err = awsmiddleware.AddRecursionDetection(stack); err != nil {
    return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
    return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
    return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
    return err
}
if err = addendpointDisableHTTPSMiddleware(stack, options); err != nil {
    return err
}
return nil
}

func newServiceMetadataMiddleware_opListLicenses(region string) *awsmiddleware.RegisterServiceMetadata {
return &awsmiddleware.RegisterServiceMetadata{
    Region:    region,
    ServiceID:
        ServiceID,
    SigningName: "license-manager",
    OperationName: "ListLicenses",
}
}

```

```

type opListLicensesResolveEndpointMiddleware struct {
    EndpointResolver EndpointResolverV2
    BuiltInResolver  builtInParameterResolver
}

func (*opListLicensesResolveEndpointMiddleware) ID() string {
    return "ResolveEndpointV2"
}

func (m *opListLicensesResolveEndpointMiddleware) HandleSerialize(ctx context.Context, in
middleware.SerializeInput, next middleware.SerializeHandler) (
    out middleware.SerializeOutput, metadata middleware.Metadata, err error,
) {
    if awsmiddleware.GetRequiresLegacyEndpoints(ctx) {
        return next.HandleSerialize(ctx, in)
    }

    req, ok := in.Request.(*smithyhttp.Request)
    if !ok {
        return out, metadata, fmt.Errorf("unknown transport type %T", in.Request)
    }

    if m.EndpointResolver == nil {
        return out, metadata, fmt.Errorf("expected endpoint resolver to not be nil")
    }

    params := EndpointParameters{}

    m.BuiltInResolver.ResolveBuiltIns(&params)

    var resolvedEndpoint
    smithyendpoints.Endpoint
    resolvedEndpoint, err = m.EndpointResolver.ResolveEndpoint(ctx, params)
    if err != nil {
        return out, metadata, fmt.Errorf("failed to resolve service endpoint, %w", err)
    }

    req.URL = &resolvedEndpoint.URI

    for k := range resolvedEndpoint.Headers {
        req.Header.Set(
            k,
            resolvedEndpoint.Headers.Get(k),
        )
    }

    authSchemes, err := internalauth.GetAuthenticationSchemes(&resolvedEndpoint.Properties)
    if err != nil {

```



```

var nfe *internalauth.NoAuthenticationSchemesFoundError
if errors.As(err, &nfe) {
    // if no auth scheme is found, default to sigv4
    signingName := "license-manager"
    signingRegion := m.BuiltInResolver.(*builtInResolver).Region
    ctx = awsmiddleware.SetSigningName(ctx, signingName)
    ctx = awsmiddleware.SetSigningRegion(ctx, signingRegion)

}

var ue *internalauth.UnSupportedAuthenticationSchemeSpecifiedError
if errors.As(err, &ue) {
    return out, metadata, fmt.Errorf(
        "This operation requests signer version(s) %v but the
client only supports %v",
        ue.UnsupportedSchemes,
        internalauth.SupportedSchemes,
    )
}
}

for _, authScheme := range authSchemes {
    switch authScheme.(type) {
    case *internalauth.AuthenticationSchemeV4:
        v4Scheme, _ := authScheme.(*internalauth.AuthenticationSchemeV4)
        var signingName, signingRegion string
        if v4Scheme.SigningName == nil {
            signingName = "license-manager"
        } else {
            signingName = *v4Scheme.SigningName
        }
        if v4Scheme.SigningRegion == nil {
            signingRegion = m.BuiltInResolver.(*builtInResolver).Region
        } else {
            signingRegion = *v4Scheme.SigningRegion
        }
        if v4Scheme.DisableDoubleEncoding != nil {
            // The signer sets an equivalent value at client initialization time.
            // Setting this context value will cause the signer to extract it
            // and override the value set at client initialization time.
            ctx = internalauth.SetDisableDoubleEncoding(ctx, *v4Scheme.DisableDoubleEncoding)
        }
        ctx = awsmiddleware.SetSigningName(ctx,
signingName)
        ctx = awsmiddleware.SetSigningRegion(ctx, signingRegion)
        break
    case *internalauth.AuthenticationSchemeV4A:
        v4aScheme, _ := authScheme.(*internalauth.AuthenticationSchemeV4A)
        if v4aScheme.SigningName == nil {

```

```

    v4aScheme.SigningName = aws.String("license-manager")
}
if v4aScheme.DisableDoubleEncoding != nil {
    // The signer sets an equivalent value at client initialization time.
    // Setting this context value will cause the signer to extract it
    // and override the value set at client initialization time.
    ctx = internalauth.SetDisableDoubleEncoding(ctx, *v4aScheme.DisableDoubleEncoding)
}
ctx = awsmiddleware.SetSigningName(ctx, *v4aScheme.SigningName)
ctx = awsmiddleware.SetSigningRegion(ctx, v4aScheme.SigningRegionSet[0])
break
case *internalauth.AuthenticationSchemeNone:
    break
}
}

return next.HandleSerialize(ctx, in)
}

```

```

func addListLicensesResolveEndpointMiddleware(stack *middleware.Stack, options Options)
error {
return stack.Serialize.Insert(&opListLicensesResolveEndpointMiddleware{
    EndpointResolver: options.EndpointResolverV2,
    BuiltInResolver: &builtInResolver{
        Region:    options.Region,
        UseDualStack: options.EndpointOptions.UseDualStackEndpoint,
        UseFIPS:    options.EndpointOptions.UseFIPSEndpoint,
        Endpoint:   options.BaseEndpoint,
    },
}, "ResolveEndpoint", middleware.After)
}
// Code generated by smithy-go-codegen DO NOT EDIT.

```

```

package licensemanager

```

```

import (
    "context"
    "errors"
    "fmt"
    "github.com/aws/aws-sdk-go-v2/aws"
    awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
    "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
    internalauth "github.com/aws/aws-sdk-go-v2/internal/auth"
    "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
    smithyendpoints "github.com/aws/smithy-go/endpoints"
    "github.com/aws/smithy-go/middleware"
    smithyhttp "github.com/aws/smithy-go/transport/http"
)

```

```

// Deletes the specified license.
func (c *Client) DeleteLicense(ctx context.Context, params *DeleteLicenseInput, optFns ...func(*Options))
(*DeleteLicenseOutput, error) {
    if params == nil {
        params = &DeleteLicenseInput{}
    }

    result, metadata, err := c.invokeOperation(ctx, "DeleteLicense", params, optFns,
c.addOperationDeleteLicenseMiddlewares)
    if err != nil {
        return nil, err
    }

    out := result.(*DeleteLicenseOutput)
    out.ResultMetadata = metadata
    return out, nil
}

type
DeleteLicenseInput struct {

    // Amazon Resource Name (ARN) of the license.
    //
    // This member is required.
    LicenseArn *string

    // Current version of the license.
    //
    // This member is required.
    SourceVersion *string

    noSmithyDocumentSerde
}

type DeleteLicenseOutput struct {

    // Date when the license is deleted.
    DeletionDate *string

    // License status.
    Status types.LicenseDeletionStatus

    // Metadata pertaining to the operation's result.
    ResultMetadata middleware.Metadata

    noSmithyDocumentSerde
}

```

```

func (c *Client) addOperationDeleteLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
    err = stack.Serialize.Add(&awsAwsjson11_serializeOpDeleteLicense{ }, middleware.After)
    if err != nil {
        return err
    }
    err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpDeleteLicense{ }, middleware.After)
    if err != nil {
        return err
    }
    if err = addLegacyEndpointContextSetter(stack, options); err != nil {
        return err
    }
    if err = addSetLoggerMiddleware(stack,
options); err != nil {
        return err
    }
    if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
        return err
    }
    if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
        return err
    }
    if err = addResolveEndpointMiddleware(stack, options); err != nil {
        return err
    }
    if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
        return err
    }
    if err = addRetryMiddlewares(stack, options); err != nil {
        return err
    }
    if err = addHTTPSignerV4Middleware(stack, options); err != nil {
        return err
    }
    if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
        return err
    }
    if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
        return err
    }
    if err = addClientUserAgent(stack, options); err != nil {
        return err
    }
    if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
        return err
    }
    if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {

```

```

    return err
}
if err = addDeleteLicenseResolveEndpointMiddleware(stack,
options); err != nil {
    return err
}
if err = addOpDeleteLicenseValidationMiddleware(stack); err != nil {
    return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDeleteLicense(options.Region),
middleware.Before); err != nil {
    return err
}
if err = awsmiddleware.AddRecursionDetection(stack); err != nil {
    return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
    return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
    return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
    return err
}
if err = addEndpointDisableHTTPSMiddleware(stack, options); err != nil {
    return err
}
return nil
}

func newServiceMetadataMiddleware_opDeleteLicense(region string) *awsmiddleware.RegisterServiceMetadata {
return &awsmiddleware.RegisterServiceMetadata{
    Region:    region,
    ServiceID: ServiceID,
    SigningName: "license-manager",
    OperationName: "DeleteLicense",
}
}

type
opDeleteLicenseResolveEndpointMiddleware struct {
    EndpointResolver EndpointResolverV2
    BuiltInResolver  builtInParameterResolver
}

func (*opDeleteLicenseResolveEndpointMiddleware) ID() string {
return "ResolveEndpointV2"
}

```

```

}

func (m *opDeleteLicenseResolveEndpointMiddleware) HandleSerialize(ctx context.Context, in
middleware.SerializeInput, next middleware.SerializeHandler) (
out middleware.SerializeOutput, metadata middleware.Metadata, err error,
) {
if awsmiddleware.GetRequiresLegacyEndpoints(ctx) {
return next.HandleSerialize(ctx, in)
}

req, ok := in.Request.(*smithyhttp.Request)
if !ok {
return out, metadata, fmt.Errorf("unknown transport type %T", in.Request)
}

if m.EndpointResolver == nil {
return out, metadata, fmt.Errorf("expected endpoint resolver to not be nil")
}

params := EndpointParameters{}

m.BuiltInResolver.ResolveBuiltIns(&params)

var resolvedEndpoint smithyendpoints.Endpoint
resolvedEndpoint, err = m.EndpointResolver.ResolveEndpoint(ctx,
params)
if err != nil {
return out, metadata, fmt.Errorf("failed to resolve service endpoint, %w", err)
}

req.URL = &resolvedEndpoint.URI

for k := range resolvedEndpoint.Headers {
req.Header.Set(
k,
resolvedEndpoint.Headers.Get(k),
)
}

authSchemes, err := internalauth.GetAuthenticationSchemes(&resolvedEndpoint.Properties)
if err != nil {
var nfe *internalauth.NoAuthenticationSchemesFoundError
if errors.As(err, &nfe) {
// if no auth scheme is found, default to sigv4
signingName := "license-manager"
signingRegion := m.BuiltInResolver.(*builtInResolver).Region
ctx = awsmiddleware.SetSigningName(ctx, signingName)
ctx = awsmiddleware.SetSigningRegion(ctx, signingRegion)
}
}
}

```

```

    }
    var ue *internalauth.UnSupportedAuthenticationSchemeSpecifiedError
    if errors.As(err, &ue) {
        return out, metadata, fmt.Errorf(
            "This operation requests signer version(s) %v but the client only supports %v",
            ue.UnsupportedSchemes,
            internalauth.SupportedSchemes,
        )
    }
}

for
_, authScheme := range authSchemes {
    switch authScheme.(type) {
    case *internalauth.AuthenticationSchemeV4:
        v4Scheme, _ := authScheme.(*internalauth.AuthenticationSchemeV4)
        var signingName, signingRegion string
        if v4Scheme.SigningName == nil {
            signingName = "license-manager"
        } else {
            signingName = *v4Scheme.SigningName
        }
        if v4Scheme.SigningRegion == nil {
            signingRegion = m.BuiltInResolver.(*builtInResolver).Region
        } else {
            signingRegion = *v4Scheme.SigningRegion
        }
        if v4Scheme.DisableDoubleEncoding != nil {
            // The signer sets an equivalent value at client initialization time.
            // Setting this context value will cause the signer to extract it
            // and override the value set at client initialization time.
            ctx = internalauth.SetDisableDoubleEncoding(ctx, *v4Scheme.DisableDoubleEncoding)
        }
        ctx = awsmiddleware.SetSigningName(ctx, signingName)
        ctx = awsmiddleware.SetSigningRegion(ctx, signingRegion)
        break
    case
*internalauth.AuthenticationSchemeV4A:
        v4aScheme, _ := authScheme.(*internalauth.AuthenticationSchemeV4A)
        if v4aScheme.SigningName == nil {
            v4aScheme.SigningName = aws.String("license-manager")
        }
        if v4aScheme.DisableDoubleEncoding != nil {
            // The signer sets an equivalent value at client initialization time.
            // Setting this context value will cause the signer to extract it
            // and override the value set at client initialization time.
            ctx = internalauth.SetDisableDoubleEncoding(ctx, *v4aScheme.DisableDoubleEncoding)

```

```

    }
    ctx = awsmiddleware.SetSigningName(ctx, *v4aScheme.SigningName)
    ctx = awsmiddleware.SetSigningRegion(ctx, v4aScheme.SigningRegionSet[0])
    break
case *internalauth.AuthenticationSchemeNone:
    break
}
}

return next.HandleSerialize(ctx, in)
}

func addDeleteLicenseResolveEndpointMiddleware(stack *middleware.Stack, options Options) error {
return stack.Serialize.Insert(&opDeleteLicenseResolveEndpointMiddleware{
    EndpointResolver:
    options.EndpointResolverV2,
    BuiltInResolver: &builtInResolver{
        Region:    options.Region,
        UseDualStack: options.EndpointOptions.UseDualStackEndpoint,
        UseFIPS:    options.EndpointOptions.UseFIPSEndpoint,
        Endpoint:   options.BaseEndpoint,
    },
    }, "ResolveEndpoint", middleware.After)
}

```

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// Code generated by smithy-go-codegen DO NOT EDIT.

```
package licensemanager
```

```
import (
```

```
    "context"
```

```
    "errors"
```

```
    "fmt"
```

```
    "github.com/aws/aws-sdk-go-v2/aws"
```

```
    awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
```

```
    "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
```

```
    internalauth "github.com/aws/aws-sdk-go-v2/internal/auth"
```

```
    smithyendpoints "github.com/aws/smithy-go/endpoints"
```

```
    "github.com/aws/smithy-go/middleware"
```

```
    smithyhttp "github.com/aws/smithy-go/transport/http"
```

```
)
```

```
// Checks in the specified license. Check in a license when it is no longer in use.
```

```
func (c *Client) CheckInLicense(ctx context.Context, params *CheckInLicenseInput, optFns ...func(*Options))
```

```
(*CheckInLicenseOutput, error) {
```

```
    if params == nil {
```

```
        params = &CheckInLicenseInput{}
```

```
    }
```

```
    result, metadata, err := c.invokeOperation(ctx, "CheckInLicense", params, optFns,
```

```
    c.addOperationCheckInLicenseMiddlewares)
```

```
    if err != nil {
```

```
        return nil, err
```

```
    }
```

```
    out := result.(*CheckInLicenseOutput)
```

```
    out.ResultMetadata = metadata
```

```
    return out, nil
```

```
}
```

```
type
```

```
    CheckInLicenseInput struct {
```

```
        // License consumption token.
```

```
        //
```

```
        // This member is required.
```

```
        LicenseConsumptionToken *string
```

```
        // License beneficiary.
```

Beneficiary \*string

```
noSmithyDocumentSerde  
}
```

```
type CheckInLicenseOutput struct {  
    // Metadata pertaining to the operation's result.  
    ResultMetadata middleware.Metadata
```

```
noSmithyDocumentSerde  
}
```

```
func (c *Client) addOperationCheckInLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {  
    err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckInLicense{ }, middleware.After)  
    if err != nil {  
        return err  
    }  
    err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckInLicense{ }, middleware.After)  
    if err != nil {  
        return err  
    }  
    if err = addLegacyEndpointContextSetter(stack, options); err != nil {  
        return err  
    }  
    if err = addSetLoggerMiddleware(stack, options); err != nil {  
        return err  
    }  
    if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {  
        return err  
    }  
    if err = smithyhttp.AddComputeContentLengthMiddleware(stack);  
    err != nil {  
        return err  
    }  
    if err = addResolveEndpointMiddleware(stack, options); err != nil {  
        return err  
    }  
    if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {  
        return err  
    }  
    if err = addRetryMiddlewares(stack, options); err != nil {  
        return err  
    }  
    if err = addHTTPSignerV4Middleware(stack, options); err != nil {  
        return err  
    }  
    if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {  
        return err  
    }
```

```

}
if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
    return err
}
if err = addClientUserAgent(stack, options); err != nil {
    return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = addCheckInLicenseResolveEndpointMiddleware(stack, options); err != nil {
    return err
}
if err = addOpCheckInLicenseValidationMiddleware(stack); err != nil {
    return err
}
if
err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckInLicense(options.Region),
middleware.Before); err != nil {
    return err
}
if err = awsmiddleware.AddRecursionDetection(stack); err != nil {
    return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
    return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
    return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
    return err
}
if err = addendpointDisableHTTPSMiddleware(stack, options); err != nil {
    return err
}
return nil
}

func newServiceMetadataMiddleware_opCheckInLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
return &awsmiddleware.RegisterServiceMetadata{
    Region:    region,
    ServiceID: ServiceID,
    SigningName: "license-manager",
}
}

```

```

    OperationName: "CheckInLicense",
  }
}

type opCheckInLicenseResolveEndpointMiddleware struct {
  EndpointResolver EndpointResolverV2
  BuiltInResolver  builtInParameterResolver
}

func (*opCheckInLicenseResolveEndpointMiddleware)
ID() string {
  return "ResolveEndpointV2"
}

func (m *opCheckInLicenseResolveEndpointMiddleware) HandleSerialize(ctx context.Context, in
middleware.SerializeInput, next middleware.SerializeHandler) (
  out middleware.SerializeOutput, metadata middleware.Metadata, err error,
) {
  if awsmiddleware.GetRequiresLegacyEndpoints(ctx) {
    return next.HandleSerialize(ctx, in)
  }

  req, ok := in.Request.(*smithyhttp.Request)
  if !ok {
    return out, metadata, fmt.Errorf("unknown transport type %T", in.Request)
  }

  if m.EndpointResolver == nil {
    return out, metadata, fmt.Errorf("expected endpoint resolver to not be nil")
  }

  params := EndpointParameters{}

  m.BuiltInResolver.ResolveBuiltIns(&params)

  var resolvedEndpoint smithyendpoints.Endpoint
  resolvedEndpoint, err = m.EndpointResolver.ResolveEndpoint(ctx, params)
  if err != nil {
    return out, metadata, fmt.Errorf("failed to resolve service endpoint, %w", err)
  }

  req.URL = &resolvedEndpoint.URI

  for
  k := range resolvedEndpoint.Headers {
    req.Header.Set(
      k,
      resolvedEndpoint.Headers.Get(k),

```

```

)
}

authSchemes, err := internalauth.GetAuthenticationSchemes(&resolvedEndpoint.Properties)
if err != nil {
    var nfe *internalauth.NoAuthenticationSchemesFoundError
    if errors.As(err, &nfe) {
        // if no auth scheme is found, default to sigv4
        signingName := "license-manager"
        signingRegion := m.BuiltInResolver.(*builtInResolver).Region
        ctx = awsmiddleware.SetSigningName(ctx, signingName)
        ctx = awsmiddleware.SetSigningRegion(ctx, signingRegion)
    }
    var ue *internalauth.UnSupportedAuthenticationSchemeSpecifiedError
    if errors.As(err, &ue) {
        return out, metadata, fmt.Errorf(
            "This operation requests signer version(s) %v but the client only supports %v",
            ue.UnsupportedSchemes,
            internalauth.SupportedSchemes,
        )
    }
}

for _, authScheme := range authSchemes {
    switch authScheme.(type) {
    case *internalauth.AuthenticationSchemeV4:
        v4Scheme, _ :=
        authScheme.(*internalauth.AuthenticationSchemeV4)
        var signingName, signingRegion string
        if v4Scheme.SigningName == nil {
            signingName = "license-manager"
        } else {
            signingName = *v4Scheme.SigningName
        }
        if v4Scheme.SigningRegion == nil {
            signingRegion = m.BuiltInResolver.(*builtInResolver).Region
        } else {
            signingRegion = *v4Scheme.SigningRegion
        }
        if v4Scheme.DisableDoubleEncoding != nil {
            // The signer sets an equivalent value at client initialization time.
            // Setting this context value will cause the signer to extract it
            // and override the value set at client initialization time.
            ctx = internalauth.SetDisableDoubleEncoding(ctx, *v4Scheme.DisableDoubleEncoding)
        }
        ctx = awsmiddleware.SetSigningName(ctx, signingName)
        ctx = awsmiddleware.SetSigningRegion(ctx, signingRegion)
    }
}

```

```

break
case *internalauth.AuthenticationSchemeV4A:
    v4aScheme, _ := authScheme.(*internalauth.AuthenticationSchemeV4A)
    if v4aScheme.SigningName
== nil {
        v4aScheme.SigningName = aws.String("license-manager")
    }
    if v4aScheme.DisableDoubleEncoding != nil {
        // The signer sets an equivalent value at client initialization time.
        // Setting this context value will cause the signer to extract it
        // and override the value set at client initialization time.
        ctx = internalauth.SetDisableDoubleEncoding(ctx, *v4aScheme.DisableDoubleEncoding)
    }
    ctx = awsmiddleware.SetSigningName(ctx, *v4aScheme.SigningName)
    ctx = awsmiddleware.SetSigningRegion(ctx, v4aScheme.SigningRegionSet[0])
    break
case *internalauth.AuthenticationSchemeNone:
    break
}
}

return next.HandleSerialize(ctx, in)
}

func addCheckInLicenseResolveEndpointMiddleware(stack *middleware.Stack, options Options) error {
return stack.Serialize.Insert(&opCheckInLicenseResolveEndpointMiddleware{
    EndpointResolver: options.EndpointResolverV2,
    BuiltInResolver: &builtInResolver{
        Region:    options.Region,
        UseDualStack: options.EndpointOptions.UseDualStackEndpoint,
        UseFIPS:
            options.EndpointOptions.UseFIPSEndpoint,
        Endpoint:  options.BaseEndpoint,
    },
}, "ResolveEndpoint", middleware.After)
}

```

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package licensemanager

```
import (  
    "context"  
    "errors"  
    "fmt"  
    "github.com/aws/aws-sdk-go-v2/aws"  
    awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"  
    "github.com/aws/aws-sdk-go-v2/aws/signer/v4"  
    internalauth "github.com/aws/aws-sdk-go-v2/internal/auth"  
    "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"  
    smithyendpoints "github.com/aws/smithy-go/endpoints"  
    "github.com/aws/smithy-go/middleware"  
    smithyhttp "github.com/aws/smithy-go/transport/http"  
)  
  
// Lists received licenses.  
func (c *Client) ListReceivedLicenses(ctx context.Context, params *ListReceivedLicensesInput, optFns  
...func(*Options)) (*ListReceivedLicensesOutput, error) {  
    if params == nil {  
        params = &ListReceivedLicensesInput{}  
    }  
  
    result, metadata, err := c.invokeOperation(ctx, "ListReceivedLicenses", params, optFns,  
c.addOperationListReceivedLicensesMiddlewares)  
    if err != nil {  
        return nil, err  
    }  
  
    out := result.(*ListReceivedLicensesOutput)  
    out.ResultMetadata  
    = metadata  
    return out, nil  
}  
  
type ListReceivedLicensesInput struct {  
  
    // Filters to scope the results. The following filters are supported:  
    // - ProductSKU
```

```

// - Status
// - Fingerprint
// - IssuerName
// - Beneficiary
Filters []types.Filter

// Amazon Resource Names (ARNs) of the licenses.
LicenseArns []string

// Maximum number of results to return in a single call.
MaxResults *int32

// Token for the next set of results.
NextToken *string

noSmithyDocumentSerde
}

type ListReceivedLicensesOutput struct {

// Received license details.
Licenses []types.GrantedLicense

// Token for the next set of results.
NextToken *string

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationListReceivedLicensesMiddlewares(stack *middleware.Stack, options Options) (err
error) {
err = stack.Serialize.Add(&awsAwsjson11_serializeOpListReceivedLicenses{ }, middleware.After)
if
err != nil {
return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListReceivedLicenses{ }, middleware.After)
if err != nil {
return err
}
if err = addLegacyEndpointContextSetter(stack, options); err != nil {
return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
return err
}
}

```

```

}
if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
    return err
}
if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
    return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
    return err
}
if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
    return err
}
if err = addRetryMiddlewares(stack, options); err != nil {
    return err
}
if err = addHTTPSignerV4Middleware(stack, options); err != nil {
    return err
}
if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
    return err
}
if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
    return
err
}
if err = addClientUserAgent(stack, options); err != nil {
    return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = addListReceivedLicensesResolveEndpointMiddleware(stack, options); err != nil {
    return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListReceivedLicenses(options.Region),
middleware.Before); err != nil {
    return err
}
if err = awsmiddleware.AddRecursionDetection(stack); err != nil {
    return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
    return err
}
}

```

```

if err = addResponseErrorMiddleware(stack); err != nil {
    return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
    return err
}
if err = addendpointDisableHTTPSMiddleware(stack, options); err != nil {
    return err
}
return nil
}

func newServiceMetadataMiddleware_opListReceivedLicenses(region
string) *awsmiddleware.RegisterServiceMetadata {
return &awsmiddleware.RegisterServiceMetadata{
    Region:    region,
    ServiceID: ServiceID,
    SigningName: "license-manager",
    OperationName: "ListReceivedLicenses",
}
}

type opListReceivedLicensesResolveEndpointMiddleware struct {
    EndpointResolver EndpointResolverV2
    BuiltInResolver  builtInParameterResolver
}

func (*opListReceivedLicensesResolveEndpointMiddleware) ID() string {
return "ResolveEndpointV2"
}

func (m *opListReceivedLicensesResolveEndpointMiddleware) HandleSerialize(ctx context.Context, in
middleware.SerializeInput, next middleware.SerializeHandler) (
out middleware.SerializeOutput, metadata middleware.Metadata, err error,
) {
if awsmiddleware.GetRequiresLegacyEndpoints(ctx) {
return next.HandleSerialize(ctx, in)
}

req, ok := in.Request.(*smithyhttp.Request)
if !ok {
return out, metadata, fmt.Errorf("unknown transport type %T", in.Request)
}

if m.EndpointResolver == nil {
return
out, metadata, fmt.Errorf("expected endpoint resolver to not be nil")
}

```

```

params := EndpointParameters{}

m.BuiltInResolver.ResolveBuiltIns(&params)

var resolvedEndpoint smithyendpoints.Endpoint
resolvedEndpoint, err = m.EndpointResolver.ResolveEndpoint(ctx, params)
if err != nil {
    return out, metadata, fmt.Errorf("failed to resolve service endpoint, %w", err)
}

req.URL = &resolvedEndpoint.URI

for k := range resolvedEndpoint.Headers {
    req.Header.Set(
        k,
        resolvedEndpoint.Headers.Get(k),
    )
}

authSchemes, err := internalauth.GetAuthenticationSchemes(&resolvedEndpoint.Properties)
if err != nil {
    var nfe *internalauth.NoAuthenticationSchemesFoundError
    if errors.As(err, &nfe) {
        // if no auth scheme is found, default to sigv4
        signingName := "license-manager"
        signingRegion := m.BuiltInResolver.(*builtInResolver).Region
        ctx = awsmiddleware.SetSigningName(ctx, signingName)
        ctx = awsmiddleware.SetSigningRegion(ctx, signingRegion)
    }
    var ue *internalauth.UnsupportedAuthenticationSchemeSpecifiedError
    if
    errors.As(err, &ue) {
        return out, metadata, fmt.Errorf(
            "This operation requests signer version(s) %v but the client only supports %v",
            ue.UnsupportedSchemes,
            internalauth.SupportedSchemes,
        )
    }
}

for _, authScheme := range authSchemes {
    switch authScheme.(type) {
    case *internalauth.AuthenticationSchemeV4:
        v4Scheme, _ := authScheme.(*internalauth.AuthenticationSchemeV4)
        var signingName, signingRegion string
        if v4Scheme.SigningName == nil {

```

```

    signingName = "license-manager"
  } else {
    signingName = *v4Scheme.SigningName
  }
  if v4Scheme.SigningRegion == nil {
    signingRegion = m.BuiltInResolver.(*builtInResolver).Region
  } else {
    signingRegion = *v4Scheme.SigningRegion
  }
  if v4Scheme.DisableDoubleEncoding != nil {
    // The signer sets an equivalent value at client initialization time.
    // Setting this context value will cause the signer to extract it
    // and override
the value set at client initialization time.
    ctx = internalauth.SetDisableDoubleEncoding(ctx, *v4Scheme.DisableDoubleEncoding)
  }
  ctx = awsmiddleware.SetSigningName(ctx, signingName)
  ctx = awsmiddleware.SetSigningRegion(ctx, signingRegion)
  break
case *internalauth.AuthenticationSchemeV4A:
v4aScheme, _ := authScheme.(*internalauth.AuthenticationSchemeV4A)
  if v4aScheme.SigningName == nil {
    v4aScheme.SigningName = aws.String("license-manager")
  }
  if v4aScheme.DisableDoubleEncoding != nil {
    // The signer sets an equivalent value at client initialization time.
    // Setting this context value will cause the signer to extract it
    // and override the value set at client initialization time.
    ctx = internalauth.SetDisableDoubleEncoding(ctx, *v4aScheme.DisableDoubleEncoding)
  }
  ctx = awsmiddleware.SetSigningName(ctx, *v4aScheme.SigningName)
  ctx = awsmiddleware.SetSigningRegion(ctx, v4aScheme.SigningRegionSet[0])
  break
case *internalauth.AuthenticationSchemeNone:
  break
}
}

return
next.HandleSerialize(ctx, in)
}

func addListReceivedLicensesResolveEndpointMiddleware(stack *middleware.Stack, options Options) error {
return stack.Serialize.Insert(&opListReceivedLicensesResolveEndpointMiddleware{
  EndpointResolver: options.EndpointResolverV2,
  BuiltInResolver: &builtInResolver{
    Region: options.Region,
    UseDualStack: options.EndpointOptions.UseDualStackEndpoint,

```



```

    UseFIPS:    options.EndpointOptions.UseFIPSEndpoint,
    Endpoint:  options.BaseEndpoint,
  },
  }, "ResolveEndpoint", middleware.After)
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
    "context"
    "errors"
    "fmt"
    "github.com/aws/aws-sdk-go-v2/aws"
    awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
    "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
    internalauth "github.com/aws/aws-sdk-go-v2/internal/auth"
    "github.com/aws/aws-sdk-go-v2/service/grafana/types"
    smithyendpoints "github.com/aws/smithy-go/endpoints"
    "github.com/aws/smithy-go/middleware"
    smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Assigns a Grafana Enterprise license to a workspace. Upgrading to Grafana
// Enterprise incurs additional fees. For more information, see Upgrade a
// workspace to Grafana Enterprise (https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-Grafana-Enterprise.html)
// .
func (c *Client) AssociateLicense(ctx context.Context, params *AssociateLicenseInput, optFns ...func(*Options))
(*AssociateLicenseOutput, error) {
    if params == nil {
        params = &AssociateLicenseInput{}
    }

    result,
    metadata, err := c.invokeOperation(ctx, "AssociateLicense", params, optFns,
c.addOperationAssociateLicenseMiddlewares)
    if err != nil {
        return nil, err
    }

    out := result.(*AssociateLicenseOutput)
    out.ResultMetadata = metadata
    return out, nil
}

type AssociateLicenseInput struct {

```

```

// The type of license to associate with the workspace.
//
// This member is required.
LicenseType types.LicenseType

// The ID of the workspace to associate the license with.
//
// This member is required.
WorkspaceId *string

noSmithyDocumentSerde
}

type AssociateLicenseOutput struct {

// A structure containing data about the workspace.
//
// This member is required.
Workspace *types.WorkspaceDescription

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationAssociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
err = stack.Serialize.Add(&awsRestjson1_serializeOpAssociateLicense{ },
middleware.After)
if err != nil {
return err
}
err = stack.Deserialize.Add(&awsRestjson1_deserializeOpAssociateLicense{ }, middleware.After)
if err != nil {
return err
}
if err = addLegacyEndpointContextSetter(stack, options); err != nil {
return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
return err
}
if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
return err
}
if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
return err
}
}

```

```

if err = addResolveEndpointMiddleware(stack, options); err != nil {
    return err
}
if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
    return err
}
if err = addRetryMiddlewares(stack, options); err != nil {
    return err
}
if err = addHTTPSignerV4Middleware(stack, options); err != nil {
    return err
}
if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
    return err
}
if err = awsmiddleware.AddRecordResponseTiming(stack);
err != nil {
    return err
}
if err = addClientUserAgent(stack, options); err != nil {
    return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = addAssociateLicenseResolveEndpointMiddleware(stack, options); err != nil {
    return err
}
if err = addOpAssociateLicenseValidationMiddleware(stack); err != nil {
    return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opAssociateLicense(options.Region),
middleware.Before); err != nil {
    return err
}
if err = awsmiddleware.AddRecursionDetection(stack); err != nil {
    return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
    return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
    return err
}
if err = addRequestResponseLogging(stack, options); err != nil {

```

```

return err
}
if err = addendpointDisableHTTPSMiddleware(stack,
options); err != nil {
return err
}
return nil
}

func newServiceMetadataMiddleware_opAssociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
return &awsmiddleware.RegisterServiceMetadata{
Region:    region,
ServiceID: ServiceID,
SigningName: "grafana",
OperationName: "AssociateLicense",
}
}

type opAssociateLicenseResolveEndpointMiddleware struct {
EndpointResolver EndpointResolverV2
BuiltInResolver  builtInParameterResolver
}

func (*opAssociateLicenseResolveEndpointMiddleware) ID() string {
return "ResolveEndpointV2"
}

func (m *opAssociateLicenseResolveEndpointMiddleware) HandleSerialize(ctx context.Context, in
middleware.SerializeInput, next middleware.SerializeHandler) (
out middleware.SerializeOutput, metadata middleware.Metadata, err error,
) {
if awsmiddleware.GetRequiresLegacyEndpoints(ctx) {
return next.HandleSerialize(ctx, in)
}

req, ok := in.Request.(*smithyhttp.Request)
if !ok {
return out, metadata, fmt.Errorf("unknown
transport type %T", in.Request)
}

if m.EndpointResolver == nil {
return out, metadata, fmt.Errorf("expected endpoint resolver to not be nil")
}

params := EndpointParameters{}

```

```

m.BuiltInResolver.ResolveBuiltIns(&params)

var resolvedEndpoint smithyendpoints.Endpoint
resolvedEndpoint, err = m.EndpointResolver.ResolveEndpoint(ctx, params)
if err != nil {
    return out, metadata, fmt.Errorf("failed to resolve service endpoint, %w", err)
}

req.URL = &resolvedEndpoint.URI

for k := range resolvedEndpoint.Headers {
    req.Header.Set(
        k,
        resolvedEndpoint.Headers.Get(k),
    )
}

authSchemes, err := internalauth.GetAuthenticationSchemes(&resolvedEndpoint.Properties)
if err != nil {
    var nfe *internalauth.NoAuthenticationSchemesFoundError
    if errors.As(err, &nfe) {
        // if no auth scheme is found, default to sigv4
        signingName := "grafana"
        signingRegion := m.BuiltInResolver.(*builtInResolver).Region
        ctx = awsmiddleware.SetSigningName(ctx, signingName)
        ctx
        = awsmiddleware.SetSigningRegion(ctx, signingRegion)
    }
    var ue *internalauth.UnsupportedAuthenticationSchemeSpecifiedError
    if errors.As(err, &ue) {
        return out, metadata, fmt.Errorf(
            "This operation requests signer version(s) %v but the client only supports %v",
            ue.UnsupportedSchemes,
            internalauth.SupportedSchemes,
        )
    }
}

for _, authScheme := range authSchemes {
    switch authScheme.(type) {
    case *internalauth.AuthenticationSchemeV4:
        v4Scheme, _ := authScheme.(*internalauth.AuthenticationSchemeV4)
        var signingName, signingRegion string
        if v4Scheme.SigningName == nil {
            signingName = "grafana"
        } else {
            signingName = *v4Scheme.SigningName
        }
    }
}

```

```

    }
    if v4Scheme.SigningRegion == nil {
        signingRegion = m.BuiltInResolver.(*builtInResolver).Region
    } else {
        signingRegion = *v4Scheme.SigningRegion
    }
    if v4Scheme.DisableDoubleEncoding != nil {
        // The signer sets an equivalent value at client initialization time.
        // Setting this
context value will cause the signer to extract it
        // and override the value set at client initialization time.
        ctx = internalauth.SetDisableDoubleEncoding(ctx, *v4Scheme.DisableDoubleEncoding)
    }
    ctx = awsmiddleware.SetSigningName(ctx, signingName)
    ctx = awsmiddleware.SetSigningRegion(ctx, signingRegion)
    break
case *internalauth.AuthenticationSchemeV4A:
    v4aScheme, _ := authScheme.(*internalauth.AuthenticationSchemeV4A)
    if v4aScheme.SigningName == nil {
        v4aScheme.SigningName = aws.String("grafana")
    }
    if v4aScheme.DisableDoubleEncoding != nil {
        // The signer sets an equivalent value at client initialization time.
        // Setting this context value will cause the signer to extract it
        // and override the value set at client initialization time.
        ctx = internalauth.SetDisableDoubleEncoding(ctx, *v4aScheme.DisableDoubleEncoding)
    }
    ctx = awsmiddleware.SetSigningName(ctx, *v4aScheme.SigningName)
    ctx = awsmiddleware.SetSigningRegion(ctx,
v4aScheme.SigningRegionSet[0])
    break
case *internalauth.AuthenticationSchemeNone:
    break
}
}

return next.HandleSerialize(ctx, in)
}

func addAssociateLicenseResolveEndpointMiddleware(stack *middleware.Stack, options Options) error {
return stack.Serialize.Insert(&opAssociateLicenseResolveEndpointMiddleware{
    EndpointResolver: options.EndpointResolverV2,
    BuiltInResolver: &builtInResolver{
        Region:    options.Region,
        UseDualStack: options.EndpointOptions.UseDualStackEndpoint,
        UseFIPS:    options.EndpointOptions.UseFIPSEndpoint,
        Endpoint:   options.BaseEndpoint,
    },
},

```

```

    }, "ResolveEndpoint", middleware.After)
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
    "context"
    "errors"
    "fmt"
    "github.com/aws/aws-sdk-go-v2/aws"
    awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
    "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
    internalauth "github.com/aws/aws-sdk-go-v2/internal/auth"
    "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
    smithyendpoints "github.com/aws/smithy-go/endpoints"
    "github.com/aws/smithy-go/middleware"
    smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Creates a license.
func (c *Client) CreateLicense(ctx context.Context, params *CreateLicenseInput, optFns ...func(*Options))
(*CreateLicenseOutput, error) {
    if params == nil {
        params = &CreateLicenseInput{}
    }

    result, metadata, err := c.invokeOperation(ctx, "CreateLicense", params, optFns,
c.addOperationCreateLicenseMiddlewares)
    if err != nil {
        return nil, err
    }

    out := result.(*CreateLicenseOutput)
    out.ResultMetadata = metadata
    return out, nil
}

type CreateLicenseInput
struct {

    // License beneficiary.
    //
    // This member is required.
    Beneficiary *string

    // Unique, case-sensitive identifier that you provide to ensure the idempotency of
    // the request.

```

```
//  
// This member is required.  
ClientToken *string  
  
// Configuration for consumption of the license. Choose a provisional  
// configuration for workloads running with continuous connectivity. Choose a  
// borrow configuration for workloads with offline usage.  
//  
// This member is required.  
ConsumptionConfiguration *types.ConsumptionConfiguration  
  
// License entitlements.  
//  
// This member is required.  
Entitlements []types.Entitlement  
  
// Home Region for the license.  
//  
// This member is required.  
HomeRegion *string  
  
// License issuer.  
//  
// This member is required.  
Issuer *types.Issuer  
  
// License name.  
//  
// This member is required.  
LicenseName *string  
  
// Product name.  
//  
// This member is required.  
ProductName *string  
  
// Product SKU.  
//  
// This member  
is required.  
ProductSKU *string  
  
// Date and time range during which the license is valid, in ISO8601-UTC format.  
//  
// This member is required.  
Validity *types.DatetimeRange  
  
// Information about the license.
```



```

LicenseMetadata []types.Metadata

noSmithyDocumentSerde
}

type CreateLicenseOutput struct {

// Amazon Resource Name (ARN) of the license.
LicenseArn *string

// License status.
Status types.LicenseStatus

// License version.
Version *string

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationCreateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
err = stack.Serialize.Add(&awsAwsjson11_serializeOpCreateLicense{ }, middleware.After)
if err != nil {
return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCreateLicense{ }, middleware.After)
if err != nil {
return err
}
if err = addLegacyEndpointContextSetter(stack, options); err
!= nil {
return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
return err
}
if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
return err
}
if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
return err
}
if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {

```

```

return err
}
if err = addRetryMiddlewares(stack, options); err != nil {
return err
}
if err = addHTTPSignerV4Middleware(stack, options); err != nil {
return err
}
if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
return err
}
if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
return err
}
if err = addClientUserAgent(stack, options); err != nil {
return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack);
err != nil {
return err
}
if err = addCreateLicenseResolveEndpointMiddleware(stack, options); err != nil {
return err
}
if err = addOpCreateLicenseValidationMiddleware(stack); err != nil {
return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCreateLicense(options.Region),
middleware.Before); err != nil {
return err
}
if err = awsmiddleware.AddRecursionDetection(stack); err != nil {
return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
return err
}
if err = addendpointDisableHTTPSMiddleware(stack, options); err != nil {
return err
}

```

```

}
return nil
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
return &awsmiddleware.RegisterServiceMetadata{
Region:    region,
ServiceID: ServiceID,
SigningName:
"license-manager",
OperationName: "CreateLicense",
}
}

type opCreateLicenseResolveEndpointMiddleware struct {
EndpointResolver EndpointResolverV2
BuiltInResolver  builtInParameterResolver
}

func (*opCreateLicenseResolveEndpointMiddleware) ID() string {
return "ResolveEndpointV2"
}

func (m *opCreateLicenseResolveEndpointMiddleware) HandleSerialize(ctx context.Context, in
middleware.SerializeInput, next middleware.SerializeHandler) (
out middleware.SerializeOutput, metadata middleware.Metadata, err error,
) {
if awsmiddleware.GetRequiresLegacyEndpoints(ctx) {
return next.HandleSerialize(ctx, in)
}

req, ok := in.Request.(*smithyhttp.Request)
if !ok {
return out, metadata, fmt.Errorf("unknown transport type %T", in.Request)
}

if m.EndpointResolver == nil {
return out, metadata, fmt.Errorf("expected endpoint resolver to not be nil")
}

params := EndpointParameters{}

m.BuiltInResolver.ResolveBuiltIns(&params)

var resolvedEndpoint smithyendpoints.Endpoint
resolvedEndpoint,
err = m.EndpointResolver.ResolveEndpoint(ctx, params)
if err != nil {

```

```

return out, metadata, fmt.Errorf("failed to resolve service endpoint, %w", err)
}

req.URL = &resolvedEndpoint.URI

for k := range resolvedEndpoint.Headers {
req.Header.Set(
k,
resolvedEndpoint.Headers.Get(k),
)
}

authSchemes, err := internalauth.GetAuthenticationSchemes(&resolvedEndpoint.Properties)
if err != nil {
var nfe *internalauth.NoAuthenticationSchemesFoundError
if errors.As(err, &nfe) {
// if no auth scheme is found, default to sigv4
signingName := "license-manager"
signingRegion := m.BuiltInResolver.(*builtInResolver).Region
ctx = awsmiddleware.SetSigningName(ctx, signingName)
ctx = awsmiddleware.SetSigningRegion(ctx, signingRegion)
}
var ue *internalauth.UnSupportedAuthenticationSchemeSpecifiedError
if errors.As(err, &ue) {
return out, metadata, fmt.Errorf(
"This operation requests signer version(s) %v but the client only supports
%v",
ue.UnsupportedSchemes,
internalauth.SupportedSchemes,
)
}
}

for _, authScheme := range authSchemes {
switch authScheme.(type) {
case *internalauth.AuthenticationSchemeV4:
v4Scheme, _ := authScheme.(*internalauth.AuthenticationSchemeV4)
var signingName, signingRegion string
if v4Scheme.SigningName == nil {
signingName = "license-manager"
} else {
signingName = *v4Scheme.SigningName
}
if v4Scheme.SigningRegion == nil {
signingRegion = m.BuiltInResolver.(*builtInResolver).Region
} else {
signingRegion = *v4Scheme.SigningRegion
}
}
}

```

```

}
if v4Scheme.DisableDoubleEncoding != nil {
// The signer sets an equivalent value at client initialization time.
// Setting this context value will cause the signer to extract it
// and override the value set at client initialization time.
ctx = internalauth.SetDisableDoubleEncoding(ctx, *v4Scheme.DisableDoubleEncoding)
}
ctx = awsmiddleware.SetSigningName(ctx, signingName)
ctx
= awsmiddleware.SetSigningRegion(ctx, signingRegion)
break
case *internalauth.AuthenticationSchemeV4A:
v4aScheme, _ := authScheme.(*internalauth.AuthenticationSchemeV4A)
if v4aScheme.SigningName == nil {
v4aScheme.SigningName = aws.String("license-manager")
}
if v4aScheme.DisableDoubleEncoding != nil {
// The signer sets an equivalent value at client initialization time.
// Setting this context value will cause the signer to extract it
// and override the value set at client initialization time.
ctx = internalauth.SetDisableDoubleEncoding(ctx, *v4aScheme.DisableDoubleEncoding)
}
ctx = awsmiddleware.SetSigningName(ctx, *v4aScheme.SigningName)
ctx = awsmiddleware.SetSigningRegion(ctx, v4aScheme.SigningRegionSet[0])
break
case *internalauth.AuthenticationSchemeNone:
break
}
}

return next.HandleSerialize(ctx, in)
}

func addCreateLicenseResolveEndpointMiddleware(stack *middleware.Stack, options Options) error {
return
stack.Serialize.Insert(&opCreateLicenseResolveEndpointMiddleware{
EndpointResolver: options.EndpointResolverV2,
BuiltInResolver: &builtInResolver{
Region: options.Region,
UseDualStack: options.EndpointOptions.UseDualStackEndpoint,
UseFIPS: options.EndpointOptions.UseFIPSEndpoint,
Endpoint: options.BaseEndpoint,
},
}, "ResolveEndpoint", middleware.After)
}

```

# 1.66 aws-aws-sdk-go-v2 1.9.25

## 1.66.1 Available under license :

```
// Code generated by smithy-go-codegen DO NOT EDIT.
```

```
package licensemanager
```

```
import (
```

```
    "context"
```

```
    awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
```

```
    "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
```

```
    "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
```

```
    "github.com/aws/smithy-go/middleware"
```

```
    smithyhttp "github.com/aws/smithy-go/transport/http"
```

```
)
```

```
// Lists received licenses.
```

```
func (c *Client) ListReceivedLicenses(ctx context.Context, params *ListReceivedLicensesInput, optFns
```

```
...func(*Options)) (*ListReceivedLicensesOutput, error) {
```

```
    if params == nil {
```

```
        params = &ListReceivedLicensesInput{}
```

```
    }
```

```
    result, metadata, err := c.invokeOperation(ctx, "ListReceivedLicenses", params, optFns,
```

```
    c.addOperationListReceivedLicensesMiddlewares)
```

```
    if err != nil {
```

```
        return nil, err
```

```
    }
```

```
    out := result.(*ListReceivedLicensesOutput)
```

```
    out.ResultMetadata = metadata
```

```
    return out, nil
```

```
}
```

```
type ListReceivedLicensesInput struct {
```

```
    // Filters to scope the results. The following filters are supported:
```

```
    //
```

```
    //
```

```
    *
```

```
    // ProductSKU
```

```
    //
```

```
    // * Status
```

```
    //
```

```
    // * Fingerprint
```

```
    //
```

```
    // * IssuerName
```

```

//
// * Beneficiary
Filters []types.Filter

// Amazon Resource Names (ARNs) of the licenses.
LicenseArns []string

// Maximum number of results to return in a single call.
MaxResults *int32

// Token for the next set of results.
NextToken *string

noSmithyDocumentSerde
}

type ListReceivedLicensesOutput struct {

// Received license details.
Licenses []types.GrantedLicense

// Token for the next set of results.
NextToken *string

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationListReceivedLicensesMiddlewares(stack *middleware.Stack, options Options) (err
error) {
err = stack.Serialize.Add(&awsAwsjson11_serializeOpListReceivedLicenses{ }, middleware.After)
if err != nil {
return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListReceivedLicenses{ }, middleware.After)
if err != nil {
return
err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
return err
}
if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
return err
}
if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {

```

```

return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
return err
}
if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
return err
}
if err = addRetryMiddlewares(stack, options); err != nil {
return err
}
if err = addHTTPSignerV4Middleware(stack, options); err != nil {
return err
}
if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
return err
}
if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
return err
}
if err = addClientUserAgent(stack); err != nil {
return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err !=
nil {
return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListReceivedLicenses(options.Region),
middleware.Before); err != nil {
return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
return err
}
return nil
}

func newServiceMetadataMiddleware_opListReceivedLicenses(region string)
*awsmiddleware.RegisterServiceMetadata {

```



```

return &awsmiddleware.RegisterServiceMetadata{
    Region:    region,
    ServiceID: ServiceID,
    SigningName: "license-manager",
    OperationName: "ListReceivedLicenses",
}
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
    "context"
    awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
    "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
    "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
    "github.com/aws/smithy-go/middleware"
    smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license for offline use.
func (c *Client) CheckoutBorrowLicense(ctx context.Context, params *CheckoutBorrowLicenseInput, optFns
...func(*Options)) (*CheckoutBorrowLicenseOutput, error) {
    if params == nil {
        params = &CheckoutBorrowLicenseInput{}
    }

    result, metadata, err := c.invokeOperation(ctx, "CheckoutBorrowLicense", params, optFns,
c.addOperationCheckoutBorrowLicenseMiddlewares)
    if err != nil {
        return nil, err
    }

    out := result.(*CheckoutBorrowLicenseOutput)
    out.ResultMetadata = metadata
    return out, nil
}

type CheckoutBorrowLicenseInput struct {

    // Unique, case-sensitive identifier that you
    // provide to ensure the idempotency of
    // the request.
    //
    // This member is required.
    ClientToken *string

    // Digital signature method. The possible value is JSON Web Signature (JWS)

```

```

// algorithm PS384. For more information, see RFC 7518 Digital Signature with
// RSASSA-PSS (https://tools.ietf.org/html/rfc7518#section-3.5).
//
// This member is required.
DigitalSignatureMethod types.DigitalSignatureMethod

// License entitlements. Partial checkouts are not supported.
//
// This member is required.
Entitlements []types.EntitlementData

// Amazon Resource Name (ARN) of the license. The license must use the borrow
// consumption configuration.
//
// This member is required.
LicenseArn *string

// Information about constraints.
CheckoutMetadata []types.Metadata

// Node ID.
NodeId *string

noSmithyDocumentSerde
}

type CheckoutBorrowLicenseOutput struct {

// Information about constraints.
CheckoutMetadata []types.Metadata

// Allowed license entitlements.
EntitlementsAllowed
[]types.EntitlementData

// Date and time at which the license checkout expires.
Expiration *string

// Date and time at which the license checkout is issued.
IssuedAt *string

// Amazon Resource Name (ARN) of the license.
LicenseArn *string

// License consumption token.
LicenseConsumptionToken *string

// Node ID.

```

```

NodeId *string

// Signed token.
SignedToken *string

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutBorrowLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutBorrowLicense{ }, middleware.After)
if err != nil {
return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutBorrowLicense{ }, middleware.After)
if err != nil {
return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
return err
}
if err = awsmiddleware.AddClientRequestIDMiddleware(stack);
err != nil {
return err
}
if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
return err
}
if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
return err
}
if err = addRetryMiddlewares(stack, options); err != nil {
return err
}
if err = addHTTPSignerV4Middleware(stack, options); err != nil {
return err
}
if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
return err
}
if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
return err
}
}

```

```

}
if err = addClientUserAgent(stack); err != nil {
    return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = addOpCheckoutBorrowLicenseValidationMiddleware(stack); err != nil {
    return err
}
if err
= stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutBorrowLicense(options.Region),
middleware.Before); err != nil {
    return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
    return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
    return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
    return err
}
return nil
}

```

```

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
return &awsmiddleware.RegisterServiceMetadata{
    Region:    region,
    ServiceID: ServiceID,
    SigningName: "license-manager",
    OperationName: "CheckoutBorrowLicense",
}
}
// Code generated by smithy-go-codegen DO NOT EDIT.

```

```
package licensemanager
```

```

import (
    "context"
    awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
    "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
    "github.com/aws/smithy-go/middleware"

```

```

smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks in the specified license. Check in a license when it is no longer in use.
func (c *Client) CheckInLicense(ctx context.Context, params *CheckInLicenseInput, optFns ...func(*Options))
(*CheckInLicenseOutput, error) {
    if params == nil {
        params = &CheckInLicenseInput{}
    }

    result, metadata, err := c.invokeOperation(ctx, "CheckInLicense", params, optFns,
c.addOperationCheckInLicenseMiddlewares)
    if err != nil {
        return nil, err
    }

    out := result.(*CheckInLicenseOutput)
    out.ResultMetadata = metadata
    return out, nil
}

type CheckInLicenseInput struct {

    // License consumption token.
    //
    // This member is required.
    LicenseConsumptionToken *string

    // License beneficiary.
    Beneficiary
    *string

    noSmithyDocumentSerde
}

type CheckInLicenseOutput struct {
    // Metadata pertaining to the operation's result.
    ResultMetadata middleware.Metadata

    noSmithyDocumentSerde
}

func (c *Client) addOperationCheckInLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
    err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckInLicense{ }, middleware.After)
    if err != nil {
        return err
    }
    err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckInLicense{ }, middleware.After)
}

```

```

if err != nil {
    return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
    return err
}
if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
    return err
}
if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
    return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
    return err
}
if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
    return err
}
if err = addRetryMiddlewares(stack,
options); err != nil {
    return err
}
if err = addHTTPSignerV4Middleware(stack, options); err != nil {
    return err
}
if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
    return err
}
if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
    return err
}
if err = addClientUserAgent(stack); err != nil {
    return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = addOpCheckInLicenseValidationMiddleware(stack); err != nil {
    return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckInLicense(options.Region),
middleware.Before); err != nil {
    return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {

```

```

return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
return err
}
if err = addRequestResponseLogging(stack, options); err != nil
{
return err
}
return nil
}

```

```

func newServiceMetadataMiddleware_opCheckInLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
return &awsmiddleware.RegisterServiceMetadata{
Region:    region,
ServiceID: ServiceID,
SigningName: "license-manager",
OperationName: "CheckInLicense",
}
}

```

AWS SDK for Go

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name: License Scan

on: [pull\_request]

jobs:

licensescan:

name: License Scan

runs-on: ubuntu-latest

strategy:

matrix:

python-version: [3.9]

steps:

- name: Checkout target

uses: actions/checkout@v2

with:

path: sdkbase

ref: \${{ github.base\_ref }}

- name: Checkout this ref

uses: actions/checkout@v2

with:

path: new-ref

fetch-depth: 0

- name: Get Diff

```

    run: git --git-dir ./new-ref/.git diff --name-only --diff-filter=ACMRT ${{ github.event.pull_request.base.sha }}
${{ github.sha }} > refDiffFiles.txt
- name: Get Target Files
  run: git --git-dir ./sdkbase/.git ls-files | grep -xf refDiffFiles.txt - > targetFiles.txt
- name: Checkout scancode
  uses: actions/checkout@v2
  with:
    repository: nexB/scancode-toolkit
    path: scancode-toolkit
    fetch-depth: 1
- name: Set up Python ${{ matrix.python-version }}
  uses: actions/setup-python@v2
  with:
    python-version: ${{ matrix.python-version }}
# ScanCode
- name: Self-configure scancode
  working-directory: ./scancode-toolkit
  run: ./scancode --help
- name: Run Scan code on target
  run: cat targetFiles.txt | while read filename; do echo ./sdkbase/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> old-licenses.txt
- name: Run Scan code on pr ref
  run: cat refDiffFiles.txt | while read filename; do echo ./new-ref/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> new-licenses.txt
# compare
- name: License test
  run: if ! cmp old-licenses.txt new-licenses.txt; then echo "Licenses differ! Failing."; exit -1; else echo "Licenses
are the same. Success."; exit 0; fi
// Code generated by smithy-go-codegen DO NOT EDIT.

```

```
package licensemanager
```

```

import (
    "context"
    awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
    "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
    "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
    "github.com/aws/smithy-go/middleware"
    smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Creates a license.
func (c *Client) CreateLicense(ctx context.Context, params *CreateLicenseInput, optFns ...func(*Options))
(*CreateLicenseOutput, error) {
    if params == nil {
        params = &CreateLicenseInput{}
    }
}

```



```

result, metadata, err := c.invokeOperation(ctx, "CreateLicense", params, optFns,
c.addOperationCreateLicenseMiddlewares)
if err != nil {
    return nil, err
}

out := result.(*CreateLicenseOutput)
out.ResultMetadata = metadata
return out, nil
}

type CreateLicenseInput struct {

    // License beneficiary.
    //
    // This member is required.
    Beneficiary *string

    // Unique, case-sensitive identifier that you provide to ensure
    the idempotency of
    // the request.
    //
    // This member is required.
    ClientToken *string

    // Configuration for consumption of the license. Choose a provisional configuration
    // for workloads running with continuous connectivity. Choose a borrow
    // configuration for workloads with offline usage.
    //
    // This member is required.
    ConsumptionConfiguration *types.ConsumptionConfiguration

    // License entitlements.
    //
    // This member is required.
    Entitlements []types.Entitlement

    // Home Region for the license.
    //
    // This member is required.
    HomeRegion *string

    // License issuer.
    //
    // This member is required.
    Issuer *types.Issuer

    // License name.

```

```

//
// This member is required.
LicenseName *string

// Product name.
//
// This member is required.
ProductName *string

// Product SKU.
//
// This member is required.
ProductSKU *string

// Date and time range during which the license is valid, in ISO8601-UTC format.
//
// This member is required.
Validity *types.DatetimeRange

//
// Information about the license.
LicenseMetadata []types.Metadata

noSmithyDocumentSerde
}

type CreateLicenseOutput struct {

// Amazon Resource Name (ARN) of the license.
LicenseArn *string

// License status.
Status types.LicenseStatus

// License version.
Version *string

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationCreateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
err = stack.Serialize.Add(&awsAwsjson11_serializeOpCreateLicense{ }, middleware.After)
if err != nil {
return err
}
}

```

```

err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCreateLicense{ }, middleware.After)
if err != nil {
    return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
    return err
}
if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
    return err
}
if err = smithyhttp.AddComputeContentLengthMiddleware(stack);
err != nil {
    return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
    return err
}
if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
    return err
}
if err = addRetryMiddlewares(stack, options); err != nil {
    return err
}
if err = addHTTPSignerV4Middleware(stack, options); err != nil {
    return err
}
if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
    return err
}
if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
    return err
}
if err = addClientUserAgent(stack); err != nil {
    return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = addOpCreateLicenseValidationMiddleware(stack); err != nil {
    return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCreateLicense(options.Region),
middleware.Before); err != nil {
    return

```

```

err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
    return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
    return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
    return err
}
return nil
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
return &awsmiddleware.RegisterServiceMetadata{
    Region:    region,
    ServiceID: ServiceID,
    SigningName: "license-manager",
    OperationName: "CreateLicense",
}
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
    "context"
    awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
    "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
    "github.com/aws/aws-sdk-go-v2/service/grafana/types"
    "github.com/aws/smithy-go/middleware"
    smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Removes the Grafana Enterprise license from a workspace.
func (c *Client) DisassociateLicense(ctx context.Context, params *DisassociateLicenseInput, optFns
...func(*Options)) (*DisassociateLicenseOutput, error) {
    if params == nil {
        params = &DisassociateLicenseInput{}
    }

    result, metadata, err := c.invokeOperation(ctx, "DisassociateLicense", params, optFns,
c.addOperationDisassociateLicenseMiddlewares)
    if err != nil {
        return nil, err
    }
}

```

```

out := result.(*DisassociateLicenseOutput)
out.ResultMetadata = metadata
return out, nil
}

type DisassociateLicenseInput struct {

// The type of license to remove from the workspace.
//
// This
member is required.
LicenseType types.LicenseType

// The ID of the workspace to remove the Grafana Enterprise license from.
//
// This member is required.
WorkspaceId *string

noSmithyDocumentSerde
}

type DisassociateLicenseOutput struct {

// A structure containing information about the workspace.
//
// This member is required.
Workspace *types.WorkspaceDescription

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationDisassociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
err = stack.Serialize.Add(&awsRestjson1_serializeOpDisassociateLicense{ }, middleware.After)
if err != nil {
return err
}
err = stack.Deserialize.Add(&awsRestjson1_deserializeOpDisassociateLicense{ }, middleware.After)
if err != nil {
return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
return err
}
if err = awsmiddleware.AddClientRequestIDMiddleware(stack);

```

```

err != nil {
    return err
}
if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
    return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
    return err
}
if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
    return err
}
if err = addRetryMiddlewares(stack, options); err != nil {
    return err
}
if err = addHTTPSignerV4Middleware(stack, options); err != nil {
    return err
}
if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
    return err
}
if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
    return err
}
if err = addClientUserAgent(stack); err != nil {
    return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = addOpDisassociateLicenseValidationMiddleware(stack); err != nil {
    return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDisassociateLicense(options.Region),
middleware.Before); err != nil {
    return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
    return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
    return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
    return err
}

```

```

}
return nil
}

func newServiceMetadataMiddleware_opDisassociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
return &awsmiddleware.RegisterServiceMetadata{
Region:    region,
ServiceID: ServiceID,
SigningName: "grafana",
OperationName: "DisassociateLicense",
}
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
"context"
awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
"github.com/aws/aws-sdk-go-v2/aws/signer/v4"
"github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
"github.com/aws/smithy-go/middleware"
smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license. If the account that created the license is the
// same that is performing the check out, you must specify the account as the
// beneficiary.
func (c *Client) CheckoutLicense(ctx context.Context, params *CheckoutLicenseInput, optFns ...func(*Options))
(*CheckoutLicenseOutput, error) {
if params == nil {
params = &CheckoutLicenseInput{}
}

result, metadata, err := c.invokeOperation(ctx, "CheckoutLicense", params, optFns,
c.addOperationCheckoutLicenseMiddlewares)
if err != nil {
return nil, err
}

out := result.(*CheckoutLicenseOutput)
out.ResultMetadata = metadata
return out, nil
}

type

```

```

CheckoutLicenseInput struct {

    // Checkout type.
    //
    // This member is required.
    CheckoutType types.CheckoutType

    // Unique, case-sensitive identifier that you provide to ensure the idempotency of
    // the request.
    //
    // This member is required.
    ClientToken *string

    // License entitlements.
    //
    // This member is required.
    Entitlements []types.EntitlementData

    // Key fingerprint identifying the license.
    //
    // This member is required.
    KeyFingerprint *string

    // Product SKU.
    //
    // This member is required.
    ProductSKU *string

    // License beneficiary.
    Beneficiary *string

    // Node ID.
    NodeId *string

    noSmithyDocumentSerde
}

```

```

type CheckoutLicenseOutput struct {

    // Checkout type.
    CheckoutType types.CheckoutType

    // Allowed license entitlements.
    EntitlementsAllowed []types.EntitlementData

    // Date and time at which the license checkout expires.
    Expiration *string
}

```



```

// Date and time at which the license checkout is issued.
IssuedAt *string

// Amazon Resource Name
// (ARN) of the checkout license.
LicenseArn *string

// License consumption token.
LicenseConsumptionToken *string

// Node ID.
NodeId *string

// Signed token.
SignedToken *string

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
    err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutLicense{ }, middleware.After)
    if err != nil {
        return err
    }
    err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutLicense{ }, middleware.After)
    if err != nil {
        return err
    }
    if err = addSetLoggerMiddleware(stack, options); err != nil {
        return err
    }
    if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
        return err
    }
    if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
        return err
    }
    if err = addResolveEndpointMiddleware(stack, options); err != nil {
        return
    }
    err
}
if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
    return err
}
if err = addRetryMiddlewares(stack, options); err != nil {

```

```

return err
}
if err = addHTTPSignerV4Middleware(stack, options); err != nil {
return err
}
if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
return err
}
if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
return err
}
if err = addClientUserAgent(stack); err != nil {
return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
return err
}
if err = addOpCheckoutLicenseValidationMiddleware(stack); err != nil {
return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutLicense(options.Region),
middleware.Before); err != nil {
return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
return err
}
if err = addResponseErrorMiddleware(stack);
err != nil {
return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
return err
}
return nil
}

func newServiceMetadataMiddleware_opCheckoutLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
return &awsmiddleware.RegisterServiceMetadata{
Region:    region,
ServiceID: ServiceID,
SigningName: "license-manager",
OperationName: "CheckoutLicense",
}
}

```

```

}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
    "context"
    awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
    "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
    "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
    "github.com/aws/smithy-go/middleware"
    smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Gets detailed information about the specified license.
func (c *Client) GetLicense(ctx context.Context, params *GetLicenseInput, optFns ...func(*Options))
(*GetLicenseOutput, error) {
    if params == nil {
        params = &GetLicenseInput{}
    }

    result, metadata, err := c.invokeOperation(ctx, "GetLicense", params, optFns,
c.addOperationGetLicenseMiddlewares)
    if err != nil {
        return nil, err
    }

    out := result.(*GetLicenseOutput)
    out.ResultMetadata = metadata
    return out, nil
}

type GetLicenseInput struct {

    // Amazon Resource Name (ARN) of the license.
    //
    // This member is required.
    LicenseArn *string

    // License version.
    Version
    *string

    noSmithyDocumentSerde
}

type GetLicenseOutput struct {

```

```

// License details.
License *types.License

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationGetLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
    err = stack.Serialize.Add(&awsAwsjson11_serializeOpGetLicense{ }, middleware.After)
    if err != nil {
        return err
    }
    err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpGetLicense{ }, middleware.After)
    if err != nil {
        return err
    }
    if err = addSetLoggerMiddleware(stack, options); err != nil {
        return err
    }
    if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
        return err
    }
    if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
        return err
    }
    if err = addResolveEndpointMiddleware(stack, options); err != nil {
        return err
    }
    if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
        return err
    }
    if
    err = addRetryMiddlewares(stack, options); err != nil {
        return err
    }
    if err = addHTTPSignerV4Middleware(stack, options); err != nil {
        return err
    }
    if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
        return err
    }
    if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
        return err
    }
    if err = addClientUserAgent(stack); err != nil {
        return err
    }
}

```

```

}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = addOpGetLicenseValidationMiddleware(stack); err != nil {
    return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opGetLicense(options.Region), middleware.Before);
err != nil {
    return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
    return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
    return err
}
if err = addRequestResponseLogging(stack,
options); err != nil {
    return err
}
return nil
}

```

```

func newServiceMetadataMiddleware_opGetLicense(region string) *awsmiddleware.RegisterServiceMetadata {
return &awsmiddleware.RegisterServiceMetadata{
    Region:    region,
    ServiceID: ServiceID,
    SigningName: "license-manager",
    OperationName: "GetLicense",
}
}

```

// Code generated by smithy-go-codegen DO NOT EDIT.

```
package licensemanager
```

```

import (
    "context"
    awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
    "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
    "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
    "github.com/aws/smithy-go/middleware"
    smithyhttp "github.com/aws/smithy-go/transport/http"
)

```

```

// Lists the licenses for your account.
func (c *Client) ListLicenses(ctx context.Context, params *ListLicensesInput, optFns ...func(*Options))
(*ListLicensesOutput, error) {
    if params == nil {
        params = &ListLicensesInput{}
    }

    result, metadata, err := c.invokeOperation(ctx, "ListLicenses", params, optFns,
c.addOperationListLicensesMiddlewares)
    if err != nil {
        return nil, err
    }

    out := result.(*ListLicensesOutput)
    out.ResultMetadata = metadata
    return out, nil
}

type ListLicensesInput struct {

    // Filters to scope the results. The following filters are supported:
    //
    // *
    // Beneficiary
    //
    // * ProductSKU
    //
    // * Fingerprint
    //
    //
    // * Status
    Filters []types.Filter

    // Amazon Resource Names (ARNs) of the licenses.
    LicenseArns []string

    // Maximum number of results to return in a single call.
    MaxResults *int32

    // Token for the next set of results.
    NextToken *string

    noSmithyDocumentSerde
}

type ListLicensesOutput struct {

    // License details.

```

Licenses []types.License

// Token for the next set of results.

NextToken \*string

// Metadata pertaining to the operation's result.

ResultMetadata middleware.Metadata

noSmithyDocumentSerde

}

```
func (c *Client) addOperationListLicensesMiddlewares(stack *middleware.Stack, options Options) (err error) {
```

```
err = stack.Serialize.Add(&awsAwsjson11_serializeOpListLicenses{ }, middleware.After)
```

```
if err != nil {
```

```
    return err
```

```
}
```

```
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListLicenses{ }, middleware.After)
```

```
if err != nil {
```

```
    return err
```

```
}
```

```
if err = addSetLoggerMiddleware(stack, options); err != nil {
```

```
    return err
```

```
}
```

```
if err = awsmiddleware.AddClientRequestIDMiddleware(stack);
```

```
err != nil {
```

```
    return err
```

```
}
```

```
if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
```

```
    return err
```

```
}
```

```
if err = addResolveEndpointMiddleware(stack, options); err != nil {
```

```
    return err
```

```
}
```

```
if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
```

```
    return err
```

```
}
```

```
if err = addRetryMiddlewares(stack, options); err != nil {
```

```
    return err
```

```
}
```

```
if err = addHTTPSignerV4Middleware(stack, options); err != nil {
```

```
    return err
```

```
}
```

```
if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
```

```
    return err
```

```
}
```

```
if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
```

```
    return err
```

```
}
```

```

if err = addClientUserAgent(stack); err != nil {
    return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListLicenses(options.Region), middleware.Before);
err != nil {
    return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
    return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
    return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
    return err
}
return nil
}

```

```

func newServiceMetadataMiddleware_opListLicenses(region string) *awsmiddleware.RegisterServiceMetadata {
    return &awsmiddleware.RegisterServiceMetadata{
        Region:    region,
        ServiceID: ServiceID,
        SigningName: "license-manager",
        OperationName: "ListLicenses",
    }
}

```

// Code generated by smithy-go-codegen DO NOT EDIT.

```
package licensemanager
```

```

import (
    "context"
    awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
    "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
    "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
    "github.com/aws/smithy-go/middleware"
    smithyhttp "github.com/aws/smithy-go/transport/http"
)

```

// Deletes the specified license.

```
func (c *Client) DeleteLicense(ctx context.Context, params *DeleteLicenseInput, optFns ...func(*Options))
```



```

(*DeleteLicenseOutput, error) {
    if params == nil {
        params = &DeleteLicenseInput{}
    }

    result, metadata, err := c.invokeOperation(ctx, "DeleteLicense", params, optFns,
c.addOperationDeleteLicenseMiddlewares)
    if err != nil {
        return nil, err
    }

    out := result.(*DeleteLicenseOutput)
    out.ResultMetadata = metadata
    return out, nil
}

type DeleteLicenseInput struct {

    // Amazon Resource Name (ARN) of the license.
    //
    // This member is required.
    LicenseArn *string

    // Current version of the
    license.
    //
    // This member is required.
    SourceVersion *string

    noSmithyDocumentSerde
}

type DeleteLicenseOutput struct {

    // Date when the license is deleted.
    DeletionDate *string

    // License status.
    Status types.LicenseDeletionStatus

    // Metadata pertaining to the operation's result.
    ResultMetadata middleware.Metadata

    noSmithyDocumentSerde
}

func (c *Client) addOperationDeleteLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
    err = stack.Serialize.Add(&awsAwsjson11_serializeOpDeleteLicense{ }, middleware.After)

```

```

if err != nil {
    return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpDeleteLicense{ }, middleware.After)
if err != nil {
    return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
    return err
}
if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
    return err
}
if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
    return err
}
if err = addResolveEndpointMiddleware(stack,
options); err != nil {
    return err
}
if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
    return err
}
if err = addRetryMiddlewares(stack, options); err != nil {
    return err
}
if err = addHTTPSignerV4Middleware(stack, options); err != nil {
    return err
}
if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
    return err
}
if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
    return err
}
if err = addClientUserAgent(stack); err != nil {
    return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = addOpDeleteLicenseValidationMiddleware(stack); err != nil {
    return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDeleteLicense(options.Region),

```

```

middleware.Before); err != nil {
    return err
}
if err = addRequestIDRetrieverMiddleware(stack);
err != nil {
    return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
    return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
    return err
}
return nil
}

func newServiceMetadataMiddleware_opDeleteLicense(region string) *awsmiddleware.RegisterServiceMetadata {
return &awsmiddleware.RegisterServiceMetadata{
    Region:    region,
    ServiceID: ServiceID,
    SigningName: "license-manager",
    OperationName: "DeleteLicense",
}
}

```

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// Code generated by smithy-go-codegen DO NOT EDIT.

```
package grafana
```

```
import (  
    "context"  
    awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"  
    "github.com/aws/aws-sdk-go-v2/aws/signer/v4"  
    "github.com/aws/aws-sdk-go-v2/service/grafana/types"  
    "github.com/aws/smithy-go/middleware"  
    smithyhttp "github.com/aws/smithy-go/transport/http"  
)  
  
// Assigns a Grafana Enterprise license to a workspace. Upgrading to Grafana  
// Enterprise incurs additional fees. For more information, see Upgrade a workspace  
// to Grafana Enterprise  
// (https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-Grafana-Enterprise.html).  
func (c *Client) AssociateLicense(ctx context.Context, params *AssociateLicenseInput, optFns ...func(*Options))  
(*AssociateLicenseOutput, error) {  
    if params == nil {  
        params = &AssociateLicenseInput{}  
    }  
  
    result, metadata, err := c.invokeOperation(ctx, "AssociateLicense", params, optFns,  
    c.addOperationAssociateLicenseMiddlewares)  
    if err != nil {
```



```

    return nil, err
}

out
:= result.(*AssociateLicenseOutput)
out.ResultMetadata = metadata
return out, nil
}

type AssociateLicenseInput struct {

    // The type of license to associate with the workspace.
    //
    // This member is required.
    LicenseType types.LicenseType

    // The ID of the workspace to associate the license with.
    //
    // This member is required.
    WorkspaceId *string

    noSmithyDocumentSerde
}

type AssociateLicenseOutput struct {

    // A structure containing data about the workspace.
    //
    // This member is required.
    Workspace *types.WorkspaceDescription

    // Metadata pertaining to the operation's result.
    ResultMetadata middleware.Metadata

    noSmithyDocumentSerde
}

func (c *Client) addOperationAssociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
    err = stack.Serialize.Add(&awsRestjson1_serializeOpAssociateLicense{ }, middleware.After)
    if err != nil {
        return err
    }
    err = stack.Deserialize.Add(&awsRestjson1_deserializeOpAssociateLicense{ }, middleware.After)
    if
    err != nil {
        return err
    }
    if err = addSetLoggerMiddleware(stack, options); err != nil {

```

```

return err
}
if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
return err
}
if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
return err
}
if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
return err
}
if err = addRetryMiddlewares(stack, options); err != nil {
return err
}
if err = addHTTPSignerV4Middleware(stack, options); err != nil {
return err
}
if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
return err
}
if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
return err
}
if err = addClientUserAgent(stack); err != nil {
return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack);
err != nil {
return err
}
if err = addOpAssociateLicenseValidationMiddleware(stack); err != nil {
return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opAssociateLicense(options.Region),
middleware.Before); err != nil {
return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
return err
}

```

```

}
if err = addRequestResponseLogging(stack, options); err != nil {
    return err
}
return nil
}

func newServiceMetadataMiddleware_opAssociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
return &awsmiddleware.RegisterServiceMetadata{
    Region:    region,
    ServiceID: ServiceID,
    SigningName: "grafana",
    OperationName: "AssociateLicense",
}
}
}

```

## 1.67 aws-aws-sdk-go-v2 1.13.18

### 1.67.1 Available under license :

// Code generated by smithy-go-codegen DO NOT EDIT.

```
package licensemanager
```

```

import (
    "context"
    "errors"
    "fmt"
    "github.com/aws/aws-sdk-go-v2/aws"
    awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
    "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
    internalauth "github.com/aws/aws-sdk-go-v2/internal/auth"
    "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
    smithyendpoints "github.com/aws/smithy-go/endpoints"
    "github.com/aws/smithy-go/middleware"
    smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license. If the account that created the license is
// the same that is performing the check out, you must specify the account as the
// beneficiary.
func (c *Client) CheckoutLicense(ctx context.Context, params *CheckoutLicenseInput, optFns ...func(*Options))
(*CheckoutLicenseOutput, error) {
    if params == nil {
        params = &CheckoutLicenseInput{}
    }
}

```

```

result, metadata, err := c.invokeOperation(ctx, "CheckoutLicense", params, optFns,
c.addOperationCheckoutLicenseMiddlewares)
if
err != nil {
return nil, err
}

out := result.(*CheckoutLicenseOutput)
out.ResultMetadata = metadata
return out, nil
}

type CheckoutLicenseInput struct {

// Checkout type.
//
// This member is required.
CheckoutType types.CheckoutType

// Unique, case-sensitive identifier that you provide to ensure the idempotency of
// the request.
//
// This member is required.
ClientToken *string

// License entitlements.
//
// This member is required.
Entitlements []types.EntitlementData

// Key fingerprint identifying the license.
//
// This member is required.
KeyFingerprint *string

// Product SKU.
//
// This member is required.
ProductSKU *string

// License beneficiary.
Beneficiary *string

// Node ID.
NodeId *string

noSmithyDocumentSerde
}

```

```

type CheckoutLicenseOutput struct {

    // Checkout type.
    CheckoutType types.CheckoutType

    // Allowed license entitlements.
    EntitlementsAllowed []types.EntitlementData

    // Date and time
    at which the license checkout expires.
    Expiration *string

    // Date and time at which the license checkout is issued.
    IssuedAt *string

    // Amazon Resource Name (ARN) of the checkout license.
    LicenseArn *string

    // License consumption token.
    LicenseConsumptionToken *string

    // Node ID.
    NodeId *string

    // Signed token.
    SignedToken *string

    // Metadata pertaining to the operation's result.
    ResultMetadata middleware.Metadata

    noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
    err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutLicense{ }, middleware.After)
    if err != nil {
        return err
    }
    err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutLicense{ }, middleware.After)
    if err != nil {
        return err
    }
    if err = addLegacyEndpointContextSetter(stack, options); err != nil {
        return err
    }
    if err = addSetLoggerMiddleware(stack, options); err != nil {
        return err
    }
}

```

```

}
if err
= awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
return err
}
if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
return err
}
if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
return err
}
if err = addRetryMiddlewares(stack, options); err != nil {
return err
}
if err = addHTTPSignerV4Middleware(stack, options); err != nil {
return err
}
if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
return err
}
if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
return err
}
if err = addClientUserAgent(stack, options); err != nil {
return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
return err
}
if err = addCheckoutLicenseResolveEndpointMiddleware(stack, options);
err != nil {
return err
}
if err = addOpCheckoutLicenseValidationMiddleware(stack); err != nil {
return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutLicense(options.Region),
middleware.Before); err != nil {
return err
}
if err = awsmiddleware.AddRecursionDetection(stack); err != nil {
return err
}

```

```

}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
    return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
    return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
    return err
}
if err = addendpointDisableHTTPSMiddleware(stack, options); err != nil {
    return err
}
return nil
}

func newServiceMetadataMiddleware_opCheckoutLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
    return &awsmiddleware.RegisterServiceMetadata{
        Region:    region,
        ServiceID: ServiceID,
        SigningName: "license-manager",
        OperationName: "CheckoutLicense",
    }
}

type opCheckoutLicenseResolveEndpointMiddleware
struct {
    EndpointResolver EndpointResolverV2
    BuiltInResolver  builtInParameterResolver
}

func (*opCheckoutLicenseResolveEndpointMiddleware) ID() string {
    return "ResolveEndpointV2"
}

func (m *opCheckoutLicenseResolveEndpointMiddleware) HandleSerialize(ctx context.Context, in
middleware.SerializeInput, next middleware.SerializeHandler) (
    out middleware.SerializeOutput, metadata middleware.Metadata, err error,
) {
    if awsmiddleware.GetRequiresLegacyEndpoints(ctx) {
        return next.HandleSerialize(ctx, in)
    }

    req, ok := in.Request.(*smithyhttp.Request)
    if !ok {
        return out, metadata, fmt.Errorf("unknown transport type %T", in.Request)
    }
}

```

```

if m.EndpointResolver == nil {
    return out, metadata, fmt.Errorf("expected endpoint resolver to not be nil")
}

params := EndpointParameters{}

m.BuiltInResolver.ResolveBuiltIns(&params)

var resolvedEndpoint smithyendpoints.Endpoint
resolvedEndpoint, err = m.EndpointResolver.ResolveEndpoint(ctx, params)
if err != nil
{
    return out, metadata, fmt.Errorf("failed to resolve service endpoint, %w", err)
}

req.URL = &resolvedEndpoint.URI

for k := range resolvedEndpoint.Headers {
    req.Header.Set(
        k,
        resolvedEndpoint.Headers.Get(k),
    )
}

authSchemes, err := internalauth.GetAuthenticationSchemes(&resolvedEndpoint.Properties)
if err != nil {
    var nfe *internalauth.NoAuthenticationSchemesFoundError
    if errors.As(err, &nfe) {
        // if no auth scheme is found, default to sigv4
        signingName := "license-manager"
        signingRegion := m.BuiltInResolver.(*builtInResolver).Region
        ctx = awsmiddleware.SetSigningName(ctx, signingName)
        ctx = awsmiddleware.SetSigningRegion(ctx, signingRegion)
    }
    var ue *internalauth.UnsupportedAuthenticationSchemeSpecifiedError
    if errors.As(err, &ue) {
        return out, metadata, fmt.Errorf(
            "This operation requests signer version(s) %v but the client only supports %v",
            ue.UnsupportedSchemes,
            internalauth.SupportedSchemes,
        )
    }
}

for _, authScheme

```



```

:= range authSchemes {
  switch authScheme.(type) {
  case *internalauth.AuthenticationSchemeV4:
    v4Scheme, _ := authScheme.(*internalauth.AuthenticationSchemeV4)
    var signingName, signingRegion string
    if v4Scheme.SigningName == nil {
      signingName = "license-manager"
    } else {
      signingName = *v4Scheme.SigningName
    }
    if v4Scheme.SigningRegion == nil {
      signingRegion = m.BuiltInResolver.(*builtInResolver).Region
    } else {
      signingRegion = *v4Scheme.SigningRegion
    }
    if v4Scheme.DisableDoubleEncoding != nil {
      // The signer sets an equivalent value at client initialization time.
      // Setting this context value will cause the signer to extract it
      // and override the value set at client initialization time.
      ctx = internalauth.SetDisableDoubleEncoding(ctx, *v4Scheme.DisableDoubleEncoding)
    }
    ctx = awsmiddleware.SetSigningName(ctx, signingName)
    ctx = awsmiddleware.SetSigningRegion(ctx, signingRegion)
    break
  case *internalauth.AuthenticationSchemeV4A:
    v4aScheme,
    _ := authScheme.(*internalauth.AuthenticationSchemeV4A)
    if v4aScheme.SigningName == nil {
      v4aScheme.SigningName = aws.String("license-manager")
    }
    if v4aScheme.DisableDoubleEncoding != nil {
      // The signer sets an equivalent value at client initialization time.
      // Setting this context value will cause the signer to extract it
      // and override the value set at client initialization time.
      ctx = internalauth.SetDisableDoubleEncoding(ctx, *v4aScheme.DisableDoubleEncoding)
    }
    ctx = awsmiddleware.SetSigningName(ctx, *v4aScheme.SigningName)
    ctx = awsmiddleware.SetSigningRegion(ctx, v4aScheme.SigningRegionSet[0])
    break
  case *internalauth.AuthenticationSchemeNone:
    break
  }
}

return next.HandleSerialize(ctx, in)
}

func addCheckoutLicenseResolveEndpointMiddleware(stack *middleware.Stack, options Options) error {

```

```

return stack.Serialize.Insert(&opCheckoutLicenseResolveEndpointMiddleware{
  EndpointResolver: options.EndpointResolverV2,
  BuiltInResolver:
  &builtInResolver{
    Region: options.Region,
    UseDualStack: options.EndpointOptions.UseDualStackEndpoint,
    UseFIPS: options.EndpointOptions.UseFIPSEndpoint,
    Endpoint: options.BaseEndpoint,
  },
}, "ResolveEndpoint", middleware.After)
}

```

AWS SDK for Go

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name: License Scan

on: [pull\_request]

jobs:

licensescan:

name: License Scan

runs-on: ubuntu-latest

strategy:

matrix:

python-version: [3.9]

steps:

- name: Checkout target

uses: actions/checkout@v2

with:

path: sdkbase

ref: \${{ github.base\_ref }}

- name: Checkout this ref

uses: actions/checkout@v2

with:

path: new-ref

fetch-depth: 0

- name: Get Diff

run: git --git-dir ./new-ref/.git diff --name-only --diff-filter=ACMRT \${{ github.event.pull\_request.base.sha }}  
\${{ github.sha }} > refDiffFiles.txt

- name: Get Target Files

run: git --git-dir ./sdkbase/.git ls-files | grep -xf refDiffFiles.txt - > targetFiles.txt

- name: Checkout scancode

uses: actions/checkout@v2

with:

repository: nexB/scancode-toolkit

path: scancode-toolkit

fetch-depth: 1

```

- name: Set up Python ${ { matrix.python-version } }
  uses: actions/setup-python@v2
  with:
    python-version: ${ { matrix.python-version } }
# ScanCode
- name: Self-configure scancode
  working-directory: ./scancode-toolkit
  run: ./scancode --help
- name: Run Scan code on target
  run: cat targetFiles.txt | while read filename; do echo ./sdkbase/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> old-licenses.txt
- name: Run Scan code on pr ref
  run: cat refDiffFiles.txt | while read filename; do echo ./new-ref/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> new-licenses.txt
# compare
- name: License test
  run: if ! cmp old-licenses.txt new-licenses.txt; then echo "Licenses differ! Failing."; exit -1; else echo "Licenses
are the same. Success."; exit 0; fi
// Code generated by smithy-go-codegen DO NOT EDIT.

```

```
package grafana
```

```

import (
    "context"
    "errors"
    "fmt"
    "github.com/aws/aws-sdk-go-v2/aws"
    awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
    "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
    internalauth "github.com/aws/aws-sdk-go-v2/internal/auth"
    "github.com/aws/aws-sdk-go-v2/service/grafana/types"
    smithyendpoints "github.com/aws/smithy-go/endpoints"
    "github.com/aws/smithy-go/middleware"
    smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Removes the Grafana Enterprise license from a workspace.
func (c *Client) DisassociateLicense(ctx context.Context, params *DisassociateLicenseInput, optFns
...func(*Options)) (*DisassociateLicenseOutput, error) {
    if params == nil {
        params = &DisassociateLicenseInput{}
    }

    result, metadata, err := c.invokeOperation(ctx, "DisassociateLicense", params, optFns,
c.addOperationDisassociateLicenseMiddlewares)
    if err != nil {
        return nil, err
    }
}

```

```

out := result.(*DisassociateLicenseOutput)
out.ResultMetadata
= metadata
return out, nil
}

type DisassociateLicenseInput struct {

// The type of license to remove from the workspace.
//
// This member is required.
LicenseType types.LicenseType

// The ID of the workspace to remove the Grafana Enterprise license from.
//
// This member is required.
WorkspaceId *string

noSmithyDocumentSerde
}

type DisassociateLicenseOutput struct {

// A structure containing information about the workspace.
//
// This member is required.
Workspace *types.WorkspaceDescription

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationDisassociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
err = stack.Serialize.Add(&awsRestjson1_serializeOpDisassociateLicense{ }, middleware.After)
if err != nil {
return err
}
err = stack.Deserialize.Add(&awsRestjson1_deserializeOpDisassociateLicense{ }, middleware.After)
if
err != nil {
return err
}
if err = addLegacyEndpointContextSetter(stack, options); err != nil {
return err
}
}

```

```

}
if err = addSetLoggerMiddleware(stack, options); err != nil {
    return err
}
if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
    return err
}
if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
    return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
    return err
}
if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
    return err
}
if err = addRetryMiddlewares(stack, options); err != nil {
    return err
}
if err = addHTTPSignerV4Middleware(stack, options); err != nil {
    return err
}
if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
    return err
}
if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
    return err
}
if err = addClientUserAgent(stack, options); err != nil {
    return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
err != nil {
    return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = addDisassociateLicenseResolveEndpointMiddleware(stack, options); err != nil {
    return err
}
if err = addOpDisassociateLicenseValidationMiddleware(stack); err != nil {
    return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDisassociateLicense(options.Region),
middleware.Before); err != nil {
    return err
}
}

```

```

if err = awsmiddleware.AddRecursionDetection(stack); err != nil {
    return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
    return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
    return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
    return err
}
if err = addendpointDisableHTTPSMiddleware(stack, options); err != nil {
    return err
}
return nil
}

```

```

func newServiceMetadataMiddleware_opDisassociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata
{
    return &awsmiddleware.RegisterServiceMetadata{
        Region:    region,
        ServiceID: ServiceID,
        SigningName: "grafana",
        OperationName: "DisassociateLicense",
    }
}

```

```

type opDisassociateLicenseResolveEndpointMiddleware struct {
    EndpointResolver EndpointResolverV2
    BuiltInResolver  builtInParameterResolver
}

```

```

func (*opDisassociateLicenseResolveEndpointMiddleware) ID() string {
    return "ResolveEndpointV2"
}

```

```

func (m *opDisassociateLicenseResolveEndpointMiddleware) HandleSerialize(ctx context.Context, in
middleware.SerializeInput, next middleware.SerializeHandler) (
    out middleware.SerializeOutput, metadata middleware.Metadata, err error,
) {
    if awsmiddleware.GetRequiresLegacyEndpoints(ctx) {
        return next.HandleSerialize(ctx, in)
    }
}

```

```

req, ok := in.Request.(*smithyhttp.Request)
if !ok {

```

```

return out, metadata, fmt.Errorf("unknown transport type %T", in.Request)
}

if m.EndpointResolver == nil {
return out, metadata, fmt.Errorf("expected endpoint resolver to
not be nil")
}

params := EndpointParameters{}

m.BuiltInResolver.ResolveBuiltIns(&params)

var resolvedEndpoint smithyendpoints.Endpoint
resolvedEndpoint, err = m.EndpointResolver.ResolveEndpoint(ctx, params)
if err != nil {
return out, metadata, fmt.Errorf("failed to resolve service endpoint, %w", err)
}

req.URL = &resolvedEndpoint.URI

for k := range resolvedEndpoint.Headers {
req.Header.Set(
k,
resolvedEndpoint.Headers.Get(k),
)
}

authSchemes, err := internalauth.GetAuthenticationSchemes(&resolvedEndpoint.Properties)
if err != nil {
var nfe *internalauth.NoAuthenticationSchemesFoundError
if errors.As(err, &nfe) {
// if no auth scheme is found, default to sigv4
signingName := "grafana"
signingRegion := m.BuiltInResolver.(*builtInResolver).Region
ctx = awsmiddleware.SetSigningName(ctx, signingName)
ctx = awsmiddleware.SetSigningRegion(ctx, signingRegion)
}
var ue *internalauth.UnsupportedAuthenticationSchemeSpecifiedError
if errors.As(err,
&ue) {
return out, metadata, fmt.Errorf(
"This operation requests signer version(s) %v but the client only supports %v",
ue.UnsupportedSchemes,
internalauth.SupportedSchemes,
)
}
}
}

```

```

for _, authScheme := range authSchemes {
    switch authScheme.(type) {
    case *internalauth.AuthenticationSchemeV4:
        v4Scheme, _ := authScheme.(*internalauth.AuthenticationSchemeV4)
        var signingName, signingRegion string
        if v4Scheme.SigningName == nil {
            signingName = "grafana"
        } else {
            signingName = *v4Scheme.SigningName
        }
        if v4Scheme.SigningRegion == nil {
            signingRegion = m.BuiltInResolver.(*builtInResolver).Region
        } else {
            signingRegion = *v4Scheme.SigningRegion
        }
        if v4Scheme.DisableDoubleEncoding != nil {
            // The signer sets an equivalent value at client initialization time.
            // Setting this context value will cause the signer to extract it
            // and override the value set at client initialization time.
            ctx = internalauth.SetDisableDoubleEncoding(ctx,
*v4Scheme.DisableDoubleEncoding)
        }
        ctx = awsmiddleware.SetSigningName(ctx, signingName)
        ctx = awsmiddleware.SetSigningRegion(ctx, signingRegion)
        break
    case *internalauth.AuthenticationSchemeV4A:
        v4aScheme, _ := authScheme.(*internalauth.AuthenticationSchemeV4A)
        if v4aScheme.SigningName == nil {
            v4aScheme.SigningName = aws.String("grafana")
        }
        if v4aScheme.DisableDoubleEncoding != nil {
            // The signer sets an equivalent value at client initialization time.
            // Setting this context value will cause the signer to extract it
            // and override the value set at client initialization time.
            ctx = internalauth.SetDisableDoubleEncoding(ctx, *v4aScheme.DisableDoubleEncoding)
        }
        ctx = awsmiddleware.SetSigningName(ctx, *v4aScheme.SigningName)
        ctx = awsmiddleware.SetSigningRegion(ctx, v4aScheme.SigningRegionSet[0])
        break
    case *internalauth.AuthenticationSchemeNone:
        break
    }
}

return next.HandleSerialize(ctx, in)
}

```



```

func
addDisassociateLicenseResolveEndpointMiddleware(stack *middleware.Stack, options Options) error {
return stack.Serialize.Insert(&opDisassociateLicenseResolveEndpointMiddleware{
EndpointResolver: options.EndpointResolverV2,
BuiltInResolver: &builtInResolver{
Region: options.Region,
UseDualStack: options.EndpointOptions.UseDualStackEndpoint,
UseFIPS: options.EndpointOptions.UseFIPSEndpoint,
Endpoint: options.BaseEndpoint,
},
}, "ResolveEndpoint", middleware.After)
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
"context"
"errors"
"fmt"
"github.com/aws/aws-sdk-go-v2/aws"
awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
"github.com/aws/aws-sdk-go-v2/aws/signer/v4"
internalauth "github.com/aws/aws-sdk-go-v2/internal/auth"
"github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
smithyendpoints "github.com/aws/smithy-go/endpoints"
"github.com/aws/smithy-go/middleware"
smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license for offline use.
func (c *Client) CheckoutBorrowLicense(ctx context.Context, params *CheckoutBorrowLicenseInput, optFns
...func(*Options)) (*CheckoutBorrowLicenseOutput, error) {
if params == nil {
params = &CheckoutBorrowLicenseInput{}
}

result, metadata, err := c.invokeOperation(ctx, "CheckoutBorrowLicense", params, optFns,
c.addOperationCheckoutBorrowLicenseMiddlewares)
if err != nil {
return nil, err
}

out := result.(*CheckoutBorrowLicenseOutput)
out.ResultMetadata
= metadata
return out, nil
}

```

```

type CheckoutBorrowLicenseInput struct {

    // Unique, case-sensitive identifier that you provide to ensure the idempotency of
    // the request.
    //
    // This member is required.
    ClientToken *string

    // Digital signature method. The possible value is JSON Web Signature (JWS)
    // algorithm PS384. For more information, see RFC 7518 Digital Signature with
    // RSASSA-PSS (https://tools.ietf.org/html/rfc7518#section-3.5) .
    //
    // This member is required.
    DigitalSignatureMethod types.DigitalSignatureMethod

    // License entitlements. Partial checkouts are not supported.
    //
    // This member is required.
    Entitlements []types.EntitlementData

    // Amazon Resource Name (ARN) of the license. The license must use the borrow
    // consumption configuration.
    //
    // This member is required.
    LicenseArn *string

    // Information about constraints.
    CheckoutMetadata []types.Metadata

    // Node ID.
    NodeId *string

    noSmithyDocumentSerde
}

```

```

type
CheckoutBorrowLicenseOutput struct {

    // Information about constraints.
    CheckoutMetadata []types.Metadata

    // Allowed license entitlements.
    EntitlementsAllowed []types.EntitlementData

    // Date and time at which the license checkout expires.
    Expiration *string
}

```

```

// Date and time at which the license checkout is issued.
IssuedAt *string

// Amazon Resource Name (ARN) of the license.
LicenseArn *string

// License consumption token.
LicenseConsumptionToken *string

// Node ID.
NodeId *string

// Signed token.
SignedToken *string

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutBorrowLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
    err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutBorrowLicense{ }, middleware.After)
    if err != nil {
        return err
    }
    err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutBorrowLicense{ },
middleware.After)
    if err != nil {
        return err
    }
    if err = addLegacyEndpointContextSetter(stack, options); err != nil {
        return err
    }
    if err = addSetLoggerMiddleware(stack, options); err != nil {
        return err
    }
    if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
        return err
    }
    if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
        return err
    }
    if err = addResolveEndpointMiddleware(stack, options); err != nil {
        return err
    }
    if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {

```

```

return err
}
if err = addRetryMiddlewares(stack, options); err != nil {
return err
}
if err = addHTTPSignerV4Middleware(stack, options); err != nil {
return err
}
if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
return err
}
if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
return err
}
if err = addClientUserAgent(stack, options); err != nil {
return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
err != nil {
return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
return err
}
if err = addCheckoutBorrowLicenseResolveEndpointMiddleware(stack, options); err != nil {
return err
}
if err = addOpCheckoutBorrowLicenseValidationMiddleware(stack); err != nil {
return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutBorrowLicense(options.Region),
middleware.Before); err != nil {
return err
}
if err = awsmiddleware.AddRecursionDetection(stack); err != nil {
return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
return err
}
if err = addendpointDisableHTTPSMiddleware(stack, options); err != nil {
return err
}

```

```

}
return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region
string) *awsmiddleware.RegisterServiceMetadata {
return &awsmiddleware.RegisterServiceMetadata{
Region:    region,
ServiceID: ServiceID,
SigningName: "license-manager",
OperationName: "CheckoutBorrowLicense",
}
}

type opCheckoutBorrowLicenseResolveEndpointMiddleware struct {
EndpointResolver EndpointResolverV2
BuiltInResolver  builtInParameterResolver
}

func (*opCheckoutBorrowLicenseResolveEndpointMiddleware) ID() string {
return "ResolveEndpointV2"
}

func (m *opCheckoutBorrowLicenseResolveEndpointMiddleware) HandleSerialize(ctx context.Context, in
middleware.SerializeInput, next middleware.SerializeHandler) (
out middleware.SerializeOutput, metadata middleware.Metadata, err error,
) {
if awsmiddleware.GetRequiresLegacyEndpoints(ctx) {
return next.HandleSerialize(ctx, in)
}

req, ok := in.Request.(*smithyhttp.Request)
if !ok {
return out, metadata, fmt.Errorf("unknown transport type %T", in.Request)
}

if m.EndpointResolver == nil {
return out, metadata,
fmt.Errorf("expected endpoint resolver to not be nil")
}

params := EndpointParameters{}

m.BuiltInResolver.ResolveBuiltIns(&params)

var resolvedEndpoint smithyendpoints.Endpoint
resolvedEndpoint, err = m.EndpointResolver.ResolveEndpoint(ctx, params)
if err != nil {

```

```

return out, metadata, fmt.Errorf("failed to resolve service endpoint, %w", err)
}

req.URL = &resolvedEndpoint.URI

for k := range resolvedEndpoint.Headers {
req.Header.Set(
k,
resolvedEndpoint.Headers.Get(k),
)
}

authSchemes, err := internalauth.GetAuthenticationSchemes(&resolvedEndpoint.Properties)
if err != nil {
var nfe *internalauth.NoAuthenticationSchemesFoundError
if errors.As(err, &nfe) {
// if no auth scheme is found, default to sigv4
signingName := "license-manager"
signingRegion := m.BuiltInResolver.(*builtInResolver).Region
ctx = awsmiddleware.SetSigningName(ctx, signingName)
ctx = awsmiddleware.SetSigningRegion(ctx, signingRegion)
}
var ue *internalauth.UnSupportedAuthenticationSchemeSpecifiedError
if
errors.As(err, &ue) {
return out, metadata, fmt.Errorf(
"This operation requests signer version(s) %v but the client only supports %v",
ue.UnsupportedSchemes,
internalauth.SupportedSchemes,
)
}
}

for _, authScheme := range authSchemes {
switch authScheme.(type) {
case *internalauth.AuthenticationSchemeV4:
v4Scheme, _ := authScheme.(*internalauth.AuthenticationSchemeV4)
var signingName, signingRegion string
if v4Scheme.SigningName == nil {
signingName = "license-manager"
} else {
signingName = *v4Scheme.SigningName
}
if v4Scheme.SigningRegion == nil {
signingRegion = m.BuiltInResolver.(*builtInResolver).Region
} else {
signingRegion = *v4Scheme.SigningRegion
}
}
}

```

```

    }
    if v4Scheme.DisableDoubleEncoding != nil {
        // The signer sets an equivalent value at client initialization time.
        // Setting this context value will cause the signer to extract it
        // and override the
value set at client initialization time.
        ctx = internalauth.SetDisableDoubleEncoding(ctx, *v4Scheme.DisableDoubleEncoding)
    }
    ctx = awsmiddleware.SetSigningName(ctx, signingName)
    ctx = awsmiddleware.SetSigningRegion(ctx, signingRegion)
    break
case *internalauth.AuthenticationSchemeV4A:
v4aScheme, _ := authScheme.(*internalauth.AuthenticationSchemeV4A)
if v4aScheme.SigningName == nil {
    v4aScheme.SigningName = aws.String("license-manager")
}
if v4aScheme.DisableDoubleEncoding != nil {
    // The signer sets an equivalent value at client initialization time.
    // Setting this context value will cause the signer to extract it
    // and override the value set at client initialization time.
    ctx = internalauth.SetDisableDoubleEncoding(ctx, *v4aScheme.DisableDoubleEncoding)
}
    ctx = awsmiddleware.SetSigningName(ctx, *v4aScheme.SigningName)
    ctx = awsmiddleware.SetSigningRegion(ctx, v4aScheme.SigningRegionSet[0])
    break
case *internalauth.AuthenticationSchemeNone:
    break
}
}

return
next.HandleSerialize(ctx, in)
}

func addCheckoutBorrowLicenseResolveEndpointMiddleware(stack *middleware.Stack, options Options) error {
return stack.Serialize.Insert(&opCheckoutBorrowLicenseResolveEndpointMiddleware{
    EndpointResolver: options.EndpointResolverV2,
    BuiltInResolver: &builtInResolver{
        Region:    options.Region,
        UseDualStack: options.EndpointOptions.UseDualStackEndpoint,
        UseFIPS:    options.EndpointOptions.UseFIPSEndpoint,
        Endpoint:   options.BaseEndpoint,
    },
}, "ResolveEndpoint", middleware.After)
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

```

```

import (
    "context"
    "errors"
    "fmt"
    "github.com/aws/aws-sdk-go-v2/aws"
    awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
    "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
    internalauth "github.com/aws/aws-sdk-go-v2/internal/auth"
    "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
    smithyendpoints "github.com/aws/smithy-go/endpoints"
    "github.com/aws/smithy-go/middleware"
    smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Gets detailed information about the specified license.
func (c *Client) GetLicense(ctx context.Context, params *GetLicenseInput, optFns ...func(*Options))
(*GetLicenseOutput, error) {
    if params == nil {
        params = &GetLicenseInput{}
    }

    result, metadata, err := c.invokeOperation(ctx, "GetLicense", params, optFns,
c.addOperationGetLicenseMiddlewares)
    if err != nil {
        return nil, err
    }

    out := result.(*GetLicenseOutput)
    out.ResultMetadata = metadata
    return out,
    nil
}

type GetLicenseInput struct {

    // Amazon Resource Name (ARN) of the license.
    //
    // This member is required.
    LicenseArn *string

    // License version.
    Version *string

    noSmithyDocumentSerde
}

type GetLicenseOutput struct {

```



```

// License details.
License *types.License

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationGetLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
    err = stack.Serialize.Add(&awsAwsjson11_serializeOpGetLicense{ }, middleware.After)
    if err != nil {
        return err
    }
    err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpGetLicense{ }, middleware.After)
    if err != nil {
        return err
    }
    if err = addLegacyEndpointContextSetter(stack, options); err != nil {
        return err
    }
    if err = addSetLoggerMiddleware(stack, options); err != nil {
        return err
    }
    if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
        return err
    }
    if
    err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
        return err
    }
    if err = addResolveEndpointMiddleware(stack, options); err != nil {
        return err
    }
    if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
        return err
    }
    if err = addRetryMiddlewares(stack, options); err != nil {
        return err
    }
    if err = addHTTPSignerV4Middleware(stack, options); err != nil {
        return err
    }
    if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
        return err
    }
    if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {

```

```

return err
}
if err = addClientUserAgent(stack, options); err != nil {
return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
return err
}
if err = addGetLicenseResolveEndpointMiddleware(stack, options); err != nil {
return err
}
if err = addOpGetLicenseValidationMiddleware(stack); err !=
nil {
return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opGetLicense(options.Region), middleware.Before);
err != nil {
return err
}
if err = awsmiddleware.AddRecursionDetection(stack); err != nil {
return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
return err
}
if err = addendpointDisableHTTPSMiddleware(stack, options); err != nil {
return err
}
return nil
}

func newServiceMetadataMiddleware_opGetLicense(region string) *awsmiddleware.RegisterServiceMetadata {
return &awsmiddleware.RegisterServiceMetadata{
Region:    region,
ServiceID: ServiceID,
SigningName: "license-manager",
OperationName: "GetLicense",
}
}

```

```

type opGetLicenseResolveEndpointMiddleware struct {
    EndpointResolver EndpointResolverV2
    BuiltInResolver  builtInParameterResolver
}

func
(*opGetLicenseResolveEndpointMiddleware) ID() string {
    return "ResolveEndpointV2"
}

func (m *opGetLicenseResolveEndpointMiddleware) HandleSerialize(ctx context.Context, in
middleware.SerializeInput, next middleware.SerializeHandler) (
    out middleware.SerializeOutput, metadata middleware.Metadata, err error,
) {
    if awsmiddleware.GetRequiresLegacyEndpoints(ctx) {
        return next.HandleSerialize(ctx, in)
    }

    req, ok := in.Request.(*smithyhttp.Request)
    if !ok {
        return out, metadata, fmt.Errorf("unknown transport type %T", in.Request)
    }

    if m.EndpointResolver == nil {
        return out, metadata, fmt.Errorf("expected endpoint resolver to not be nil")
    }

    params := EndpointParameters{}

    m.BuiltInResolver.ResolveBuiltIns(&params)

    var resolvedEndpoint smithyendpoints.Endpoint
    resolvedEndpoint, err = m.EndpointResolver.ResolveEndpoint(ctx, params)
    if err != nil {
        return out, metadata, fmt.Errorf("failed to resolve service endpoint, %w", err)
    }

    req.URL = &resolvedEndpoint.URI

    for
    k := range resolvedEndpoint.Headers {
        req.Header.Set(
            k,
            resolvedEndpoint.Headers.Get(k),
        )
    }
}

```

```

authSchemes, err := internalauth.GetAuthenticationSchemes(&resolvedEndpoint.Properties)
if err != nil {
    var nfe *internalauth.NoAuthenticationSchemesFoundError
    if errors.As(err, &nfe) {
        // if no auth scheme is found, default to sigv4
        signingName := "license-manager"
        signingRegion := m.BuiltInResolver.(*builtInResolver).Region
        ctx = awsmiddleware.SetSigningName(ctx, signingName)
        ctx = awsmiddleware.SetSigningRegion(ctx, signingRegion)

    }
    var ue *internalauth.UnSupportedAuthenticationSchemeSpecifiedError
    if errors.As(err, &ue) {
        return out, metadata, fmt.Errorf(
            "This operation requests signer version(s) %v but the client only supports %v",
            ue.UnsupportedSchemes,
            internalauth.SupportedSchemes,
        )
    }
}

for _, authScheme := range authSchemes {
    switch authScheme.(type) {
    case *internalauth.AuthenticationSchemeV4:
        v4Scheme, _ := authScheme.(*internalauth.AuthenticationSchemeV4)
        var
        signingName, signingRegion string
        if v4Scheme.SigningName == nil {
            signingName = "license-manager"
        } else {
            signingName = *v4Scheme.SigningName
        }
        if v4Scheme.SigningRegion == nil {
            signingRegion = m.BuiltInResolver.(*builtInResolver).Region
        } else {
            signingRegion = *v4Scheme.SigningRegion
        }
        if v4Scheme.DisableDoubleEncoding != nil {
            // The signer sets an equivalent value at client initialization time.
            // Setting this context value will cause the signer to extract it
            // and override the value set at client initialization time.
            ctx = internalauth.SetDisableDoubleEncoding(ctx, *v4Scheme.DisableDoubleEncoding)
        }
        ctx = awsmiddleware.SetSigningName(ctx, signingName)
        ctx = awsmiddleware.SetSigningRegion(ctx, signingRegion)
        break
    case *internalauth.AuthenticationSchemeV4A:
        v4aScheme, _ := authScheme.(*internalauth.AuthenticationSchemeV4A)

```

```

    if v4aScheme.SigningName ==
nil {
    v4aScheme.SigningName = aws.String("license-manager")
    }
    if v4aScheme.DisableDoubleEncoding != nil {
        // The signer sets an equivalent value at client initialization time.
        // Setting this context value will cause the signer to extract it
        // and override the value set at client initialization time.
        ctx = internalauth.SetDisableDoubleEncoding(ctx, *v4aScheme.DisableDoubleEncoding)
    }
    ctx = awsmiddleware.SetSigningName(ctx, *v4aScheme.SigningName)
    ctx = awsmiddleware.SetSigningRegion(ctx, v4aScheme.SigningRegionSet[0])
    break
case *internalauth.AuthenticationSchemeNone:
    break
}
}

return next.HandleSerialize(ctx, in)
}

func addGetLicenseResolveEndpointMiddleware(stack *middleware.Stack, options Options) error {
return stack.Serialize.Insert(&opGetLicenseResolveEndpointMiddleware{
    EndpointResolver: options.EndpointResolverV2,
    BuiltInResolver: &builtInResolver{
        Region:    options.Region,
        UseDualStack: options.EndpointOptions.UseDualStackEndpoint,
        UseFIPS:
            options.EndpointOptions.UseFIPSEndpoint,
        Endpoint:  options.BaseEndpoint,
    },
}, "ResolveEndpoint", middleware.After)
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
    "context"
    "errors"
    "fmt"
    "github.com/aws/aws-sdk-go-v2/aws"
    awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
    "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
    internalauth "github.com/aws/aws-sdk-go-v2/internal/auth"
    "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
    smithyendpoints "github.com/aws/smithy-go/endpoints"
    "github.com/aws/smithy-go/middleware"

```

```

smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists the licenses for your account.
func (c *Client) ListLicenses(ctx context.Context, params *ListLicensesInput, optFns ...func(*Options))
(*ListLicensesOutput, error) {
    if params == nil {
        params = &ListLicensesInput{}
    }

    result, metadata, err := c.invokeOperation(ctx, "ListLicenses", params, optFns,
c.addOperationListLicensesMiddlewares)
    if err != nil {
        return nil, err
    }

    out := result.(*ListLicensesOutput)
    out.ResultMetadata = metadata
    return out, nil
}

type
ListLicensesInput struct {

    // Filters to scope the results. The following filters are supported:
    // - Beneficiary
    // - ProductSKU
    // - Fingerprint
    // - Status
    Filters []types.Filter

    // Amazon Resource Names (ARNs) of the licenses.
    LicenseArns []string

    // Maximum number of results to return in a single call.
    MaxResults *int32

    // Token for the next set of results.
    NextToken *string

    noSmithyDocumentSerde
}

type ListLicensesOutput struct {

    // License details.
    Licenses []types.License

```

```

// Token for the next set of results.
NextToken *string

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationListLicensesMiddlewares(stack *middleware.Stack, options Options) (err error) {
    err = stack.Serialize.Add(&awsAwsjson11_serializeOpListLicenses{ }, middleware.After)
    if err != nil {
        return err
    }
    err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListLicenses{ }, middleware.After)
    if
    err != nil {
        return err
    }
    if err = addLegacyEndpointContextSetter(stack, options); err != nil {
        return err
    }
    if err = addSetLoggerMiddleware(stack, options); err != nil {
        return err
    }
    if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
        return err
    }
    if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
        return err
    }
    if err = addResolveEndpointMiddleware(stack, options); err != nil {
        return err
    }
    if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
        return err
    }
    if err = addRetryMiddlewares(stack, options); err != nil {
        return err
    }
    if err = addHTTPSignerV4Middleware(stack, options); err != nil {
        return err
    }
    if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
        return err
    }
    if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
        return err
    }
}

```

```

}
if err = addClientUserAgent(stack, options); err != nil {
    return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
err != nil {
    return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = addListLicensesResolveEndpointMiddleware(stack, options); err != nil {
    return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListLicenses(options.Region), middleware.Before);
err != nil {
    return err
}
if err = awsmiddleware.AddRecursionDetection(stack); err != nil {
    return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
    return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
    return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
    return err
}
if err = addendpointDisableHTTPSMiddleware(stack, options); err != nil {
    return err
}
return nil
}

```

```

func newServiceMetadataMiddleware_opListLicenses(region string) *awsmiddleware.RegisterServiceMetadata {
    return &awsmiddleware.RegisterServiceMetadata{
        Region:    region,
        ServiceID:
            ServiceID,
        SigningName: "license-manager",
        OperationName: "ListLicenses",
    }
}

```

```

type opListLicensesResolveEndpointMiddleware struct {
    EndpointResolver EndpointResolverV2
}

```



```

BuiltInResolver builtInParameterResolver
}

func (*opListLicensesResolveEndpointMiddleware) ID() string {
return "ResolveEndpointV2"
}

func (m *opListLicensesResolveEndpointMiddleware) HandleSerialize(ctx context.Context, in
middleware.SerializeInput, next middleware.SerializeHandler) (
out middleware.SerializeOutput, metadata middleware.Metadata, err error,
) {
if awsmiddleware.GetRequiresLegacyEndpoints(ctx) {
return next.HandleSerialize(ctx, in)
}

req, ok := in.Request.(*smithyhttp.Request)
if !ok {
return out, metadata, fmt.Errorf("unknown transport type %T", in.Request)
}

if m.EndpointResolver == nil {
return out, metadata, fmt.Errorf("expected endpoint resolver to not be nil")
}

params := EndpointParameters{}

m.BuiltInResolver.ResolveBuiltIns(&params)

var resolvedEndpoint
smithyendpoints.Endpoint
resolvedEndpoint, err = m.EndpointResolver.ResolveEndpoint(ctx, params)
if err != nil {
return out, metadata, fmt.Errorf("failed to resolve service endpoint, %w", err)
}

req.URL = &resolvedEndpoint.URI

for k := range resolvedEndpoint.Headers {
req.Header.Set(
k,
resolvedEndpoint.Headers.Get(k),
)
}

authSchemes, err := internalauth.GetAuthenticationSchemes(&resolvedEndpoint.Properties)
if err != nil {
var nfe *internalauth.NoAuthenticationSchemesFoundError
if errors.As(err, &nfe) {

```

```

// if no auth scheme is found, default to sigv4
signingName := "license-manager"
signingRegion := m.BuiltInResolver.(*builtInResolver).Region
ctx = awsmiddleware.SetSigningName(ctx, signingName)
ctx = awsmiddleware.SetSigningRegion(ctx, signingRegion)

}

var ue *internalauth.UnSupportedAuthenticationSchemeSpecifiedError
if errors.As(err, &ue) {
return out, metadata, fmt.Errorf(
    "This operation requests signer version(s) %v but the
client only supports %v",
    ue.UnsupportedSchemes,
    internalauth.SupportedSchemes,
)
}
}

for _, authScheme := range authSchemes {
switch authScheme.(type) {
case *internalauth.AuthenticationSchemeV4:
v4Scheme, _ := authScheme.(*internalauth.AuthenticationSchemeV4)
var signingName, signingRegion string
if v4Scheme.SigningName == nil {
signingName = "license-manager"
} else {
signingName = *v4Scheme.SigningName
}
if v4Scheme.SigningRegion == nil {
signingRegion = m.BuiltInResolver.(*builtInResolver).Region
} else {
signingRegion = *v4Scheme.SigningRegion
}
if v4Scheme.DisableDoubleEncoding != nil {
// The signer sets an equivalent value at client initialization time.
// Setting this context value will cause the signer to extract it
// and override the value set at client initialization time.
ctx = internalauth.SetDisableDoubleEncoding(ctx, *v4Scheme.DisableDoubleEncoding)
}
ctx = awsmiddleware.SetSigningName(ctx,
signingName)
ctx = awsmiddleware.SetSigningRegion(ctx, signingRegion)
break
case *internalauth.AuthenticationSchemeV4A:
v4aScheme, _ := authScheme.(*internalauth.AuthenticationSchemeV4A)
if v4aScheme.SigningName == nil {
v4aScheme.SigningName = aws.String("license-manager")
}
}
}

```

```

if v4aScheme.DisableDoubleEncoding != nil {
    // The signer sets an equivalent value at client initialization time.
    // Setting this context value will cause the signer to extract it
    // and override the value set at client initialization time.
    ctx = internalauth.SetDisableDoubleEncoding(ctx, *v4aScheme.DisableDoubleEncoding)
}
ctx = awsmiddleware.SetSigningName(ctx, *v4aScheme.SigningName)
ctx = awsmiddleware.SetSigningRegion(ctx, v4aScheme.SigningRegionSet[0])
break
case *internalauth.AuthenticationSchemeNone:
    break
}
}

return next.HandleSerialize(ctx, in)
}

```

```

func addListLicensesResolveEndpointMiddleware(stack *middleware.Stack, options Options)
error {
return stack.Serialize.Insert(&opListLicensesResolveEndpointMiddleware{
    EndpointResolver: options.EndpointResolverV2,
    BuiltInResolver: &builtInResolver{
        Region:    options.Region,
        UseDualStack: options.EndpointOptions.UseDualStackEndpoint,
        UseFIPS:    options.EndpointOptions.UseFIPSEndpoint,
        Endpoint:   options.BaseEndpoint,
    },
}, "ResolveEndpoint", middleware.After)
}
// Code generated by smithy-go-codegen DO NOT EDIT.

```

```

package licensemanager

```

```

import (
    "context"
    "errors"
    "fmt"
    "github.com/aws/aws-sdk-go-v2/aws"
    awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
    "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
    internalauth "github.com/aws/aws-sdk-go-v2/internal/auth"
    "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
    smithyendpoints "github.com/aws/smithy-go/endpoints"
    "github.com/aws/smithy-go/middleware"
    smithyhttp "github.com/aws/smithy-go/transport/http"
)

```

```

// Deletes the specified license.

```

```

func (c *Client) DeleteLicense(ctx context.Context, params *DeleteLicenseInput, optFns ...func(*Options))
(*DeleteLicenseOutput, error) {
    if params == nil {
        params = &DeleteLicenseInput{}
    }

    result, metadata, err := c.invokeOperation(ctx, "DeleteLicense", params, optFns,
c.addOperationDeleteLicenseMiddlewares)
    if err != nil {
        return nil, err
    }

    out := result.(*DeleteLicenseOutput)
    out.ResultMetadata = metadata
    return out, nil
}

type
DeleteLicenseInput struct {

    // Amazon Resource Name (ARN) of the license.
    //
    // This member is required.
    LicenseArn *string

    // Current version of the license.
    //
    // This member is required.
    SourceVersion *string

    noSmithyDocumentSerde
}

type DeleteLicenseOutput struct {

    // Date when the license is deleted.
    DeletionDate *string

    // License status.
    Status types.LicenseDeletionStatus

    // Metadata pertaining to the operation's result.
    ResultMetadata middleware.Metadata

    noSmithyDocumentSerde
}

func (c *Client) addOperationDeleteLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {

```

```

err = stack.Serialize.Add(&awsAwsjson11_serializeOpDeleteLicense{ }, middleware.After)
if err != nil {
    return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpDeleteLicense{ }, middleware.After)
if err != nil {
    return err
}
if err = addLegacyEndpointContextSetter(stack, options); err != nil {
    return err
}
if err = addSetLoggerMiddleware(stack,
options); err != nil {
    return err
}
if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
    return err
}
if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
    return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
    return err
}
if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
    return err
}
if err = addRetryMiddlewares(stack, options); err != nil {
    return err
}
if err = addHTTPSignerV4Middleware(stack, options); err != nil {
    return err
}
if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
    return err
}
if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
    return err
}
if err = addClientUserAgent(stack, options); err != nil {
    return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
}

```

```

if err = addDeleteLicenseResolveEndpointMiddleware(stack,
options); err != nil {
    return err
}
if err = addOpDeleteLicenseValidationMiddleware(stack); err != nil {
    return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDeleteLicense(options.Region),
middleware.Before); err != nil {
    return err
}
if err = awsmiddleware.AddRecursionDetection(stack); err != nil {
    return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
    return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
    return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
    return err
}
if err = addendpointDisableHTTPSMiddleware(stack, options); err != nil {
    return err
}
return nil
}

func newServiceMetadataMiddleware_opDeleteLicense(region string) *awsmiddleware.RegisterServiceMetadata {
return &awsmiddleware.RegisterServiceMetadata{
    Region:    region,
    ServiceID: ServiceID,
    SigningName: "license-manager",
    OperationName: "DeleteLicense",
}
}

type
opDeleteLicenseResolveEndpointMiddleware struct {
    EndpointResolver EndpointResolverV2
    BuiltInResolver  builtInParameterResolver
}

func (*opDeleteLicenseResolveEndpointMiddleware) ID() string {
return "ResolveEndpointV2"
}

```

```

func (m *opDeleteLicenseResolveEndpointMiddleware) HandleSerialize(ctx context.Context, in
middleware.SerializeInput, next middleware.SerializeHandler) (
out middleware.SerializeOutput, metadata middleware.Metadata, err error,
) {
if awsmiddleware.GetRequiresLegacyEndpoints(ctx) {
return next.HandleSerialize(ctx, in)
}

req, ok := in.Request.(*smithyhttp.Request)
if !ok {
return out, metadata, fmt.Errorf("unknown transport type %T", in.Request)
}

if m.EndpointResolver == nil {
return out, metadata, fmt.Errorf("expected endpoint resolver to not be nil")
}

params := EndpointParameters{}

m.BuiltInResolver.ResolveBuiltIns(&params)

var resolvedEndpoint smithyendpoints.Endpoint
resolvedEndpoint, err = m.EndpointResolver.ResolveEndpoint(ctx,
params)
if err != nil {
return out, metadata, fmt.Errorf("failed to resolve service endpoint, %w", err)
}

req.URL = &resolvedEndpoint.URI

for k := range resolvedEndpoint.Headers {
req.Header.Set(
k,
resolvedEndpoint.Headers.Get(k),
)
}

authSchemes, err := internalauth.GetAuthenticationSchemes(&resolvedEndpoint.Properties)
if err != nil {
var nfe *internalauth.NoAuthenticationSchemesFoundError
if errors.As(err, &nfe) {
// if no auth scheme is found, default to sigv4
signingName := "license-manager"
signingRegion := m.BuiltInResolver.(*builtInResolver).Region
ctx = awsmiddleware.SetSigningName(ctx, signingName)
ctx = awsmiddleware.SetSigningRegion(ctx, signingRegion)
}
}

```

```

var ue *internalauth.UnSupportedAuthenticationSchemeSpecifiedError
if errors.As(err, &ue) {
return out, metadata, fmt.Errorf(
    "This operation requests signer version(s) %v but the client only supports %v",
    ue.UnsupportedSchemes,
    internalauth.SupportedSchemes,
)
}
}

for
_, authScheme := range authSchemes {
switch authScheme.(type) {
case *internalauth.AuthenticationSchemeV4:
v4Scheme, _ := authScheme.(*internalauth.AuthenticationSchemeV4)
var signingName, signingRegion string
if v4Scheme.SigningName == nil {
    signingName = "license-manager"
} else {
    signingName = *v4Scheme.SigningName
}
if v4Scheme.SigningRegion == nil {
    signingRegion = m.BuiltInResolver.(*builtInResolver).Region
} else {
    signingRegion = *v4Scheme.SigningRegion
}
if v4Scheme.DisableDoubleEncoding != nil {
    // The signer sets an equivalent value at client initialization time.
    // Setting this context value will cause the signer to extract it
    // and override the value set at client initialization time.
    ctx = internalauth.SetDisableDoubleEncoding(ctx, *v4Scheme.DisableDoubleEncoding)
}
ctx = awsmiddleware.SetSigningName(ctx, signingName)
ctx = awsmiddleware.SetSigningRegion(ctx, signingRegion)
break
case
*internalauth.AuthenticationSchemeV4A:
v4aScheme, _ := authScheme.(*internalauth.AuthenticationSchemeV4A)
if v4aScheme.SigningName == nil {
    v4aScheme.SigningName = aws.String("license-manager")
}
if v4aScheme.DisableDoubleEncoding != nil {
    // The signer sets an equivalent value at client initialization time.
    // Setting this context value will cause the signer to extract it
    // and override the value set at client initialization time.
    ctx = internalauth.SetDisableDoubleEncoding(ctx, *v4aScheme.DisableDoubleEncoding)
}
ctx = awsmiddleware.SetSigningName(ctx, *v4aScheme.SigningName)

```



```

    ctx = awsmiddleware.SetSigningRegion(ctx, v4aScheme.SigningRegionSet[0])
    break
case *internalauth.AuthenticationSchemeNone:
    break
}
}

return next.HandleSerialize(ctx, in)
}

func addDeleteLicenseResolveEndpointMiddleware(stack *middleware.Stack, options Options) error {
return stack.Serialize.Insert(&opDeleteLicenseResolveEndpointMiddleware{
    EndpointResolver:
    options.EndpointResolverV2,
    BuiltInResolver: &builtInResolver{
        Region:    options.Region,
        UseDualStack: options.EndpointOptions.UseDualStackEndpoint,
        UseFIPS:    options.EndpointOptions.UseFIPSEndpoint,
        Endpoint:   options.BaseEndpoint,
    },
}, "ResolveEndpoint", middleware.After)
}

```

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// Code generated by smithy-go-codegen DO NOT EDIT.

```
package licensemanager
```

```
import (  
    "context"  
    "errors"  
    "fmt"  
    "github.com/aws/aws-sdk-go-v2/aws"  
    awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"  
    "github.com/aws/aws-sdk-go-v2/aws/signer/v4"  
    internalauth "github.com/aws/aws-sdk-go-v2/internal/auth"  
    smithyendpoints "github.com/aws/smithy-go/endpoints"  
    "github.com/aws/smithy-go/middleware"  
    smithyhttp "github.com/aws/smithy-go/transport/http"  
)
```

```
// Checks in the specified license. Check in a license when it is no longer in use.
```

```
func (c *Client) CheckInLicense(ctx context.Context, params *CheckInLicenseInput, optFns ...func(*Options))  
(*CheckInLicenseOutput, error) {
```

```
    if params == nil {  
        params = &CheckInLicenseInput{ }  
    }
```

```
    result, metadata, err := c.invokeOperation(ctx, "CheckInLicense", params, optFns,  
    c.addOperationCheckInLicenseMiddlewares)
```

```
    if err != nil {  
        return nil, err  
    }
```

```
    out := result.(*CheckInLicenseOutput)  
    out.ResultMetadata = metadata  
    return out, nil  
}
```

```
type
```

```
CheckInLicenseInput struct {
```

```
    // License consumption token.
```

```
    //
```

```
    // This member is required.
```

```
    LicenseConsumptionToken *string
```

```
    // License beneficiary.
```

```
    Beneficiary *string
```

```

noSmithyDocumentSerde
}

type CheckInLicenseOutput struct {
// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationCheckInLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckInLicense{ }, middleware.After)
if err != nil {
return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckInLicense{ }, middleware.After)
if err != nil {
return err
}
if err = addLegacyEndpointContextSetter(stack, options); err != nil {
return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
return err
}
if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
return err
}
if err = smithyhttp.AddComputeContentLengthMiddleware(stack);
err != nil {
return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
return err
}
if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
return err
}
if err = addRetryMiddlewares(stack, options); err != nil {
return err
}
if err = addHTTPSignerV4Middleware(stack, options); err != nil {
return err
}
if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
return err
}
if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {

```

```

return err
}
if err = addClientUserAgent(stack, options); err != nil {
return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
return err
}
if err = addCheckInLicenseResolveEndpointMiddleware(stack, options); err != nil {
return err
}
if err = addOpCheckInLicenseValidationMiddleware(stack); err != nil {
return err
}
if
err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckInLicense(options.Region),
middleware.Before); err != nil {
return err
}
if err = awsmiddleware.AddRecursionDetection(stack); err != nil {
return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
return err
}
if err = addendpointDisableHTTPSMiddleware(stack, options); err != nil {
return err
}
return nil
}

func newServiceMetadataMiddleware_opCheckInLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
return &awsmiddleware.RegisterServiceMetadata{
Region:    region,
ServiceID: ServiceID,
SigningName: "license-manager",
OperationName: "CheckInLicense",
}
}

```

```

}

type opCheckInLicenseResolveEndpointMiddleware struct {
    EndpointResolver EndpointResolverV2
    BuiltInResolver  builtInParameterResolver
}

func (*opCheckInLicenseResolveEndpointMiddleware)
ID() string {
    return "ResolveEndpointV2"
}

func (m *opCheckInLicenseResolveEndpointMiddleware) HandleSerialize(ctx context.Context, in
middleware.SerializeInput, next middleware.SerializeHandler) (
out middleware.SerializeOutput, metadata middleware.Metadata, err error,
) {
    if awsmiddleware.GetRequiresLegacyEndpoints(ctx) {
        return next.HandleSerialize(ctx, in)
    }

    req, ok := in.Request.(*smithyhttp.Request)
    if !ok {
        return out, metadata, fmt.Errorf("unknown transport type %T", in.Request)
    }

    if m.EndpointResolver == nil {
        return out, metadata, fmt.Errorf("expected endpoint resolver to not be nil")
    }

    params := EndpointParameters{}

    m.BuiltInResolver.ResolveBuiltIns(&params)

    var resolvedEndpoint smithyendpoints.Endpoint
    resolvedEndpoint, err = m.EndpointResolver.ResolveEndpoint(ctx, params)
    if err != nil {
        return out, metadata, fmt.Errorf("failed to resolve service endpoint, %w", err)
    }

    req.URL = &resolvedEndpoint.URI

    for
    k := range resolvedEndpoint.Headers {
        req.Header.Set(
            k,
            resolvedEndpoint.Headers.Get(k),
        )
    }
}

```

```

authSchemes, err := internalauth.GetAuthenticationSchemes(&resolvedEndpoint.Properties)
if err != nil {
    var nfe *internalauth.NoAuthenticationSchemesFoundError
    if errors.As(err, &nfe) {
        // if no auth scheme is found, default to sigv4
        signingName := "license-manager"
        signingRegion := m.BuiltInResolver.(*builtInResolver).Region
        ctx = awsmiddleware.SetSigningName(ctx, signingName)
        ctx = awsmiddleware.SetSigningRegion(ctx, signingRegion)

    }
    var ue *internalauth.UnsupportedAuthenticationSchemeSpecifiedError
    if errors.As(err, &ue) {
        return out, metadata, fmt.Errorf(
            "This operation requests signer version(s) %v but the client only supports %v",
            ue.UnsupportedSchemes,
            internalauth.SupportedSchemes,
        )
    }
}

for _, authScheme := range authSchemes {
    switch authScheme.(type) {
    case *internalauth.AuthenticationSchemeV4:
        v4Scheme, _ :=
authScheme.(*internalauth.AuthenticationSchemeV4)
        var signingName, signingRegion string
        if v4Scheme.SigningName == nil {
            signingName = "license-manager"
        } else {
            signingName = *v4Scheme.SigningName
        }
        if v4Scheme.SigningRegion == nil {
            signingRegion = m.BuiltInResolver.(*builtInResolver).Region
        } else {
            signingRegion = *v4Scheme.SigningRegion
        }
        if v4Scheme.DisableDoubleEncoding != nil {
            // The signer sets an equivalent value at client initialization time.
            // Setting this context value will cause the signer to extract it
            // and override the value set at client initialization time.
            ctx = internalauth.SetDisableDoubleEncoding(ctx, *v4Scheme.DisableDoubleEncoding)
        }
        ctx = awsmiddleware.SetSigningName(ctx, signingName)
        ctx = awsmiddleware.SetSigningRegion(ctx, signingRegion)
        break
    case *internalauth.AuthenticationSchemeV4A:

```

```

v4aScheme, _ := authScheme.(*internalauth.AuthenticationSchemeV4A)
if v4aScheme.SigningName
== nil {
    v4aScheme.SigningName = aws.String("license-manager")
}
if v4aScheme.DisableDoubleEncoding != nil {
    // The signer sets an equivalent value at client initialization time.
    // Setting this context value will cause the signer to extract it
    // and override the value set at client initialization time.
    ctx = internalauth.SetDisableDoubleEncoding(ctx, *v4aScheme.DisableDoubleEncoding)
}
ctx = awsmiddleware.SetSigningName(ctx, *v4aScheme.SigningName)
ctx = awsmiddleware.SetSigningRegion(ctx, v4aScheme.SigningRegionSet[0])
break
case *internalauth.AuthenticationSchemeNone:
    break
}
}

return next.HandleSerialize(ctx, in)
}

func addCheckInLicenseResolveEndpointMiddleware(stack *middleware.Stack, options Options) error {
return stack.Serialize.Insert(&opCheckInLicenseResolveEndpointMiddleware{
    EndpointResolver: options.EndpointResolverV2,
    BuiltInResolver: &builtInResolver{
        Region:    options.Region,
        UseDualStack: options.EndpointOptions.UseDualStackEndpoint,
        UseFIPS:
            options.EndpointOptions.UseFIPSEndpoint,
        Endpoint:  options.BaseEndpoint,
    },
}, "ResolveEndpoint", middleware.After)
}

```

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```
// Code generated by smithy-go-codegen DO NOT EDIT.
```

```
package licensemanager
```

```
import (  
    "context"  
    "errors"  
    "fmt"  
    "github.com/aws/aws-sdk-go-v2/aws"  
    awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"  
    "github.com/aws/aws-sdk-go-v2/aws/signer/v4"  
    internalauth "github.com/aws/aws-sdk-go-v2/internal/auth"  
    "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"  
    smithyendpoints "github.com/aws/smithy-go/endpoints"  
    "github.com/aws/smithy-go/middleware"  
    smithyhttp "github.com/aws/smithy-go/transport/http"  
)  
  
// Lists received licenses.  
func (c *Client) ListReceivedLicenses(ctx context.Context, params *ListReceivedLicensesInput, optFns  
...func(*Options)) (*ListReceivedLicensesOutput, error) {  
    if params == nil {  
        params = &ListReceivedLicensesInput{}  
    }  
  
    result, metadata, err := c.invokeOperation(ctx, "ListReceivedLicenses", params, optFns,  
c.addOperationListReceivedLicensesMiddlewares)  
    if err != nil {  
        return nil, err  
    }  
  
    out := result.(*ListReceivedLicensesOutput)  
    out.ResultMetadata  
    = metadata  
    return out, nil  
}  
  
type ListReceivedLicensesInput struct {  
  
    // Filters to scope the results. The following filters are supported:  
    // - ProductSKU  
    // - Status  
    // - Fingerprint
```

```

// - IssuerName
// - Beneficiary
Filters []types.Filter

// Amazon Resource Names (ARNs) of the licenses.
LicenseArns []string

// Maximum number of results to return in a single call.
MaxResults *int32

// Token for the next set of results.
NextToken *string

noSmithyDocumentSerde
}

type ListReceivedLicensesOutput struct {

// Received license details.
Licenses []types.GrantedLicense

// Token for the next set of results.
NextToken *string

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationListReceivedLicensesMiddlewares(stack *middleware.Stack, options Options) (err
error) {
err = stack.Serialize.Add(&awsAwsjson11_serializeOpListReceivedLicenses{ }, middleware.After)
if
err != nil {
return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListReceivedLicenses{ }, middleware.After)
if err != nil {
return err
}
if err = addLegacyEndpointContextSetter(stack, options); err != nil {
return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
return err
}
if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {

```

```

return err
}
if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
return err
}
if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
return err
}
if err = addRetryMiddlewares(stack, options); err != nil {
return err
}
if err = addHTTPSignerV4Middleware(stack, options); err != nil {
return err
}
if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
return err
}
if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
return
err
}
if err = addClientUserAgent(stack, options); err != nil {
return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
return err
}
if err = addListReceivedLicensesResolveEndpointMiddleware(stack, options); err != nil {
return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListReceivedLicenses(options.Region),
middleware.Before); err != nil {
return err
}
if err = awsmiddleware.AddRecursionDetection(stack); err != nil {
return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
return err
}

```

```

}
if err = addRequestResponseLogging(stack, options); err != nil {
    return err
}
if err = addendpointDisableHTTPSMiddleware(stack, options); err != nil {
    return err
}
return nil
}

func newServiceMetadataMiddleware_opListReceivedLicenses(region
string) *awsmiddleware.RegisterServiceMetadata {
return &awsmiddleware.RegisterServiceMetadata{
    Region:    region,
    ServiceID: ServiceID,
    SigningName: "license-manager",
    OperationName: "ListReceivedLicenses",
}
}

type opListReceivedLicensesResolveEndpointMiddleware struct {
    EndpointResolver EndpointResolverV2
    BuiltInResolver  builtInParameterResolver
}

func (*opListReceivedLicensesResolveEndpointMiddleware) ID() string {
return "ResolveEndpointV2"
}

func (m *opListReceivedLicensesResolveEndpointMiddleware) HandleSerialize(ctx context.Context, in
middleware.SerializeInput, next middleware.SerializeHandler) (
    out middleware.SerializeOutput, metadata middleware.Metadata, err error,
) {
    if awsmiddleware.GetRequiresLegacyEndpoints(ctx) {
        return next.HandleSerialize(ctx, in)
    }

    req, ok := in.Request.(*smithyhttp.Request)
    if !ok {
        return out, metadata, fmt.Errorf("unknown transport type %T", in.Request)
    }

    if m.EndpointResolver == nil {
        return
        out, metadata, fmt.Errorf("expected endpoint resolver to not be nil")
    }

    params := EndpointParameters{}

```

```

m.BuiltInResolver.ResolveBuiltIns(&params)

var resolvedEndpoint smithyendpoints.Endpoint
resolvedEndpoint, err = m.EndpointResolver.ResolveEndpoint(ctx, params)
if err != nil {
    return out, metadata, fmt.Errorf("failed to resolve service endpoint, %w", err)
}

req.URL = &resolvedEndpoint.URI

for k := range resolvedEndpoint.Headers {
    req.Header.Set(
        k,
        resolvedEndpoint.Headers.Get(k),
    )
}

authSchemes, err := internalauth.GetAuthenticationSchemes(&resolvedEndpoint.Properties)
if err != nil {
    var nfe *internalauth.NoAuthenticationSchemesFoundError
    if errors.As(err, &nfe) {
        // if no auth scheme is found, default to sigv4
        signingName := "license-manager"
        signingRegion := m.BuiltInResolver.(*builtInResolver).Region
        ctx = awsmiddleware.SetSigningName(ctx, signingName)
        ctx = awsmiddleware.SetSigningRegion(ctx, signingRegion)
    }
    var ue *internalauth.UnsupportedAuthenticationSchemeSpecifiedError
    if
    errors.As(err, &ue) {
        return out, metadata, fmt.Errorf(
            "This operation requests signer version(s) %v but the client only supports %v",
            ue.UnsupportedSchemes,
            internalauth.SupportedSchemes,
        )
    }
}

for _, authScheme := range authSchemes {
    switch authScheme.(type) {
    case *internalauth.AuthenticationSchemeV4:
        v4Scheme, _ := authScheme.(*internalauth.AuthenticationSchemeV4)
        var signingName, signingRegion string
        if v4Scheme.SigningName == nil {
            signingName = "license-manager"
        } else {

```



```

    signingName = *v4Scheme.SigningName
}
if v4Scheme.SigningRegion == nil {
    signingRegion = m.BuiltInResolver.(*builtInResolver).Region
} else {
    signingRegion = *v4Scheme.SigningRegion
}
if v4Scheme.DisableDoubleEncoding != nil {
    // The signer sets an equivalent value at client initialization time.
    // Setting this context value will cause the signer to extract it
    // and override
the value set at client initialization time.
    ctx = internalauth.SetDisableDoubleEncoding(ctx, *v4Scheme.DisableDoubleEncoding)
}
ctx = awsmiddleware.SetSigningName(ctx, signingName)
ctx = awsmiddleware.SetSigningRegion(ctx, signingRegion)
break
case *internalauth.AuthenticationSchemeV4A:
v4aScheme, _ := authScheme.(*internalauth.AuthenticationSchemeV4A)
if v4aScheme.SigningName == nil {
    v4aScheme.SigningName = aws.String("license-manager")
}
if v4aScheme.DisableDoubleEncoding != nil {
    // The signer sets an equivalent value at client initialization time.
    // Setting this context value will cause the signer to extract it
    // and override the value set at client initialization time.
    ctx = internalauth.SetDisableDoubleEncoding(ctx, *v4aScheme.DisableDoubleEncoding)
}
ctx = awsmiddleware.SetSigningName(ctx, *v4aScheme.SigningName)
ctx = awsmiddleware.SetSigningRegion(ctx, v4aScheme.SigningRegionSet[0])
break
case *internalauth.AuthenticationSchemeNone:
break
}
}

return
next.HandleSerialize(ctx, in)
}

func addListReceivedLicensesResolveEndpointMiddleware(stack *middleware.Stack, options Options) error {
return stack.Serialize.Insert(&opListReceivedLicensesResolveEndpointMiddleware{
EndpointResolver: options.EndpointResolverV2,
BuiltInResolver: &builtInResolver{
Region:    options.Region,
UseDualStack: options.EndpointOptions.UseDualStackEndpoint,
UseFIPS:   options.EndpointOptions.UseFIPSEndpoint,
Endpoint:  options.BaseEndpoint,

```

```

    },
    }, "ResolveEndpoint", middleware.After)
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
    "context"
    "errors"
    "fmt"
    "github.com/aws/aws-sdk-go-v2/aws"
    awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
    "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
    internalauth "github.com/aws/aws-sdk-go-v2/internal/auth"
    "github.com/aws/aws-sdk-go-v2/service/grafana/types"
    smithyendpoints "github.com/aws/smithy-go/endpoints"
    "github.com/aws/smithy-go/middleware"
    smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Assigns a Grafana Enterprise license to a workspace. Upgrading to Grafana
// Enterprise incurs additional fees. For more information, see Upgrade a
// workspace to Grafana Enterprise (https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-Grafana-Enterprise.html)
// .
func (c *Client) AssociateLicense(ctx context.Context, params *AssociateLicenseInput, optFns ...func(*Options))
(*AssociateLicenseOutput, error) {
    if params == nil {
        params = &AssociateLicenseInput{}
    }

    result,
    metadata, err := c.invokeOperation(ctx, "AssociateLicense", params, optFns,
c.addOperationAssociateLicenseMiddlewares)
    if err != nil {
        return nil, err
    }

    out := result.(*AssociateLicenseOutput)
    out.ResultMetadata = metadata
    return out, nil
}

type AssociateLicenseInput struct {

    // The type of license to associate with the workspace.
    //

```

```

// This member is required.
LicenseType types.LicenseType

// The ID of the workspace to associate the license with.
//
// This member is required.
WorkspaceId *string

noSmithyDocumentSerde
}

type AssociateLicenseOutput struct {

// A structure containing data about the workspace.
//
// This member is required.
Workspace *types.WorkspaceDescription

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationAssociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
err = stack.Serialize.Add(&awsRestjson1_serializeOpAssociateLicense{ },
middleware.After)
if err != nil {
return err
}
err = stack.Deserialize.Add(&awsRestjson1_deserializeOpAssociateLicense{ }, middleware.After)
if err != nil {
return err
}
if err = addLegacyEndpointContextSetter(stack, options); err != nil {
return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
return err
}
if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
return err
}
if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
return err
}
}

```

```

}
if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
    return err
}
if err = addRetryMiddlewares(stack, options); err != nil {
    return err
}
if err = addHTTPSignerV4Middleware(stack, options); err != nil {
    return err
}
if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
    return err
}
if err = awsmiddleware.AddRecordResponseTiming(stack);
err != nil {
    return err
}
if err = addClientUserAgent(stack, options); err != nil {
    return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = addAssociateLicenseResolveEndpointMiddleware(stack, options); err != nil {
    return err
}
if err = addOpAssociateLicenseValidationMiddleware(stack); err != nil {
    return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opAssociateLicense(options.Region),
middleware.Before); err != nil {
    return err
}
if err = awsmiddleware.AddRecursionDetection(stack); err != nil {
    return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
    return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
    return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
    return err
}
}

```

```

if err = addendpointDisableHTTPSMiddleware(stack,
options); err != nil {
    return err
}
return nil
}

func newServiceMetadataMiddleware_opAssociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
return &awsmiddleware.RegisterServiceMetadata{
    Region:    region,
    ServiceID: ServiceID,
    SigningName: "grafana",
    OperationName: "AssociateLicense",
}
}

type opAssociateLicenseResolveEndpointMiddleware struct {
    EndpointResolver EndpointResolverV2
    BuiltInResolver  builtInParameterResolver
}

func (*opAssociateLicenseResolveEndpointMiddleware) ID() string {
return "ResolveEndpointV2"
}

func (m *opAssociateLicenseResolveEndpointMiddleware) HandleSerialize(ctx context.Context, in
middleware.SerializeInput, next middleware.SerializeHandler) (
out middleware.SerializeOutput, metadata middleware.Metadata, err error,
) {
if awsmiddleware.GetRequiresLegacyEndpoints(ctx) {
return next.HandleSerialize(ctx, in)
}

req, ok := in.Request.(*smithyhttp.Request)
if !ok {
return out, metadata, fmt.Errorf("unknown
transport type %T", in.Request)
}

if m.EndpointResolver == nil {
return out, metadata, fmt.Errorf("expected endpoint resolver to not be nil")
}

params := EndpointParameters{}

m.BuiltInResolver.ResolveBuiltIns(&params)

```

```

var resolvedEndpoint smithyendpoints.Endpoint
resolvedEndpoint, err = m.EndpointResolver.ResolveEndpoint(ctx, params)
if err != nil {
    return out, metadata, fmt.Errorf("failed to resolve service endpoint, %w", err)
}

req.URL = &resolvedEndpoint.URI

for k := range resolvedEndpoint.Headers {
    req.Header.Set(
        k,
        resolvedEndpoint.Headers.Get(k),
    )
}

authSchemes, err := internalauth.GetAuthenticationSchemes(&resolvedEndpoint.Properties)
if err != nil {
    var nfe *internalauth.NoAuthenticationSchemesFoundError
    if errors.As(err, &nfe) {
        // if no auth scheme is found, default to sigv4
        signingName := "grafana"
        signingRegion := m.BuiltInResolver.(*builtInResolver).Region
        ctx = awsmiddleware.SetSigningName(ctx, signingName)
        ctx
        = awsmiddleware.SetSigningRegion(ctx, signingRegion)
    }
    var ue *internalauth.UnSupportedAuthenticationSchemeSpecifiedError
    if errors.As(err, &ue) {
        return out, metadata, fmt.Errorf(
            "This operation requests signer version(s) %v but the client only supports %v",
            ue.UnsupportedSchemes,
            internalauth.SupportedSchemes,
        )
    }
}

for _, authScheme := range authSchemes {
    switch authScheme.(type) {
    case *internalauth.AuthenticationSchemeV4:
        v4Scheme, _ := authScheme.(*internalauth.AuthenticationSchemeV4)
        var signingName, signingRegion string
        if v4Scheme.SigningName == nil {
            signingName = "grafana"
        } else {
            signingName = *v4Scheme.SigningName
        }
        if v4Scheme.SigningRegion == nil {

```

```

    signingRegion = m.BuiltInResolver.(*builtInResolver).Region
  } else {
    signingRegion = *v4Scheme.SigningRegion
  }
  if v4Scheme.DisableDoubleEncoding != nil {
    // The signer sets an equivalent value at client initialization time.
    // Setting this
context value will cause the signer to extract it
    // and override the value set at client initialization time.
    ctx = internalauth.SetDisableDoubleEncoding(ctx, *v4Scheme.DisableDoubleEncoding)
  }
  ctx = awsmiddleware.SetSigningName(ctx, signingName)
  ctx = awsmiddleware.SetSigningRegion(ctx, signingRegion)
  break
case *internalauth.AuthenticationSchemeV4A:
  v4aScheme, _ := authScheme.(*internalauth.AuthenticationSchemeV4A)
  if v4aScheme.SigningName == nil {
    v4aScheme.SigningName = aws.String("grafana")
  }
  if v4aScheme.DisableDoubleEncoding != nil {
    // The signer sets an equivalent value at client initialization time.
    // Setting this context value will cause the signer to extract it
    // and override the value set at client initialization time.
    ctx = internalauth.SetDisableDoubleEncoding(ctx, *v4aScheme.DisableDoubleEncoding)
  }
  ctx = awsmiddleware.SetSigningName(ctx, *v4aScheme.SigningName)
  ctx = awsmiddleware.SetSigningRegion(ctx,
v4aScheme.SigningRegionSet[0])
  break
case *internalauth.AuthenticationSchemeNone:
  break
}
}

return next.HandleSerialize(ctx, in)
}

func addAssociateLicenseResolveEndpointMiddleware(stack *middleware.Stack, options Options) error {
return stack.Serialize.Insert(&opAssociateLicenseResolveEndpointMiddleware{
  EndpointResolver: options.EndpointResolverV2,
  BuiltInResolver: &builtInResolver{
    Region:    options.Region,
    UseDualStack: options.EndpointOptions.UseDualStackEndpoint,
    UseFIPS:    options.EndpointOptions.UseFIPSEndpoint,
    Endpoint:   options.BaseEndpoint,
  },
}, "ResolveEndpoint", middleware.After)
}

```

```

// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
    "context"
    "errors"
    "fmt"
    "github.com/aws/aws-sdk-go-v2/aws"
    awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
    "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
    internalauth "github.com/aws/aws-sdk-go-v2/internal/auth"
    "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
    smithyendpoints "github.com/aws/smithy-go/endpoints"
    "github.com/aws/smithy-go/middleware"
    smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Creates a license.
func (c *Client) CreateLicense(ctx context.Context, params *CreateLicenseInput, optFns ...func(*Options))
(*CreateLicenseOutput, error) {
    if params == nil {
        params = &CreateLicenseInput{}
    }

    result, metadata, err := c.invokeOperation(ctx, "CreateLicense", params, optFns,
c.addOperationCreateLicenseMiddlewares)
    if err != nil {
        return nil, err
    }

    out := result.(*CreateLicenseOutput)
    out.ResultMetadata = metadata
    return out, nil
}

type CreateLicenseInput
struct {

    // License beneficiary.
    //
    // This member is required.
    Beneficiary *string

    // Unique, case-sensitive identifier that you provide to ensure the idempotency of
    // the request.
    //
    // This member is required.

```



```
ClientToken *string

// Configuration for consumption of the license. Choose a provisional
// configuration for workloads running with continuous connectivity. Choose a
// borrow configuration for workloads with offline usage.
//
// This member is required.
ConsumptionConfiguration *types.ConsumptionConfiguration

// License entitlements.
//
// This member is required.
Entitlements []types.Entitlement

// Home Region for the license.
//
// This member is required.
HomeRegion *string

// License issuer.
//
// This member is required.
Issuer *types.Issuer

// License name.
//
// This member is required.
LicenseName *string

// Product name.
//
// This member is required.
ProductName *string

// Product SKU.
//
// This member
is required.
ProductSKU *string

// Date and time range during which the license is valid, in ISO8601-UTC format.
//
// This member is required.
Validity *types.DatetimeRange

// Information about the license.
LicenseMetadata []types.Metadata
```

```

noSmithyDocumentSerde
}

type CreateLicenseOutput struct {

    // Amazon Resource Name (ARN) of the license.
    LicenseArn *string

    // License status.
    Status types.LicenseStatus

    // License version.
    Version *string

    // Metadata pertaining to the operation's result.
    ResultMetadata middleware.Metadata

    noSmithyDocumentSerde
}

func (c *Client) addOperationCreateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
    err = stack.Serialize.Add(&awsAwsjson11_serializeOpCreateLicense{ }, middleware.After)
    if err != nil {
        return err
    }
    err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCreateLicense{ }, middleware.After)
    if err != nil {
        return err
    }
    if err = addLegacyEndpointContextSetter(stack, options); err
    != nil {
        return err
    }
    if err = addSetLoggerMiddleware(stack, options); err != nil {
        return err
    }
    if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
        return err
    }
    if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
        return err
    }
    if err = addResolveEndpointMiddleware(stack, options); err != nil {
        return err
    }
    if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
        return err
    }
}

```

```

if err = addRetryMiddlewares(stack, options); err != nil {
    return err
}
if err = addHTTPSignerV4Middleware(stack, options); err != nil {
    return err
}
if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
    return err
}
if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
    return err
}
if err = addClientUserAgent(stack, options); err != nil {
    return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack);
err != nil {
    return err
}
if err = addCreateLicenseResolveEndpointMiddleware(stack, options); err != nil {
    return err
}
if err = addOpCreateLicenseValidationMiddleware(stack); err != nil {
    return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCreateLicense(options.Region),
middleware.Before); err != nil {
    return err
}
if err = awsmiddleware.AddRecursionDetection(stack); err != nil {
    return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
    return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
    return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
    return err
}
if err = addendpointDisableHTTPSMiddleware(stack, options); err != nil {
    return err
}
return nil

```

```

}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
return &awsmiddleware.RegisterServiceMetadata{
Region:    region,
ServiceID: ServiceID,
SigningName:
"license-manager",
OperationName: "CreateLicense",
}
}

type opCreateLicenseResolveEndpointMiddleware struct {
EndpointResolver EndpointResolverV2
BuiltInResolver  builtInParameterResolver
}

func (*opCreateLicenseResolveEndpointMiddleware) ID() string {
return "ResolveEndpointV2"
}

func (m *opCreateLicenseResolveEndpointMiddleware) HandleSerialize(ctx context.Context, in
middleware.SerializeInput, next middleware.SerializeHandler) (
out middleware.SerializeOutput, metadata middleware.Metadata, err error,
) {
if awsmiddleware.GetRequiresLegacyEndpoints(ctx) {
return next.HandleSerialize(ctx, in)
}

req, ok := in.Request.(*smithyhttp.Request)
if !ok {
return out, metadata, fmt.Errorf("unknown transport type %T", in.Request)
}

if m.EndpointResolver == nil {
return out, metadata, fmt.Errorf("expected endpoint resolver to not be nil")
}

params := EndpointParameters{}

m.BuiltInResolver.ResolveBuiltIns(&params)

var resolvedEndpoint smithyendpoints.Endpoint
resolvedEndpoint,
err = m.EndpointResolver.ResolveEndpoint(ctx, params)
if err != nil {
return out, metadata, fmt.Errorf("failed to resolve service endpoint, %w", err)
}
}

```

```

req.URL = &resolvedEndpoint.URI

for k := range resolvedEndpoint.Headers {
    req.Header.Set(
        k,
        resolvedEndpoint.Headers.Get(k),
    )
}

authSchemes, err := internalauth.GetAuthenticationSchemes(&resolvedEndpoint.Properties)
if err != nil {
    var nfe *internalauth.NoAuthenticationSchemesFoundError
    if errors.As(err, &nfe) {
        // if no auth scheme is found, default to sigv4
        signingName := "license-manager"
        signingRegion := m.BuiltInResolver.(*builtInResolver).Region
        ctx = awsmiddleware.SetSigningName(ctx, signingName)
        ctx = awsmiddleware.SetSigningRegion(ctx, signingRegion)
    }
    var ue *internalauth.UnsupportedAuthenticationSchemeSpecifiedError
    if errors.As(err, &ue) {
        return out, metadata, fmt.Errorf(
            "This operation requests signer version(s) %v but the client only supports
            %v",
            ue.UnsupportedSchemes,
            internalauth.SupportedSchemes,
        )
    }
}

for _, authScheme := range authSchemes {
    switch authScheme.(type) {
    case *internalauth.AuthenticationSchemeV4:
        v4Scheme, _ := authScheme.(*internalauth.AuthenticationSchemeV4)
        var signingName, signingRegion string
        if v4Scheme.SigningName == nil {
            signingName = "license-manager"
        } else {
            signingName = *v4Scheme.SigningName
        }
        if v4Scheme.SigningRegion == nil {
            signingRegion = m.BuiltInResolver.(*builtInResolver).Region
        } else {
            signingRegion = *v4Scheme.SigningRegion
        }
        if v4Scheme.DisableDoubleEncoding != nil {

```

```

// The signer sets an equivalent value at client initialization time.
// Setting this context value will cause the signer to extract it
// and override the value set at client initialization time.
ctx = internalauth.SetDisableDoubleEncoding(ctx, *v4Scheme.DisableDoubleEncoding)
}
ctx = awsmiddleware.SetSigningName(ctx, signingName)
ctx
= awsmiddleware.SetSigningRegion(ctx, signingRegion)
break
case *internalauth.AuthenticationSchemeV4A:
v4aScheme, _ := authScheme.(*internalauth.AuthenticationSchemeV4A)
if v4aScheme.SigningName == nil {
v4aScheme.SigningName = aws.String("license-manager")
}
if v4aScheme.DisableDoubleEncoding != nil {
// The signer sets an equivalent value at client initialization time.
// Setting this context value will cause the signer to extract it
// and override the value set at client initialization time.
ctx = internalauth.SetDisableDoubleEncoding(ctx, *v4aScheme.DisableDoubleEncoding)
}
ctx = awsmiddleware.SetSigningName(ctx, *v4aScheme.SigningName)
ctx = awsmiddleware.SetSigningRegion(ctx, v4aScheme.SigningRegionSet[0])
break
case *internalauth.AuthenticationSchemeNone:
break
}
}

return next.HandleSerialize(ctx, in)
}

func addCreateLicenseResolveEndpointMiddleware(stack *middleware.Stack, options Options) error {
return
stack.Serialize.Insert(&opCreateLicenseResolveEndpointMiddleware{
EndpointResolver: options.EndpointResolverV2,
BuiltInResolver: &builtInResolver{
Region: options.Region,
UseDualStack: options.EndpointOptions.UseDualStackEndpoint,
UseFIPS: options.EndpointOptions.UseFIPSEndpoint,
Endpoint: options.BaseEndpoint,
},
}, "ResolveEndpoint", middleware.After)
}
}

```

## 1.68 aws-aws-sdk-go-v2-internal-configsources 1.1.31

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## 1.73 aws-aws-sdk-go-v2-service-internal-s3shared 1.14.0

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name: License Scan

on: [pull\_request]

jobs:

licensescan:

name: License Scan

runs-on: ubuntu-latest

strategy:

matrix:

python-version: [3.9]

steps:

- name: Checkout target

uses: actions/checkout@v2

with:

path: sdkbase

ref: \${{ github.base\_ref }}

- name: Checkout this ref

uses: actions/checkout@v2

with:

path: new-ref

```

    fetch-depth: 0
  - name: Get Diff
    run: git --git-dir ./new-ref/.git diff --name-only --diff-filter=ACMRT ${{ github.event.pull_request.base.sha }}
${{ github.sha }} > refDiffFiles.txt
  - name: Get Target Files
    run: git --git-dir ./sdkbase/.git ls-files | grep -xf refDiffFiles.txt - > targetFiles.txt
  - name: Checkout scancode
    uses: actions/checkout@v2
    with:
      repository: nexB/scancode-toolkit
      path: scancode-toolkit
      fetch-depth: 1
  - name: Set up Python ${{ matrix.python-version }}
    uses: actions/setup-python@v2
    with:
      python-version: ${{ matrix.python-version }}
# ScanCode
  - name: Self-configure scancode
    working-directory: ./scancode-toolkit
    run: ./scancode --help
  - name: Run Scan code on target
    run: cat targetFiles.txt | while read filename; do echo ./sdkbase/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> old-licenses.txt
  - name: Run Scan code on pr ref
    run: cat refDiffFiles.txt | while read filename; do echo ./new-ref/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> new-licenses.txt
# compare
  - name: License test
    run: if ! cmp old-licenses.txt new-licenses.txt; then echo "Licenses differ! Failing."; exit -1; else echo "Licenses
are the same. Success."; exit 0; fi
// Code generated by smithy-go-codegen DO NOT EDIT.

```

```
package licensemanager
```

```

import (
    "context"
    "fmt"
    awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
    "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
    "github.com/aws/smithy-go/middleware"
    smithyhttp "github.com/aws/smithy-go/transport/http"
)

```

```
// Checks out the specified license for offline use.
```

```

func (c *Client) CheckoutBorrowLicense(ctx context.Context, params *CheckoutBorrowLicenseInput, optFns
...func(*Options)) (*CheckoutBorrowLicenseOutput, error) {
    if params == nil {
        params = &CheckoutBorrowLicenseInput{}
    }
}

```

```

}

result, metadata, err := c.invokeOperation(ctx, "CheckoutBorrowLicense", params, optFns,
c.addOperationCheckoutBorrowLicenseMiddlewares)
if err != nil {
    return nil, err
}

out := result.(*CheckoutBorrowLicenseOutput)
out.ResultMetadata = metadata
return out, nil
}

type CheckoutBorrowLicenseInput struct {

    // Unique, case-sensitive identifier that you provide to ensure the idempotency of
    //
    // the request.
    //
    // This member is required.
    ClientToken *string

    // Digital signature method. The possible value is JSON Web Signature (JWS)
    // algorithm PS384. For more information, see RFC 7518 Digital Signature with
    // RSASSA-PSS (https://tools.ietf.org/html/rfc7518#section-3.5) .
    //
    // This member is required.
    DigitalSignatureMethod types.DigitalSignatureMethod

    // License entitlements. Partial checkouts are not supported.
    //
    // This member is required.
    Entitlements []types.EntitlementData

    // Amazon Resource Name (ARN) of the license. The license must use the borrow
    // consumption configuration.
    //
    // This member is required.
    LicenseArn *string

    // Information about constraints.
    CheckoutMetadata []types.Metadata

    // Node ID.
    NodeId *string

    noSmithyDocumentSerde
}

```

```

type CheckoutBorrowLicenseOutput struct {

    // Information about constraints.
    CheckoutMetadata []types.Metadata

    // Allowed license entitlements.
    EntitlementsAllowed []types.EntitlementData

    //
    Date and time at which the license checkout expires.
    Expiration *string

    // Date and time at which the license checkout is issued.
    IssuedAt *string

    // Amazon Resource Name (ARN) of the license.
    LicenseArn *string

    // License consumption token.
    LicenseConsumptionToken *string

    // Node ID.
    NodeId *string

    // Signed token.
    SignedToken *string

    // Metadata pertaining to the operation's result.
    ResultMetadata middleware.Metadata

    noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutBorrowLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
    if err := stack.Serialize.Add(&setOperationInputMiddleware{ }, middleware.After); err != nil {
        return err
    }
    err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutBorrowLicense{ }, middleware.After)
    if err != nil {
        return err
    }
    err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutBorrowLicense{ }, middleware.After)
    if err != nil {
        return err
    }
    if err := addProtocolFinalizerMiddlewares(stack,

```

```

options, "CheckoutBorrowLicense"); err != nil {
    return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addLegacyEndpointContextSetter(stack, options); err != nil {
    return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
    return err
}
if err = addClientRequestID(stack); err != nil {
    return err
}
if err = addComputeContentLength(stack); err != nil {
    return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
    return err
}
if err = addComputePayloadSHA256(stack); err != nil {
    return err
}
if err = addRetry(stack, options); err != nil {
    return err
}
if err = addRawResponseToMetadata(stack); err != nil {
    return err
}
if err = addRecordResponseTiming(stack); err != nil {
    return err
}
if err = addClientUserAgent(stack, options); err != nil {
    return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack);
err != nil {
    return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
    return err
}
if err = addOpCheckoutBorrowLicenseValidationMiddleware(stack); err != nil {
    return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutBorrowLicense(options.Region),

```

```

middleware.Before); err != nil {
    return err
}
if err = addRecursionDetection(stack); err != nil {
    return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
    return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
    return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
    return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
    return err
}
return nil
}

```

```

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region string)

```

```

*awsmiddleware.RegisterServiceMetadata {
return &awsmiddleware.RegisterServiceMetadata{
    Region:    region,
    ServiceID: ServiceID,
    OperationName:
"CheckoutBorrowLicense",
}
}

```

```

ListLicenses

```

```

Initialize stack step

```

```

RegisterServiceMetadata

```

```

legacyEndpointContextSetter

```

```

SetLogger

```

```

Serialize stack step

```

```

setOperationInput

```

```

ResolveEndpoint

```

```

OperationSerializer

```

```

Build stack step

```

```

ClientRequestID

```

```

ComputeContentLength

```

```

UserAgent

```

```

RecursionDetection

```

```

Finalize stack step

```

```

ResolveAuthScheme

```

```

GetIdentity

```

```

ResolveEndpointV2

```

```

disableHTTPS
ComputePayloadHash
Retry
RetryMetricsHeader
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
RecordResponseTiming
RequestResponseLogger
{
  "smithy": "2.0",
  "shapes": {
    "com.amazonaws.licenseanagerlinuxsubscriptions#BoxInteger": {
      "type": "integer"
    },
    "com.amazonaws.licenseanagerlinuxsubscriptions#BoxLong": {
      "type": "long"
    },
    "com.amazonaws.licenseanagerlinuxsubscriptions#Filter": {
      "type": "structure",
      "members": {
        "Name": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The type of name to filter by.</p>"
          }
        },
        "Values": {
          "target": "com.amazonaws.licenseanagerlinuxsubscriptions#StringList",
          "traits": {
            "smithy.api#documentation": "<p>One or more values for the name to filter by.</p>"
          }
        },
        "Operator": {
          "target": "com.amazonaws.licenseanagerlinuxsubscriptions#Operator",
          "traits": {
            "smithy.api#documentation": "<p>An operator for filtering results.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>A filter object that is used to return more specific results from a describe

```

```

operation.\n    Filters can be used to match a set of resources by specific criteria.</p>"
  }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#FilterList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Filter"
  }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerErrorException"
    },
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
    },
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Lists the Linux subscriptions service settings.</p>",
    "smithy.api#http": {
      "code": 200,
      "method": "POST",
      "uri": "/subscription/GetServiceSettings"
    },
    "smithy.api#idempotent": {}
  }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest":
{
  "type": "structure",
  "members": {}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse": {
  "type": "structure",
  "members": {
    "LinuxSubscriptionsDiscovery": {

```



```

    "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
    "traits": {
      "smithy.api#documentation": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
    }
  },
  "LinuxSubscriptionsDiscoverySettings": {
    "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
    "traits": {
      "smithy.api#documentation": "<p>Lists the settings defined for Linux subscriptions discovery. The settings include if\n Organizations integration has been enabled, and which Regions data will be aggregated from.</p>"
    }
  },
  "Status": {
    "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
    "traits": {
      "smithy.api#documentation": "<p>Indicates the status of Linux subscriptions settings being applied.</p>"
    }
  },
  "StatusMessage": {
    "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
    "traits": {
      "smithy.api#documentation": "<p>A message which details the Linux subscriptions service settings current status.</p>"
    }
  },
  "HomeRegions": {
    "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
    "traits": {
      "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated data for Linux\n subscriptions.</p>"
    }
  }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Instance": {
  "type": "structure",
  "members": {
    "AmiId": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>The AMI ID used to launch the instance.</p>"
      }
    },
    "InstanceID": {
      "target": "smithy.api#String",
      "traits": {

```

```

    "smithy.api#documentation": "<p>The instance ID of the resource.</p>"
  }
},
"InstanceType": {
  "target": "smithy.api#String",
  "traits": {
    "smithy.api#documentation": "<p>The instance type of the resource.</p>"
  }
},
"AccountID": {
  "target": "smithy.api#String",
  "traits": {
    "smithy.api#documentation": "<p>The account ID which owns the instance.</p>"
  }
},
"Status": {
  "target": "smithy.api#String",
  "traits": {
    "smithy.api#documentation": "<p>The status of the instance.</p>"
  }
},
"Region": {
  "target": "smithy.api#String",
  "traits": {
    "smithy.api#documentation": "<p>The Region the instance is running in.</p>"
  }
},
"UsageOperation": {
  "target": "smithy.api#String",
  "traits": {
    "smithy.api#documentation": "<p>The usage operation of the instance. For more information, see For
more information, see\n    <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-
subscriptions-usage-operation.html\">Usage\n    operation values</a> in the <i>License Manager User
Guide</i>.</p>"
  }
},
"ProductCode": {
  "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList",
  "traits": {
    "smithy.api#documentation": "<p>The product code for the instance. For more information, see <a
href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-subscriptions-usage-
operation.html\">Usage\n    operation values</a> in the <i>License Manager User Guide</i> .</p>"
  }
},
"LastUpdatedTime": {
  "target": "smithy.api#String",
  "traits": {

```

```

    "smithy.api#documentation": "<p>The time in which the last discovery
updated the instance details.</p>"
  }
},
"SubscriptionName": {
  "target": "smithy.api#String",
  "traits": {
    "smithy.api#documentation": "<p>The name of the subscription being used by the instance.</p>"
  }
},
"traits": {
  "smithy.api#documentation": "<p>Details discovered information about a running instance using Linux
subscriptions.</p>"
},
},
"com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Instance"
  }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerError": {
  "type": "structure",
  "members": {
    "message": {
      "target": "smithy.api#String"
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>An exception occurred with the service.</p>",
    "smithy.api#error": "server"
  }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#LicenseManagerLinuxSubscriptions": {
  "type": "service",
  "version": "2018-05-10",
  "operations": [
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings"
    },
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances"
    },
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions"
    },
    {

```

```

    "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings"
  }
],

"traits": {
  "aws.api#service": {
    "sdkId": "License Manager Linux Subscriptions",
    "arnNamespace": "license-manager-linux-subscriptions",
    "cloudTrailEventSource": "license-manager-linux-subscriptions.amazonaws.com"
  },
  "aws.auth#sigv4": {
    "name": "license-manager-linux-subscriptions"
  },
  "aws.protocols#restJson1": {},
  "smithy.api#cors": {
    "additionalAllowedHeaders": [
      "*",
      "content-type",
      "x-amz-content-sha256",
      "x-amz-user-agent",
      "x-amzn-platform-id",
      "x-amzn-trace-id",
      "content-length",
      "x-api-key",
      "authorization",
      "x-amz-date",

"x-amz-security-token",
      "Access-Control-Allow-Headers",
      "Access-Control-Allow-Methods",
      "Access-Control-Allow-Origin"
    ],
    "additionalExposedHeaders": [
      "x-amzn-errortype",
      "x-amzn-requestid",
      "x-amzn-trace-id"
    ]
  },
  "smithy.api#documentation": "<p>With License Manager, you can discover and track your commercial Linux subscriptions on running Amazon EC2 instances.</p>",
  "smithy.api#title": "AWS License Manager Linux Subscriptions",
  "smithy.rules#endpointRuleSet": {
    "version": "1.0",
    "parameters": {
      "Region": {
        "builtIn": "AWS::Region",
        "required": false,
        "documentation": "The

```

```

AWS region used to dispatch the request.",
  "type": "String"
},
"UseDualStack": {
  "builtIn": "AWS::UseDualStack",
  "required": true,
  "default": false,
  "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not
support dual-stack, dispatching the request MAY return an error.",
  "type": "Boolean"
},
"UseFIPS": {
  "builtIn": "AWS::UseFIPS",
  "required": true,
  "default": false,
  "documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the
configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",

"type": "Boolean"
},
"Endpoint": {
  "builtIn": "SDK::Endpoint",
  "required": false,
  "documentation": "Override the endpoint used to send this request",
  "type": "String"
}
},
"rules": [
  {
    "conditions": [
      {
        "fn": "isSet",
        "argv": [
          {
            "ref": "Endpoint"
          }
        ]
      }
    ]
  }
],
"type": "tree",
"rules": [
  {

    "conditions": [
      {
        "fn": "booleanEquals",
        "argv": [
          {

```

```

        "ref": "UseFIPS"
    },
    true
]
}
],
"error": "Invalid Configuration: FIPS and custom endpoint are not supported",
"type": "error"
},
{
    "conditions": [],
    "type": "tree",
    "rules": [
        {

"conditions": [
            {
                "fn": "booleanEquals",
                "argv": [
                    {
                        "ref": "UseDualStack"
                    },
                    true
                ]
            }
        ],
        "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
        "type": "error"
    },
    {
        "conditions": [],

"endpoint": {
    "url": {
        "ref": "Endpoint"
    },
    "properties": {},
    "headers": {}
},
    "type": "endpoint"
}
]
}
]
},
{
    "conditions": [],
    "type": "tree",

```

```

"rules": [
  {
    "conditions": [
      {
        "fn": "isSet",
        "argv": [
          {
            "ref": "Region"
          }
        ]
      }
    ],
    "type": "tree",
    "rules": [
      {
        "conditions": [
          {
            "fn": "aws.partition",
            "argv": [
              {
                "ref": "Region"
              }
            ]
          }
        ],
        "assign": "PartitionResult"
      }
    ],
    "type": "tree",
    "rules": [
      {
        "conditions": [
          {
            "fn": "booleanEquals",
            "argv": [
              {
                "ref": "UseFIPS"
              },
              true
            ]
          }
        ],
        "fn": "booleanEquals",
        "argv": [
          {
            "ref": "UseDualStack"
          }
        ]
      }
    ]
  }
]

```

```

        true
      ]
    }
  ],
  "type": "tree",
  "rules": [
    {
      "conditions": [
        {

          "fn": "booleanEquals",
          "argv": [
            true,
            {
              "fn": "getAttr",
              "argv": [
                {
                  "ref": "PartitionResult"
                },
                "supportsFIPS"
              ]
            }
          ]
        }
      ]
    },
    {
      "fn": "booleanEquals",
      "argv": [
        true,
        {
          "fn": "getAttr",
          "argv": [
            {
              "ref": "PartitionResult"
            },
            "supportsDualStack"
          ]
        }
      ]
    }
  ],
  "type": "tree",
  "rules": [
    {
      "conditions": [],
      "type": "tree",
      "rules": [

```



```

        {
            "conditions": [],
            "endpoint": {
                "url": "https://license-manager-linux-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                "properties": {},
                "headers": {}
            },
            "type": "endpoint"
        }
    ]
}
},
{
    "conditions": [],
    "error": "FIPS and DualStack are enabled, but this partition does not support
one or both",
    "type": "error"
}
],
},
{
    "conditions": [
        {
            "fn": "booleanEquals",
            "argv": [
                {
                    "ref": "UseFIPS"
                },
                true
            ]
        }
    ],
    "type": "tree",
    "rules": [
        {
            "conditions": [
                {
                    "fn": "booleanEquals",
                    "argv": [
                        true,

```

```

        "argv": [
            {
                "ref": "PartitionResult"
            },
            "supportsFIPS"
        ]
    }
]
},
"type": "tree",

"rules": [
    {
        "conditions": [],
        "type": "tree",
        "rules": [
            {
                "conditions": [],
                "endpoint": {
                    "url": "https://license-manager-linux-subscriptions-
fips.{Region}.*{PartitionResult#dnsSuffix}",
                    "properties": {},
                    "headers": {}
                },
                "type": "endpoint"
            }
        ]
    },
    {
        "conditions": [],
        "error": "FIPS is enabled but this partition does not support FIPS",
        "type": "error"
    }
]
},

{
    "conditions": [
        {
            "fn": "booleanEquals",
            "argv": [
                {
                    "ref": "UseDualStack"
                },
            ],

```

```

        true
      ]
    }
  ],
  "type": "tree",
  "rules": [
    {
      "conditions": [
        {
          "fn": "booleanEquals",
          "argv": [
            true,
            {
              "fn": "getAttr",
              "argv": [
                {
                  "ref": "PartitionResult"
                },
                "supportsDualStack"
              ]
            }
          ]
        }
      ],
      "type": "tree",
      "rules": [
        {
          "conditions": [],
          "type": "tree",
          "rules": [
            {
              "conditions": [],
              "endpoint": {
                "url": "https://license-manager-linux-
subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                "properties": {},
                "headers": {}
              },
              "type": "endpoint"
            }
          ]
        }
      ]
    }
  ],
},

```

```

{
    "conditions": [],
    "error": "DualStack is enabled but this partition does not support DualStack",
    "type": "error"
}
],
},
{
    "conditions": [],
    "type": "tree",
    "rules": [
        {
            "conditions": [],
            "endpoint": {
                "url":
"https://license-manager-linux-subscriptions.{Region}.{PartitionResult#dnsSuffix}",
                "properties": {},
                "headers": {}
            },
            "type": "endpoint"
        }
    ]
}
],
},
{
    "conditions": [],
    "error": "Invalid Configuration: Missing Region",
    "type": "error"
}
]
}
],
},
"smithy.rules#endpointTests": {
    "testCases": [
        {
            "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager-linux-subscriptions-fips.us-east-1.api.aws"
                }
            },
            "params": {
                "Region": "us-east-1",
                "UseFIPS": true,

```

```

        "UseDualStack": true
    }
},
{
    "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
    "expect": {
"endpoint": {
        "url": "https://license-manager-linux-subscriptions-fips.us-east-1.amazonaws.com"
    }
},
    "params": {
        "Region": "us-east-1",
        "UseFIPS": true,
        "UseDualStack": false
    }
},
{
    "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager-linux-subscriptions.us-east-1.api.aws"
        }
},
    "params": {
        "Region": "us-east-1",
        "UseFIPS": false,
        "UseDualStack": true
    }
},
{
    "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager-linux-subscriptions.us-east-1.amazonaws.com"
        }
},
    "params": {
        "Region": "us-east-1",
        "UseFIPS": false,
        "UseDualStack": false
    }
},
{
    "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
    "expect": {
        "endpoint": {

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    "url": "https://license-manager-linux-subscriptions-fips.cn-north-1.api.amazonwebservices.com.cn"
  }
},
"params": {
  "Region": "cn-north-1",
  "UseFIPS": true,
  "UseDualStack": true
}
},
{
  "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager-linux-subscriptions-fips.cn-north-1.amazonaws.com.cn"
    }
  },
  "params": {
    "Region": "cn-north-1",
    "UseFIPS": true,
    "UseDualStack": false
  }
},
{
  "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager-linux-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
    }
  },
  "params": {
    "Region": "cn-north-1",
    "UseFIPS": false,
    "UseDualStack": true
  }
},
{
  "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint":
  {
      "url": "https://license-manager-linux-subscriptions.cn-north-1.amazonaws.com.cn"
    }
  },
  "params": {
    "Region": "cn-north-1",
    "UseFIPS": false,
    "UseDualStack": false
  }
}

```

```

    },
    {
      "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.api.aws"
        }
      },
      "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": true,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions.us-gov-east-1.api.aws"
        }
      },
      "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": false,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions.us-gov-east-1.amazonaws.com"
        }
      },
    },

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```

    "params": {
      "Region": "us-gov-east-1",
      "UseFIPS": false,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
    "expect": {
      "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
    },
    "params": {
      "Region": "us-iso-east-1",
      "UseFIPS": true,
      "UseDualStack": true
    }
  },
  {
    "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-linux-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
      }
    },
    "params": {
      "Region": "us-iso-east-1",
      "UseFIPS": true,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
    "expect": {
      "error": "DualStack is enabled but this partition does not support DualStack"
    },
    "params": {
      "Region": "us-iso-east-1",
      "UseFIPS": false,
      "UseDualStack": true
    }
  },
  {
    "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-linux-subscriptions.us-iso-east-1.c2s.ic.gov"
      }
    }
  }

```



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    },
    "params": {
      "Region": "us-iso-east-1",
      "UseFIPS": false,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
    "expect": {
      "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
    },
    "params": {

      "Region": "us-isob-east-1",
      "UseFIPS": true,
      "UseDualStack": true
    }
  },
  {
    "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-linux-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
      }
    },
    "params": {
      "Region": "us-isob-east-1",
      "UseFIPS": true,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For region us-isob-east-1 with FIPS disabled
and DualStack enabled",
    "expect": {
      "error": "DualStack is enabled but this partition does not support DualStack"
    },
    "params": {
      "Region": "us-isob-east-1",
      "UseFIPS": false,
      "UseDualStack": true
    }
  },
  {
    "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
    "expect": {
      "endpoint": {

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        "url": "https://license-manager-linux-subscriptions.us-isob-east-1.sc2s.sgov.gov"
    }
},
"params": {
    "Region": "us-isob-east-1",
    "UseFIPS": false,
    "UseDualStack": false
}
},
{
    "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
    "expect": {
        "endpoint": {
            "url": "https://example.com"
        }
    },
    "params": {
        "Region": "us-east-1",
        "UseFIPS": false,
        "UseDualStack": false,
        "Endpoint": "https://example.com"
    }
},
{
    "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
    "expect": {
        "endpoint": {
            "url": "https://example.com"
        }
    },
    "params": {
        "UseFIPS": false,
        "UseDualStack": false,
        "Endpoint": "https://example.com"
    }
},
{
    "documentation": "For custom endpoint with fips enabled and dualstack disabled",
    "expect": {
        "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
    },
    "params": {
        "Region": "us-east-1",
        "UseFIPS": true,
        "UseDualStack": false,

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      "Endpoint": "https://example.com"
    }
  },
  {
    "documentation": "For custom endpoint with fips disabled and dualstack enabled",
    "expect": {
      "error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
    },
    "params": {
      "Region": "us-east-1",
      "UseFIPS": false,
      "UseDualStack": true,
      "Endpoint": "https://example.com"
    }
  },
  {
    "documentation": "Missing region",
    "expect": {
      "error": "Invalid Configuration: Missing Region"
    }
  }
}
],
"version": "1.0"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery": {
  "type": "string",
  "traits": {
    "smithy.api#enum": [
      {
        "name": "Enabled",
        "value": "Enabled",
        "documentation": "Enabled LinuxSubscriptionsDiscovery"
      },
      {
        "name": "Disabled",
        "value": "Disabled",
        "documentation": "Disabled LinuxSubscriptionsDiscovery"
      }
    ]
  }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings": {
  "type": "structure",
  "members": {

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"SourceRegions": {
  "target": "com.amazonaws.licenseanagerlinuxsubscriptions#StringList",
  "traits": {
    "smithy.api#documentation": "<p>The Regions in which to discover data for Linux
subscriptions.</p>",
    "smithy.api#required": {}
  }
},
"OrganizationIntegration": {
  "target": "com.amazonaws.licenseanagerlinuxsubscriptions#OrganizationIntegration",
  "traits": {
    "smithy.api#documentation": "<p>Details if you have enabled resource discovery across your
accounts in Organizations.</p>",
    "smithy.api#required": {}
  }
}
},
"traits": {
  "smithy.api#documentation": "<p>Lists the settings defined for discovering Linux subscriptions.</p>"
}
},
"com.amazonaws.licenseanagerlinuxsubscriptions#ListLinuxSubscriptionInstances": {
  "type":
"operation",
  "input": {
    "target": "com.amazonaws.licenseanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest"
  },
  "output": {
    "target": "com.amazonaws.licenseanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licenseanagerlinuxsubscriptions#InternalServerErrorException"
    },
    {
      "target": "com.amazonaws.licenseanagerlinuxsubscriptions#ThrottlingException"
    },
    {
      "target": "com.amazonaws.licenseanagerlinuxsubscriptions#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Lists the running Amazon EC2 instances that were discovered with
commercial Linux\n  subscriptions.</p>",
    "smithy.api#http": {
"code": 200,
  "method": "POST",

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    "uri": "/subscription/ListLinuxSubscriptionInstances"
  },
  "smithy.api#idempotent": {},
  "smithy.api#paginated": {
    "inputToken": "NextToken",
    "outputToken": "NextToken",
    "pageSize": "MaxResults",
    "items": "Instances"
  }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest": {
  "type": "structure",
  "members": {
    "Filters": {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
      "traits": {
        "smithy.api#documentation": "<p>An array of structures that you can use to filter the results to those that match one or more sets of key-value pairs that you specify. For example, you can filter by the name of the <code>AmiID</code> with an optional operator to see subscriptions that match, partially match, or don't match a certain Amazon Machine Image (AMI) ID.</p>\n\n<p>The valid names for this filter are:</p>\n\n<ul>\n<li>\n<p>\n<code>AmiID</code>\n</p>\n</li>\n<li>\n<p>\n<code>InstanceID</code>\n</p>\n</li>\n<li>\n<p>\n<code>AccountID</code>\n</p>\n</li>\n<li>\n<p>\n<code>Status</code>\n</p>\n</li>\n<li>\n<p>\n<code>Region</code>\n</p>\n</li>\n<li>\n<p>\n<code>UsageOperation</code>\n</p>\n</li>\n<li>\n<p>\n<code>ProductCode</code>\n</p>\n</li>\n<li>\n<p>\n<code>InstanceType</code>\n</p>\n</li>\n</ul>\n\n<p>The valid Operators for this filter are:</p>\n\n<ul>\n<li>\n<p>\n<code>contains</code>\n</p>\n</li>\n<li>\n<p>\n<code>equals</code>\n</p>\n</li>\n<li>\n<p>\n<code>Notequal</code>\n</p>\n</li>\n</ul>"
      }
    },
    "MaxResults": {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
      "traits": {
        "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
      }
    }
  }
},
"NextToken": {
  "target": "smithy.api#String",
  "traits": {
    "smithy.api#documentation": "<p>Token for the next set of results.</p>",
    "smithy.api#length": {
      "min": 1,
      "max": 16384
    }
  }
}

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    }
  }
},
"traits": {
  "smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if
parameters in request increases."
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse": {
  "type": "structure",
  "members": {
    "Instances": {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList",
      "traits": {
        "smithy.api#documentation":
"<p>An array that contains instance objects.</p>"
      }
    },
    "NextToken": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>Token for the next set of results.</p>"
      }
    }
  }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerError"
    },
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
    },
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Lists the Linux subscriptions that have been discovered. If you have

```

linked your organization, the returned results will include data aggregated across your accounts in Organizations.

```
"smithy.api#http": {
  "code": 200,
  "method": "POST",
  "uri": "/subscription/ListLinuxSubscriptions"
},
"smithy.api#idempotent": {},
"smithy.api#paginated": {
  "inputToken": "NextToken",
  "outputToken": "NextToken",
  "pageSize": "MaxResults",
  "items": "Subscriptions"
}

}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest": {
  "type": "structure",
  "members": {
    "Filters": {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
      "traits": {
        "smithy.api#documentation": "<p>An array of structures that you can use to filter the results to those that match one or more sets of key-value pairs that you specify. For example, you can filter by the name of <code>Subscription</code> with an optional operator to see subscriptions that match, partially match, or don't match a certain subscription's name.</p><p>The valid names for this filter are:</p><ul><li><code>Subscription</code></li></ul><p>The valid Operators for this filter are:</p><ul><li><code>contains</code></li><li><code>>equals</code></li><li><code>Notequal</code></li></ul>"
      }
    },
    "MaxResults": {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
      "traits": {
        "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
      }
    },
    "NextToken": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>Token for the next set of results.</p>",
        "smithy.api#length": {
          "min": 1,
          "max": 16384
        }
      }
    }
  }
}
```

```

    }
  }
},
"traits": {
  "smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if
parameters in request increases."
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse": {
  "type": "structure",
  "members": {
    "Subscriptions": {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList",
      "traits": {
        "smithy.api#documentation": "<p>An array that contains subscription objects.</p>"
      }
    },
    "NextToken": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>Token for
the next set of results.</p>"
      }
    }
  }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Operator": {
  "type": "string",
  "traits": {
    "smithy.api#enum": [
      {
        "name": "EQUAL",
        "value": "Equal",
        "documentation": "Equal operator"
      },
      {
        "name": "NOT_EQUAL",
        "value": "NotEqual",
        "documentation": "Not equal operator"
      },
      {
        "name": "CONTAINS",
        "value": "Contains",
        "documentation": "Contains operator"
      }
    ]
  },
  "smithy.api#length": {

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        "min": 1,
        "max": 20
    }
}
},

```

```

"com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration": {

```

```

    "type": "string",
    "traits": {
        "smithy.api#enum": [
            {
                "name": "Enabled",
                "value": "Enabled",
                "documentation": "Enabled OrganizationIntegration"
            },
            {
                "name": "Disabled",
                "value": "Disabled",
                "documentation": "Disabled OrganizationIntegration"
            }
        ]
    }
},

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```

"com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList": {

```

```

    "type": "list",
    "member": {
        "target": "smithy.api#String"
    }
},

```

```

"com.amazonaws.licensemanagerlinuxsubscriptions#Status": {

```

```

    "type": "string",
    "traits": {
        "smithy.api#enum": [
            {
                "name": "InProgress",
                "value": "InProgress",
                "documentation": "InProgress status"
            },
            {
                "name": "Completed",
                "value": "Completed",
                "documentation": "Completed status"
            },
            {
                "name": "Successful",
                "value": "Successful",
                "documentation": "Successful status"
            }
        ]
    }
},

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```

    },
    {
      "name": "Failed",
      "value": "Failed",
      "documentation": "Failed status"
    }
  ]
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#StringList": {
  "type": "list",
  "member": {
    "target": "smithy.api#String",
    "traits":
{
    "smithy.api#length": {
      "min": 1,
      "max": 100
    }
  }
},
  "traits": {
    "smithy.api#length": {
      "min": 1,
      "max": 100
    },
    "smithy.api#uniqueItems": {}
  }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#StringMap": {
  "type": "map",
  "key": {
    "target": "smithy.api#String"
  },
  "value": {
    "target": "smithy.api#String"
  }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Subscription": {
  "type": "structure",
  "members": {
    "Name": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>The name of the subscription.</p>"
      }
    }
  }
},

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```

    "Type": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>The type of subscription. The type can be subscription-included with Amazon EC2, Bring Your Own\n    Subscription model (BYOS), or from the Amazon Web Services Marketplace. Certain subscriptions may use licensing from the\n    Amazon Web Services Marketplace as well as OS licensing from Amazon EC2 or BYOS.</p>"
      }
    },
    "InstanceCount": {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong",
      "traits": {
        "smithy.api#documentation": "<p>The total amount of running instances using this subscription.</p>"
      }
    },
    "traits": {
      "smithy.api#documentation": "<p>An object which details a discovered Linux subscription.</p>"
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>The request was denied due to request throttling.</p>",
        "smithy.api#error": "client"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse"
      },
    },
  },
}

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"errors": [
  {
    "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerErrorException"
  },
  {
    "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
  },
  {
    "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
  }
],
"traits": {
  "smithy.api#documentation": "<p>Updates the service settings for Linux subscriptions.</p>",
  "smithy.api#http": {
    "code": 200,
    "method": "POST",
    "uri": "/subscription/UpdateServiceSettings"
  },
  "smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest":
{
  "type": "structure",
  "members": {
    "LinuxSubscriptionsDiscovery": {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
      "traits": {
        "smithy.api#documentation": "<p>Describes if the discovery of Linux subscriptions is enabled.</p>",
        "smithy.api#required": {}
      }
    },
    "LinuxSubscriptionsDiscoverySettings": {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
      "traits": {
        "smithy.api#documentation": "<p>The settings defined for Linux subscriptions discovery. The settings include if Organizations\n  integration has been enabled, and which Regions data will be aggregated from.</p>",
        "smithy.api#required": {}
      }
    },
    "AllowUpdate": {
      "target": "smithy.api#Boolean",
      "traits": {
        "smithy.api#documentation": "<p>Describes if updates are allowed to the service settings for Linux subscriptions. If you\n  allow updates, you can aggregate Linux subscription data in more than one home Region.</p>"
      }
    }
  }
}

```

```

    }
  }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse": {
  "type": "structure",
  "members": {
    "LinuxSubscriptionsDiscovery": {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
      "traits": {
        "smithy.api#documentation": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
      }
    },
    "LinuxSubscriptionsDiscoverySettings": {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
      "traits": {
        "smithy.api#documentation": "<p>The settings defined for Linux subscriptions discovery. The settings include if Organizations\n    integration has been enabled, and which Regions data will be aggregated from.</p>"
      }
    },
    "Status": {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
      "traits": {
        "smithy.api#documentation": "<p>Indicates the status of Linux subscriptions settings being applied.</p>"
      }
    },
    "StatusMessage": {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
      "traits": {
        "smithy.api#documentation":
"<p>A message which details the Linux subscriptions service settings current status.</p>"
      }
    },
    "HomeRegions": {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
      "traits": {
        "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated data for Linux\n    subscriptions.</p>"
      }
    }
  }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException": {
  "type": "structure",
  "members": {

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        "message": {
            "target": "smithy.api#String"
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>The provided input is not valid. Try your request again.</p>",
        "smithy.api#error": "client"
    }
}
}
}
// Code generated by smithy-go-codegen DO NOT EDIT.

```

```
package licensemanager
```

```

import (
    "context"
    "fmt"
    awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
    "github.com/aws/smithy-go/middleware"
    smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks in the specified license. Check in a license when it is no longer in use.
func (c *Client) CheckInLicense(ctx context.Context, params *CheckInLicenseInput, optFns ...func(*Options))
(*CheckInLicenseOutput, error) {
    if params == nil {
        params = &CheckInLicenseInput{}
    }

    result, metadata, err := c.invokeOperation(ctx, "CheckInLicense", params, optFns,
c.addOperationCheckInLicenseMiddlewares)
    if err != nil {
        return nil, err
    }

    out := result.(*CheckInLicenseOutput)
    out.ResultMetadata = metadata
    return out, nil
}

type CheckInLicenseInput struct {

    // License consumption token.
    //
    // This member is required.
    LicenseConsumptionToken *string

```

```

// License beneficiary.
Beneficiary *string

noSmithyDocumentSerde
}

type
CheckInLicenseOutput struct {
// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationCheckInLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
if err := stack.Serialize.Add(&setOperationInputMiddleware{ }, middleware.After); err != nil {
return err
}
err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckInLicense{ }, middleware.After)
if err != nil {
return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckInLicense{ }, middleware.After)
if err != nil {
return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "CheckInLicense"); err != nil {
return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addLegacyEndpointContextSetter(stack, options); err != nil {
return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
return err
}
if err = addClientRequestID(stack); err != nil {
return err
}
if
err = addComputeContentLength(stack); err != nil {
return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
return err
}
if err = addComputePayloadSHA256(stack); err != nil {
return err
}

```

```

}
if err = addRetry(stack, options); err != nil {
    return err
}
if err = addRawResponseToMetadata(stack); err != nil {
    return err
}
if err = addRecordResponseTiming(stack); err != nil {
    return err
}
if err = addClientUserAgent(stack, options); err != nil {
    return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
    return err
}
if err = addOpCheckInLicenseValidationMiddleware(stack); err != nil {
    return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckInLicense(options.Region),
middleware.Before); err != nil {
    return
err
}
if err = addRecursionDetection(stack); err != nil {
    return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
    return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
    return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
    return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
    return err
}
return nil
}

```



```

func newServiceMetadataMiddleware_opCheckInLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
return &awsmiddleware.RegisterServiceMetadata{
Region:    region,
ServiceID: ServiceID,
OperationName: "CheckInLicense",
}
}
CheckoutBorrowLicense
Initialize stack step
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
Serialize stack step
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
RecursionDetection
Finalize stack step
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
Retry
RetryMetricsHeader
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
RecordResponseTiming
RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
"context"

```

```

"fmt"
awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
"github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
"github.com/aws/smithy-go/middleware"
smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists received licenses.
func (c *Client) ListReceivedLicenses(ctx context.Context, params *ListReceivedLicensesInput, optFns
...func(*Options)) (*ListReceivedLicensesOutput, error) {
if params == nil {
params = &ListReceivedLicensesInput{}
}

result, metadata, err := c.invokeOperation(ctx, "ListReceivedLicenses", params, optFns,
c.addOperationListReceivedLicensesMiddlewares)
if err != nil {
return nil, err
}

out := result.(*ListReceivedLicensesOutput)
out.ResultMetadata = metadata
return out, nil
}

type ListReceivedLicensesInput struct {

// Filters to scope the results. The following filters are supported:
// - ProductSKU
// - Status
// - Fingerprint
//
// - IssuerName
// - Beneficiary
Filters []types.Filter

// Amazon Resource Names (ARNs) of the licenses.
LicenseArns []string

// Maximum number of results to return in a single call.
MaxResults *int32

// Token for the next set of results.
NextToken *string

noSmithyDocumentSerde
}

```

```

type ListReceivedLicensesOutput struct {

    // Received license details.
    Licenses []types.GrantedLicense

    // Token for the next set of results.
    NextToken *string

    // Metadata pertaining to the operation's result.
    ResultMetadata middleware.Metadata

    noSmithyDocumentSerde
}

func (c *Client) addOperationListReceivedLicensesMiddlewares(stack *middleware.Stack, options Options) (err
error) {
    if err := stack.Serialize.Add(&setOperationInputMiddleware{ }, middleware.After); err != nil {
        return err
    }
    err = stack.Serialize.Add(&awsAwsjson11_serializeOpListReceivedLicenses{ }, middleware.After)
    if err != nil {
        return err
    }
    err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListReceivedLicenses{ },
middleware.After)
    if err != nil {
        return err
    }
    if err := addProtocolFinalizerMiddlewares(stack, options, "ListReceivedLicenses"); err != nil {
        return fmt.Errorf("add protocol finalizers: %v", err)
    }

    if err = addLegacyEndpointContextSetter(stack, options); err != nil {
        return err
    }
    if err = addSetLoggerMiddleware(stack, options); err != nil {
        return err
    }
    if err = addClientRequestID(stack); err != nil {
        return err
    }
    if err = addComputeContentLength(stack); err != nil {
        return err
    }
    if err = addResolveEndpointMiddleware(stack, options); err != nil {
        return err
    }
    if err = addComputePayloadSHA256(stack); err != nil {

```

```

return err
}
if err = addRetry(stack, options); err != nil {
return err
}
if err = addRawResponseToMetadata(stack); err != nil {
return err
}
if err = addRecordResponseTiming(stack); err != nil {
return err
}
if err = addClientUserAgent(stack, options); err != nil {
return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
err != nil {
return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListReceivedLicenses(options.Region),
middleware.Before); err != nil {
return err
}
if err = addRecursionDetection(stack); err != nil {
return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
return err
}
return nil
}

func newServiceMetadataMiddleware_opListReceivedLicenses(region string)
*awsmiddleware.RegisterServiceMetadata {

```

```

return &awsmiddleware.RegisterServiceMetadata{
    Region:    region,
    ServiceID:
    ServiceID,
    OperationName: "ListReceivedLicenses",
}
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
    "context"
    "fmt"
    awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
    "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
    "github.com/aws/smithy-go/middleware"
    smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license. If the account that created the license is
// the same that is performing the check out, you must specify the account as the
// beneficiary.
func (c *Client) CheckoutLicense(ctx context.Context, params *CheckoutLicenseInput, optFns ...func(*Options))
(*CheckoutLicenseOutput, error) {
    if params == nil {
        params = &CheckoutLicenseInput{}
    }

    result, metadata, err := c.invokeOperation(ctx, "CheckoutLicense", params, optFns,
c.addOperationCheckoutLicenseMiddlewares)
    if err != nil {
        return nil, err
    }

    out := result.(*CheckoutLicenseOutput)
    out.ResultMetadata = metadata
    return out, nil
}

type CheckoutLicenseInput struct {

    // Checkout
    type.
    //
    // This member is required.
    CheckoutType types.CheckoutType

```

```

// Unique, case-sensitive identifier that you provide to ensure the idempotency of
// the request.
//
// This member is required.
ClientToken *string

// License entitlements.
//
// This member is required.
Entitlements []types.EntitlementData

// Key fingerprint identifying the license.
//
// This member is required.
KeyFingerprint *string

// Product SKU.
//
// This member is required.
ProductSKU *string

// License beneficiary.
Beneficiary *string

// Node ID.
NodeId *string

noSmithyDocumentSerde
}

type CheckoutLicenseOutput struct {

// Checkout type.
CheckoutType types.CheckoutType

// Allowed license entitlements.
EntitlementsAllowed []types.EntitlementData

// Date and time at which the license checkout expires.
Expiration *string

// Date and time at which the license checkout is issued.
IssuedAt *string

// Amazon Resource Name (ARN) of the checkout license.
LicenseArn
*string

```

```

// License consumption token.
LicenseConsumptionToken *string

// Node ID.
NodeId *string

// Signed token.
SignedToken *string

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
if err := stack.Serialize.Add(&setOperationInputMiddleware{ }, middleware.After); err != nil {
return err
}
err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutLicense{ }, middleware.After)
if err != nil {
return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutLicense{ }, middleware.After)
if err != nil {
return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutLicense"); err != nil {
return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addLegacyEndpointContextSetter(stack, options); err != nil {
return err
}
if err = addSetLoggerMiddleware(stack,
options); err != nil {
return err
}
if err = addClientRequestID(stack); err != nil {
return err
}
if err = addComputeContentLength(stack); err != nil {
return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
return err
}
if err = addComputePayloadSHA256(stack); err != nil {

```

```

return err
}
if err = addRetry(stack, options); err != nil {
return err
}
if err = addRawResponseToMetadata(stack); err != nil {
return err
}
if err = addRecordResponseTiming(stack); err != nil {
return err
}
if err = addClientUserAgent(stack, options); err != nil {
return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
return err
}
if err = addOpCheckoutLicenseValidationMiddleware(stack); err != nil {
return err
}
if err =
stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutLicense(options.Region), middleware.Before);
err != nil {
return err
}
if err = addRecursionDetection(stack); err != nil {
return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
return err
}
return nil
}

```



```

func newServiceMetadataMiddleware_opCheckoutLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
return &awsmiddleware.RegisterServiceMetadata{
Region:    region,
ServiceID: ServiceID,
OperationName: "CheckoutLicense",
}
}
DisassociateLicense
Initialize stack step
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
Serialize stack step
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
RecursionDetection
Finalize stack step
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
Retry
RetryMetricsHeader
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
RecordResponseTiming
RequestResponseLogger
CheckoutLicense
Initialize stack step
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger

```

OperationInputValidation  
Serialize stack step  
setOperationInput  
ResolveEndpoint  
OperationSerializer  
Build stack step  
ClientRequestID  
ComputeContentLength  
UserAgent  
RecursionDetection  
Finalize stack step  
ResolveAuthScheme  
GetIdentity  
ResolveEndpointV2  
disableHTTPS  
ComputePayloadHash  
Retry  
RetryMetricsHeader  
setLegacyContextSigningOptions  
Signing  
Deserialize stack step  
AddRawResponseToMetadata  
ErrorCloseResponseBody  
CloseResponseBody  
ResponseErrorWrapper  
RequestIDRetriever  
OperationDeserializer  
RecordResponseTiming  
RequestResponseLogger  
AssociateLicense  
Initialize stack step  
RegisterServiceMetadata  
legacyEndpointContextSetter  
SetLogger  
OperationInputValidation  
Serialize stack step  
setOperationInput  
ResolveEndpoint  
OperationSerializer  
Build stack step  
ClientRequestID  
ComputeContentLength  
UserAgent  
RecursionDetection  
Finalize stack step  
ResolveAuthScheme  
GetIdentity  
ResolveEndpointV2

disableHTTPS  
ComputePayloadHash  
Retry  
RetryMetricsHeader  
setLegacyContextSigningOptions  
Signing  
Deserialize stack step  
AddRawResponseToMetadata  
ErrorCloseResponseBody  
CloseResponseBody  
ResponseErrorWrapper  
RequestIDRetriever  
OperationDeserializer  
RecordResponseTiming  
RequestResponseLogger  
CheckInLicense  
Initialize stack step  
RegisterServiceMetadata  
legacyEndpointContextSetter  
SetLogger  
OperationInputValidation  
Serialize stack step  
setOperationInput  
ResolveEndpoint  
OperationSerializer  
Build stack step  
ClientRequestID  
ComputeContentLength  
UserAgent  
RecursionDetection  
Finalize stack step  
ResolveAuthScheme  
GetIdentity  
ResolveEndpointV2  
disableHTTPS  
ComputePayloadHash  
Retry  
RetryMetricsHeader  
setLegacyContextSigningOptions  
Signing  
Deserialize stack step  
AddRawResponseToMetadata  
ErrorCloseResponseBody  
CloseResponseBody  
ResponseErrorWrapper  
RequestIDRetriever  
OperationDeserializer  
RecordResponseTiming

RequestResponseLogger  
AWS SDK for Go  
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CreateLicense  
Initialize stack step  
RegisterServiceMetadata  
legacyEndpointContextSetter  
SetLogger  
OperationInputValidation  
Serialize stack step  
setOperationInput  
ResolveEndpoint  
OperationSerializer  
Build stack step  
ClientRequestID  
ComputeContentLength  
UserAgent  
RecursionDetection  
Finalize stack step  
ResolveAuthScheme  
GetIdentity  
ResolveEndpointV2  
disableHTTPS  
ComputePayloadHash  
Retry  
RetryMetricsHeader  
setLegacyContextSigningOptions  
Signing  
Deserialize stack step  
AddRawResponseToMetadata  
ErrorCloseResponseBody  
CloseResponseBody  
ResponseErrorWrapper  
RequestIDRetriever  
OperationDeserializer  
RecordResponseTiming  
RequestResponseLogger  
GetLicense  
Initialize stack step  
RegisterServiceMetadata  
legacyEndpointContextSetter  
SetLogger  
OperationInputValidation  
Serialize stack step  
setOperationInput  
ResolveEndpoint  
OperationSerializer

```

Build stack step
  ClientRequestID
  ComputeContentLength
  UserAgent
  RecursionDetection
Finalize stack step
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  Retry
  RetryMetricsHeader
  setLegacyContextSigningOptions
  Signing
Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  RecordResponseTiming
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
    "context"
    "fmt"
    awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
    "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
    "github.com/aws/smithy-go/middleware"
    smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Creates a license.
func (c *Client) CreateLicense(ctx context.Context, params *CreateLicenseInput, optFns ...func(*Options))
(*CreateLicenseOutput, error) {
    if params == nil {
        params = &CreateLicenseInput{}
    }

    result, metadata, err := c.invokeOperation(ctx, "CreateLicense", params, optFns,
c.addOperationCreateLicenseMiddlewares)
    if err != nil {
        return nil, err

```

```

}

out := result.(*CreateLicenseOutput)
out.ResultMetadata = metadata
return out, nil
}

type CreateLicenseInput struct {

    // License beneficiary.
    //
    // This member is required.
    Beneficiary *string

    // Unique, case-sensitive identifier that you provide to ensure the idempotency of
    // the request.
    //
    //
    // This member is required.
    ClientToken *string

    // Configuration for consumption of the license. Choose a provisional
    // configuration for workloads running with continuous connectivity. Choose a
    // borrow configuration for workloads with offline usage.
    //
    // This member is required.
    ConsumptionConfiguration *types.ConsumptionConfiguration

    // License entitlements.
    //
    // This member is required.
    Entitlements []types.Entitlement

    // Home Region for the license.
    //
    // This member is required.
    HomeRegion *string

    // License issuer.
    //
    // This member is required.
    Issuer *types.Issuer

    // License name.
    //
    // This member is required.
    LicenseName *string

```

```

// Product name.
//
// This member is required.
ProductName *string

// Product SKU.
//
// This member is required.
ProductSKU *string

// Date and time range during which the license is valid, in ISO8601-UTC format.
//
// This member is required.
Validity *types.DatetimeRange

// Information about
the license.
LicenseMetadata []types.Metadata

noSmithyDocumentSerde
}

type CreateLicenseOutput struct {

// Amazon Resource Name (ARN) of the license.
LicenseArn *string

// License status.
Status types.LicenseStatus

// License version.
Version *string

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationCreateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
if err := stack.Serialize.Add(&setOperationInputMiddleware{ }, middleware.After); err != nil {
return err
}
err = stack.Serialize.Add(&awsAwsjson11_serializeOpCreateLicense{ }, middleware.After)
if err != nil {
return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCreateLicense{ }, middleware.After)

```

```

if err != nil {
    return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "CreateLicense"); err != nil {
    return fmt.Errorf("add protocol finalizers: %v", err)
}

if
err = addLegacyEndpointContextSetter(stack, options); err != nil {
    return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
    return err
}
if err = addClientRequestID(stack); err != nil {
    return err
}
if err = addComputeContentLength(stack); err != nil {
    return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
    return err
}
if err = addComputePayloadSHA256(stack); err != nil {
    return err
}
if err = addRetry(stack, options); err != nil {
    return err
}
if err = addRawResponseToMetadata(stack); err != nil {
    return err
}
if err = addRecordResponseTiming(stack); err != nil {
    return err
}
if err = addClientUserAgent(stack, options); err != nil {
    return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
    return
err
}

```



```

if err = addOpCreateLicenseValidationMiddleware(stack); err != nil {
    return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCreateLicense(options.Region),
middleware.Before); err != nil {
    return err
}
if err = addRecursionDetection(stack); err != nil {
    return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
    return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
    return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
    return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
    return err
}
return nil
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
return &awsmiddleware.RegisterServiceMetadata{
    Region:    region,
    ServiceID: ServiceID,
    OperationName: "CreateLicense",
}
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
    "context"
    "fmt"
    awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
    "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
    "github.com/aws/smithy-go/middleware"
    smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Gets detailed information about the specified license.
func (c *Client) GetLicense(ctx context.Context, params *GetLicenseInput, optFns ...func(*Options))
(*GetLicenseOutput, error) {

```

```

if params == nil {
    params = &GetLicenseInput{}
}

result, metadata, err := c.invokeOperation(ctx, "GetLicense", params, optFns,
c.addOperationGetLicenseMiddlewares)
if err != nil {
    return nil, err
}

out := result.(*GetLicenseOutput)
out.ResultMetadata = metadata
return out, nil
}

type GetLicenseInput struct {

    // Amazon Resource Name (ARN) of the license.
    //
    // This member is required.
    LicenseArn *string

    // License version.
    Version *string

    noSmithyDocumentSerde
}

type
GetLicenseOutput struct {

    // License details.
    License *types.License

    // Metadata pertaining to the operation's result.
    ResultMetadata middleware.Metadata

    noSmithyDocumentSerde
}

func (c *Client) addOperationGetLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
    if err := stack.Serialize.Add(&setOperationInputMiddleware{ }, middleware.After); err != nil {
        return err
    }
    err = stack.Serialize.Add(&awsAwsjson11_serializeOpGetLicense{ }, middleware.After)
    if err != nil {
        return err
    }
}

```

```

err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpGetLicense{ }, middleware.After)
if err != nil {
    return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "GetLicense"); err != nil {
    return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addLegacyEndpointContextSetter(stack, options); err != nil {
    return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
    return err
}
if err = addClientRequestID(stack); err
!= nil {
    return err
}
if err = addComputeContentLength(stack); err != nil {
    return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
    return err
}
if err = addComputePayloadSHA256(stack); err != nil {
    return err
}
if err = addRetry(stack, options); err != nil {
    return err
}
if err = addRawResponseToMetadata(stack); err != nil {
    return err
}
if err = addRecordResponseTiming(stack); err != nil {
    return err
}
if err = addClientUserAgent(stack, options); err != nil {
    return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
    return err
}
}

```

```

if err = addOpGetLicenseValidationMiddleware(stack); err != nil {
    return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opGetLicense(options.Region), middleware.Before);
err != nil {
    return err
}
if err = addRecursionDetection(stack); err != nil {
    return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
    return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
    return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
    return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
    return err
}
return nil
}

```

```

func newServiceMetadataMiddleware_opGetLicense(region string) *awsmiddleware.RegisterServiceMetadata {
return &awsmiddleware.RegisterServiceMetadata{
    Region:    region,
    ServiceID: ServiceID,
    OperationName: "GetLicense",
}
}

```

```

DeleteLicense
Initialize stack step
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
Serialize stack step
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
RecursionDetection
Finalize stack step

```

```

ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
Retry
RetryMetricsHeader
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
RecordResponseTiming
RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
    "context"
    "fmt"
    awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
    "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
    "github.com/aws/smithy-go/middleware"
    smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists the licenses for your account.
func (c *Client) ListLicenses(ctx context.Context, params *ListLicensesInput, optFns ...func(*Options))
(*ListLicensesOutput, error) {
    if params == nil {
        params = &ListLicensesInput{}
    }

    result, metadata, err := c.invokeOperation(ctx, "ListLicenses", params, optFns,
c.addOperationListLicensesMiddlewares)
    if err != nil {
        return nil, err
    }

    out := result.(*ListLicensesOutput)
    out.ResultMetadata = metadata
    return out, nil
}

```

```

type ListLicensesInput struct {

    // Filters to scope the results. The following filters are supported:
    // - Beneficiary
    // - ProductSKU
    // - Fingerprint
    // - Status
    Filters []types.Filter

    //
    // Amazon Resource Names (ARNs) of the licenses.
    LicenseArns []string

    // Maximum number of results to return in a single call.
    MaxResults *int32

    // Token for the next set of results.
    NextToken *string

    noSmithyDocumentSerde
}

type ListLicensesOutput struct {

    // License details.
    Licenses []types.License

    // Token for the next set of results.
    NextToken *string

    // Metadata pertaining to the operation's result.
    ResultMetadata middleware.Metadata

    noSmithyDocumentSerde
}

func (c *Client) addOperationListLicensesMiddlewares(stack *middleware.Stack, options Options) (err error) {
    if err := stack.Serialize.Add(&setOperationInputMiddleware{ }, middleware.After); err != nil {
        return err
    }
    err = stack.Serialize.Add(&awsAwsjson11_serializeOpListLicenses{ }, middleware.After)
    if err != nil {
        return err
    }
    err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListLicenses{ }, middleware.After)
    if err != nil {
        return err
    }
}

```

```

}
if err := addProtocolFinalizerMiddlewares(stack,
options, "ListLicenses"); err != nil {
return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addLegacyEndpointContextSetter(stack, options); err != nil {
return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
return err
}
if err = addClientRequestID(stack); err != nil {
return err
}
if err = addComputeContentLength(stack); err != nil {
return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
return err
}
if err = addComputePayloadSHA256(stack); err != nil {
return err
}
if err = addRetry(stack, options); err != nil {
return err
}
if err = addRawResponseToMetadata(stack); err != nil {
return err
}
if err = addRecordResponseTiming(stack); err != nil {
return err
}
if err = addClientUserAgent(stack, options); err != nil {
return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack);
err != nil {
return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListLicenses(options.Region), middleware.Before);
err != nil {

```

```

return err
}
if err = addRecursionDetection(stack); err != nil {
return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
return err
}
return nil
}

func newServiceMetadataMiddleware_opListLicenses(region string) *awsmiddleware.RegisterServiceMetadata {
return &awsmiddleware.RegisterServiceMetadata{
Region:    region,
ServiceID: ServiceID,
OperationName: "ListLicenses",
}
}

```

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ListReceivedLicenses

Initialize stack step

RegisterServiceMetadata

legacyEndpointContextSetter

SetLogger

Serialize stack step

setOperationInput

ResolveEndpoint

OperationSerializer

Build stack step

ClientRequestID

ComputeContentLength

UserAgent

RecursionDetection

Finalize stack step

ResolveAuthScheme

GetIdentity

ResolveEndpointV2

disableHTTPS

ComputePayloadHash

Retry

RetryMetricsHeader

setLegacyContextSigningOptions

Signing

Deserialize stack step

AddRawResponseToMetadata

ErrorCloseResponseBody

CloseResponseBody

ResponseErrorWrapper

RequestIDRetriever

OperationDeserializer

RecordResponseTiming

RequestResponseLogger

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// Code generated by smithy-go-codegen DO NOT EDIT.

```
package grafana
```

```
import (
```

```
    "context"
```

```
    "fmt"
```

```
    awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
```

```
    "github.com/aws/aws-sdk-go-v2/service/grafana/types"
```

```
    "github.com/aws/smithy-go/middleware"
```

```
    smithyhttp "github.com/aws/smithy-go/transport/http"
```

```
)
```

```
// Removes the Grafana Enterprise license from a workspace.
```

```
func (c *Client) DisassociateLicense(ctx context.Context, params *DisassociateLicenseInput, optFns
```

```
...func(*Options)) (*DisassociateLicenseOutput, error) {
```

```
    if params == nil {
```

```
        params = &DisassociateLicenseInput{}
```

```
    }
```

```
    result, metadata, err := c.invokeOperation(ctx, "DisassociateLicense", params, optFns,
```

```
    c.addOperationDisassociateLicenseMiddlewares)
```

```
    if err != nil {
```

```
        return nil, err
```

```
    }
```

```
    out := result.(*DisassociateLicenseOutput)
```

```
    out.ResultMetadata = metadata
```

```
    return out, nil
```

```
}
```

```
type DisassociateLicenseInput struct {
```

```
    // The type of license to remove from the workspace.
```

```
    //
```

```
    // This member is required.
```

```
    LicenseType types.LicenseType
```

```

//
The ID of the workspace to remove the Grafana Enterprise license from.
//
// This member is required.
WorkspaceId *string

noSmithyDocumentSerde
}

type DisassociateLicenseOutput struct {

// A structure containing information about the workspace.
//
// This member is required.
Workspace *types.WorkspaceDescription

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationDisassociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
if err := stack.Serialize.Add(&setOperationInputMiddleware{ }, middleware.After); err != nil {
return err
}
err = stack.Serialize.Add(&awsRestjson1_serializeOpDisassociateLicense{ }, middleware.After)
if err != nil {
return err
}
err = stack.Deserialize.Add(&awsRestjson1_deserializeOpDisassociateLicense{ }, middleware.After)
if err != nil {
return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "DisassociateLicense");
err != nil {
return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addLegacyEndpointContextSetter(stack, options); err != nil {
return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
return err
}
if err = addClientRequestID(stack); err != nil {
return err
}

```

```

}
if err = addComputeContentLength(stack); err != nil {
    return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
    return err
}
if err = addComputePayloadSHA256(stack); err != nil {
    return err
}
if err = addRetry(stack, options); err != nil {
    return err
}
if err = addRawResponseToMetadata(stack); err != nil {
    return err
}
if err = addRecordResponseTiming(stack); err != nil {
    return err
}
if err = addClientUserAgent(stack, options); err != nil {
    return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil
{
    return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
    return err
}
if err = addOpDisassociateLicenseValidationMiddleware(stack); err != nil {
    return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDisassociateLicense(options.Region),
middleware.Before); err != nil {
    return err
}
if err = addRecursionDetection(stack); err != nil {
    return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
    return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
    return err
}
}

```



```

if err = addRequestResponseLogging(stack, options); err != nil {
    return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
    return err
}
return nil
}

func newServiceMetadataMiddleware_opDisassociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
return &awsmiddleware.RegisterServiceMetadata{
    Region:    region,
    ServiceID: ServiceID,
    OperationName: "DisassociateLicense",
}
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
    "context"
    "fmt"
    awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
    "github.com/aws/aws-sdk-go-v2/service/grafana/types"
    "github.com/aws/smithy-go/middleware"
    smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Assigns a Grafana Enterprise license to a workspace. Upgrading to Grafana
// Enterprise incurs additional fees. For more information, see Upgrade a
// workspace to Grafana Enterprise (https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-Grafana-Enterprise.html)
// .
func (c *Client) AssociateLicense(ctx context.Context, params *AssociateLicenseInput, optFns ...func(*Options))
(*AssociateLicenseOutput, error) {
    if params == nil {
        params = &AssociateLicenseInput{}
    }

    result, metadata, err := c.invokeOperation(ctx, "AssociateLicense", params, optFns,
c.addOperationAssociateLicenseMiddlewares)
    if err != nil {
        return nil, err
    }

    out := result.(*AssociateLicenseOutput)

```

```

out.ResultMetadata
= metadata
return out, nil
}

type AssociateLicenseInput struct {

// The type of license to associate with the workspace.
//
// This member is required.
LicenseType types.LicenseType

// The ID of the workspace to associate the license with.
//
// This member is required.
WorkspaceId *string

noSmithyDocumentSerde
}

type AssociateLicenseOutput struct {

// A structure containing data about the workspace.
//
// This member is required.
Workspace *types.WorkspaceDescription

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationAssociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
if err := stack.Serialize.Add(&setOperationInputMiddleware{ }, middleware.After); err != nil {
return err
}
err = stack.Serialize.Add(&awsRestjson1_serializeOpAssociateLicense{ }, middleware.After)
if err != nil {
return err
}
err = stack.Deserialize.Add(&awsRestjson1_deserializeOpAssociateLicense{ },
middleware.After)
if err != nil {
return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "AssociateLicense"); err != nil {
return fmt.Errorf("add protocol finalizers: %v", err)
}
}

```

```

}

if err = addLegacyEndpointContextSetter(stack, options); err != nil {
    return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
    return err
}
if err = addClientRequestID(stack); err != nil {
    return err
}
if err = addComputeContentLength(stack); err != nil {
    return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
    return err
}
if err = addComputePayloadSHA256(stack); err != nil {
    return err
}
if err = addRetry(stack, options); err != nil {
    return err
}
if err = addRawResponseToMetadata(stack); err != nil {
    return err
}
if err = addRecordResponseTiming(stack); err != nil {
    return err
}
if err = addClientUserAgent(stack, options); err != nil {
    return err
}
if
err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
    return err
}
if err = addOpAssociateLicenseValidationMiddleware(stack); err != nil {
    return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opAssociateLicense(options.Region),
middleware.Before); err != nil {
    return err
}

```

```

}
if err = addRecursionDetection(stack); err != nil {
    return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
    return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
    return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
    return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
    return err
}
return nil
}

func newServiceMetadataMiddleware_opAssociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata
{
return &awsmiddleware.RegisterServiceMetadata{
    Region:    region,
    ServiceID: ServiceID,
    OperationName: "AssociateLicense",
}
}
{
    "smithy": "2.0",
    "shapes": {
        "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException": {
            "type": "structure",
            "members": {
                "message": {
                    "target": "smithy.api#String"
                }
            },
            "traits": {
                "smithy.api#documentation": "<p>You don't have sufficient access to perform this action.</p>",
                "smithy.api#error": "client"
            }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider": {
            "type": "structure",
            "members": {
                "DirectoryId": {
                    "target": "smithy.api#String",

```

```

    "traits": {
      "smithy.api#documentation": "<p>The directory ID for an Active Directory identity provider.</p>"
    }
  },
  "traits": {
    "smithy.api#documentation":
    "<p>Details about an Active Directory identity provider.</p>"
  }
},
"com.amazonaws.licenseanagerusersubscriptions#AssociateUser": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licenseanagerusersubscriptions#AssociateUserRequest"
  },
  "output": {
    "target": "com.amazonaws.licenseanagerusersubscriptions#AssociateUserResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ConflictException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#InternalServerError"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ResourceNotFoundException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ServiceQuotaExceededException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ThrottlingException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Associates the user to an EC2 instance to utilize user-based
subscriptions.</p>\n    <note>\n    <p>Your estimated bill for charges on the number of users and related
costs will take 48\n    hours to appear for billing periods that haven't closed (marked as <b>Pending</b> billing
status) in Amazon Web Services Billing. For more information, see <a
href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your\n

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monthly charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p>\n    </note>",
  "smithy.api#http": {
    "code": 200,
    "method": "POST",
    "uri": "/user/AssociateUser"
  },
  "smithy.api#idempotent": {}
}
},
"com.amazonaws.licenseanagerusersubscriptions#AssociateUserRequest": {
  "type": "structure",
  "members": {
    "Username": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>",
        "smithy.api#required": {}
      }
    },
    "InstanceId": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>The ID of the
EC2 instance, which provides user-based subscriptions.</p>",
        "smithy.api#required": {}
      }
    },
    "IdentityProvider": {
      "target": "com.amazonaws.licenseanagerusersubscriptions#IdentityProvider",
      "traits": {
        "smithy.api#documentation": "<p>The identity provider of the user.</p>",
        "smithy.api#required": {}
      }
    },
    "Domain": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>The domain name of the user.</p>"
      }
    }
  }
},
"com.amazonaws.licenseanagerusersubscriptions#AssociateUserResponse": {
  "type": "structure",
  "members": {
    "InstanceUserSummary": {
      "target": "com.amazonaws.licenseanagerusersubscriptions#InstanceUserSummary",

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        "traits": {
          "smithy.api#documentation": "<p>Metadata that describes the associate user operation.</p>",
          "smithy.api#required": {}
        }
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#BoxInteger": {
      "type": "integer"
    },
    "com.amazonaws.licensemanagerusersubscriptions#ConflictException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>The request couldn't be completed because it conflicted with the current
state of the\n    resource.</p>",
        "smithy.api#error": "server"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider":
  {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerErrorException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
      }
    ]
  }

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    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ThrottlingException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Deregisters the identity provider from providing user-based
subscriptions.</p>",
    "smithy.api#http": {
      "code": 200,
      "method": "POST",
      "uri": "/identity-provider/DeregisterIdentityProvider"
    },
    "smithy.api#idempotent": {}
  }
},
"com.amazonaws.licenseanagerusersubscriptions#DeregisterIdentityProviderRequest": {
  "type": "structure",
  "members": {
    "IdentityProvider": {
      "target": "com.amazonaws.licenseanagerusersubscriptions#IdentityProvider",
      "traits": {
        "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
        "smithy.api#required": {}
      }
    },
    "Product": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
        "smithy.api#required": {}
      }
    }
  }
},
"com.amazonaws.licenseanagerusersubscriptions#DeregisterIdentityProviderResponse": {
  "type": "structure",
  "members": {
    "IdentityProviderSummary": {
      "target": "com.amazonaws.licenseanagerusersubscriptions#IdentityProviderSummary",
      "traits": {
        "smithy.api#documentation":
"<p>Metadata that describes the results of an identity provider operation.</p>",
        "smithy.api#required": {}
      }
    }
  }
}

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    }
  }
},
"com.amazonaws.licenseanagerusersubscriptions#DisassociateUser": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licenseanagerusersubscriptions#DisassociateUserRequest"
  },
  "output": {
    "target": "com.amazonaws.licenseanagerusersubscriptions#DisassociateUserResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ConflictException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#InternalServerErrorException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ResourceNotFoundException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ServiceQuotaExceededException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ThrottlingException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Disassociates the user from an EC2 instance providing user-based
subscriptions.</p>",
    "smithy.api#http": {
      "code": 200,
      "method": "POST",
      "uri": "/user/DisassociateUser"
    },
    "smithy.api#idempotent": {}
  }
},
"com.amazonaws.licenseanagerusersubscriptions#DisassociateUserRequest": {
  "type": "structure",

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"members": {
  "Username": {
    "target": "smithy.api#String",
    "traits": {
      "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>",
      "smithy.api#required": {}
    }
  },
  "InstanceId": {
    "target": "smithy.api#String",
    "traits": {
      "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
      "smithy.api#required": {}
    }
  },
  "IdentityProvider": {
    "target": "com.amazonaws.licenseanagerusersubscriptions#IdentityProvider",
    "traits": {
      "smithy.api#documentation":
"<p>An object that specifies details for the identity provider.</p>",
      "smithy.api#required": {}
    }
  },
  "Domain": {
    "target": "smithy.api#String",
    "traits": {
      "smithy.api#documentation": "<p>The domain name of the user.</p>"
    }
  }
},
"com.amazonaws.licenseanagerusersubscriptions#DisassociateUserResponse": {
  "type": "structure",
  "members": {
    "InstanceUserSummary": {
      "target": "com.amazonaws.licenseanagerusersubscriptions#InstanceUserSummary",
      "traits": {
        "smithy.api#documentation": "<p>Metadata that describes the associate user operation.</p>",
        "smithy.api#required": {}
      }
    }
  }
},

"com.amazonaws.licenseanagerusersubscriptions#Filter": {
  "type": "structure",
  "members": {

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"Attribute": {
  "target": "smithy.api#String",
  "traits": {
    "smithy.api#documentation": "<p>The name of an attribute to use as a filter.</p>"
  }
},
"Operation": {
  "target": "smithy.api#String",
  "traits": {
    "smithy.api#documentation": "<p>The type of search (For example, eq, geq, leq)</p>"
  }
},
"Value": {
  "target": "smithy.api#String",
  "traits": {
    "smithy.api#documentation": "<p>Value of the filter.</p>"
  }
},
"traits": {
  "smithy.api#documentation": "<p>A filter name and value pair that is used
to return more specific results from a describe\n operation. Filters can be used to match a set of resources by
specific criteria, such as tags,\n attributes, or IDs.</p>"
},
},
"com.amazonaws.licensemanagerusersubscriptions#FilterList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanagerusersubscriptions#Filter"
  }
},
"com.amazonaws.licensemanagerusersubscriptions#IdentityProvider": {
  "type": "union",
  "members": {
    "ActiveDirectoryIdentityProvider": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider",
      "traits": {
        "smithy.api#documentation": "<p>An object that details an Active Directory identity provider.</p>"
      }
    }
  }
},
"traits": {
  "smithy.api#documentation":
"<p>Details about an identity provider.</p>"
}
},
"com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary": {
  "type": "structure",

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"members": {
  "IdentityProvider": {
    "target": "com.amazonaws.licenseanagerusersubscriptions#IdentityProvider",
    "traits": {
      "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
      "smithy.api#required": {}
    }
  },
  "Settings": {
    "target": "com.amazonaws.licenseanagerusersubscriptions#Settings",
    "traits": {
      "smithy.api#documentation": "<p>An object that details the registered identity providers product
related configuration\n settings such as the subnets to provision VPC endpoints.</p>",
      "smithy.api#required":
{}
    }
  },
  "Product": {
    "target": "smithy.api#String",
    "traits": {
      "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
      "smithy.api#required": {}
    }
  },
  "Status": {
    "target": "smithy.api#String",
    "traits": {
      "smithy.api#documentation": "<p>The status of an identity provider.</p>",
      "smithy.api#required": {}
    }
  },
  "FailureMessage": {
    "target": "smithy.api#String",
    "traits": {
      "smithy.api#documentation": "<p>The failure message associated with an identity provider.</p>"
    }
  },
  "traits": {
    "smithy.api#documentation":
"<p>Describes an identity provider.</p>"
  },
  "com.amazonaws.licenseanagerusersubscriptions#IdentityProviderSummaryList": {
    "type": "list",
    "member": {
      "target": "com.amazonaws.licenseanagerusersubscriptions#IdentityProviderSummary"
    }
  }
}

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    },
    "com.amazonaws.licenseanagerusersubscriptions#InstanceSummary": {
      "type": "structure",
      "members": {
        "InstanceId": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
            "smithy.api#required": {}
          }
        },
        "Status": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The status
of an EC2 instance resource.</p>",
            "smithy.api#required": {}
          }
        },
        "Products": {
          "target": "com.amazonaws.licenseanagerusersubscriptions#StringList",
          "traits": {
            "smithy.api#documentation": "<p>A list of provided user-based subscription products.</p>",
            "smithy.api#required": {}
          }
        },
        "LastStatusCheckDate": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The date of the last status check.</p>"
          }
        },
        "StatusMessage": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The status message for an EC2 instance.</p>"
          }
        }
      }
    },
    "traits": {
      "smithy.api#documentation": "<p>Describes an EC2 instance providing user-based subscriptions.</p>"
    }
  },
  "com.amazonaws.licenseanagerusersubscriptions#InstanceSummaryList": {
    "type": "list",
    "member": {

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    "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary"
  }
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary": {
  "type": "structure",
  "members": {
    "Username": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>",
        "smithy.api#required": {}
      }
    },
    "InstanceId": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
        "smithy.api#required": {}
      }
    },
    "IdentityProvider": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
      "traits": {
        "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
        "smithy.api#required": {}
      }
    },
    "Status": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>The status of a user associated with an EC2 instance.</p>",
        "smithy.api#required": {}
      }
    },
    "StatusMessage": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>The status message for users of an EC2 instance.</p>"
      }
    },
    "Domain": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>The domain name of the user.</p>"
      }
    }
  },
}

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    "AssociationDate": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>The date a user was associated with an EC2 instance.</p>"
      }
    },
    "DisassociationDate": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>The date a user was disassociated from an EC2 instance.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>Describes users of an EC2 instance providing user-based
subscriptions.</p>"
  }
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary"
  }
},
"com.amazonaws.licensemanagerusersubscriptions#InternalServerError": {
  "type": "structure",
  "members": {
    "message": {
      "target": "smithy.api#String"
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>An exception occurred with the service.</p>",
    "smithy.api#error": "server"
  }
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseManagerUserSubscriptions": {
  "type": "service",

"version": "2018-05-10",
"operations": [
  {
    "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUser"
  },
  {
    "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider"
  },

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    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser"
    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders"
    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstances"
    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions"
    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations"
    }
  ],
  {
    "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider"
  },
  {
    "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription"
  },
  {
    "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription"
  },
  {
    "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings"
  }
],
"traits": {
  "aws.api#service": {
    "sdkId": "License Manager User Subscriptions",
    "arnNamespace": "license-manager-user-subscriptions",
    "cloudTrailEventSource": "license-manager-user-subscriptions.amazonaws.com"
  },
  "aws.auth#sigv4": {
    "name": "license-manager-user-subscriptions"
  },
  "aws.protocols#restJson1": {},
  "smithy.api#cors": {
    "additionalAllowedHeaders": [
      "*",
      "content-type",
      "x-amz-content-sha256",
      "x-amz-user-agent",
      "x-amzn-platform-id",
      "x-amzn-trace-id",
      "content-length",
    ]
  }
}

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    "x-api-key",
    "authorization",
    "x-amz-date",
    "x-amz-security-token",
    "Access-Control-Allow-Headers",
    "Access-Control-Allow-Methods",
    "Access-Control-Allow-Origin"
  ],
  "additionalExposedHeaders": [
    "x-amzn-errortype",
    "x-amzn-requestid",
    "x-amzn-trace-id"
  ]
}
]
},
"smithy.api#documentation": "<p>With License Manager, you can create user-based subscriptions to utilize licensed software with a per user subscription fee on Amazon EC2 instances.</p>",
"smithy.api#title": "AWS License Manager User Subscriptions",
"smithy.rules#endpointRuleSet": {
  "version": "1.0",
  "parameters": {
    "Region": {
      "builtIn": "AWS::Region",
      "required": false,
      "documentation": "The AWS region used to dispatch the request.",
      "type": "String"
    },
    "UseDualStack": {
      "builtIn": "AWS::UseDualStack",
      "required": true,
      "default": false,
      "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
      "type": "Boolean"
    },
    "UseFIPS": {
      "builtIn": "AWS::UseFIPS",
      "required": true,
      "default": false,
      "documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
      "type": "Boolean"
    },
    "Endpoint": {
      "builtIn": "SDK::Endpoint",
      "required": false,
      "documentation": "Override the endpoint used to send this request",
      "type": "String"
    }
  }
}

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    }
  },
  "rules": [
    {
      "conditions": [
        {
          "fn": "isSet",
          "argv": [
            {
              "ref": "Endpoint"
            }
          ]
        }
      ]
    }
  ],
  "type": "tree",
  "rules": [
    {
      "conditions": [
        {
          "fn": "booleanEquals",
          "argv": [
            {
              "ref": "UseFIPS"
            },
            true
          ]
        }
      ],
      "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
      "type": "error"
    },
    {
      "conditions": [
        {
          "fn": "booleanEquals",
          "argv": [
            {
              "ref": "UseDualStack"
            },
            true
          ]
        }
      ],
      "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
      "type": "error"
    }
  ]
}

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    },
    {
      "conditions": [],
      "endpoint": {
        "url": {
          "ref": "Endpoint"
        },
        "properties": {},
        "headers": {}
      },
      "type": "endpoint"
    }
  ]
},
{
  "conditions": [
    {
      "fn": "isSet",
      "argv": [
        {
          "ref": "Region"
        }
      ]
    }
  ],
  "type": "tree",
  "rules": [
    {
      "conditions": [
        {
          "fn": "aws.partition",
          "argv": [
            {
              "ref": "Region"
            }
          ]
        }
      ],
      "assign": "PartitionResult"
    }
  ],
  "type": "tree",
  "rules": [
    {
      "conditions": [
        {
          "fn": "booleanEquals",
          "argv": [

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        {
            "ref": "UseFIPS"
        },
        true
    ]
},
{
    "fn": "booleanEquals",
    "argv": [
        {
            "ref": "UseDualStack"
        },
        true
    ]
}
],
"type": "tree",
"rules": [
    {
        "conditions": [
            {
                "fn": "booleanEquals",
                "argv": [
                    true,
                    {
                        "fn": "getAttr",
                        "argv": [
                            {
                                "ref": "PartitionResult"
                            },
                            "supportsFIPS"
                        ]
                    }
                ]
            }
        ],
        "fn": "booleanEquals",
        "argv": [
            true,
            {
                "fn": "getAttr",
                "argv": [
                    {
                        "ref": "PartitionResult"
                    },
                ],
            }
        ]
    }
]

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        "supportsDualStack"
      ]
    }
  ]
}
],
"type": "tree",
"rules": [
  {
    "conditions": [],
    "endpoint": {
      "url": "https://license-manager-user-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
      "properties": {},
      "headers": {}
    },
    "type": "endpoint"
  }
],
{
  "conditions": [],
  "error": "FIPS and DualStack are enabled, but this partition does not support one or
both",
  "type": "error"
}
],
{
  "conditions": [
    {
      "fn": "booleanEquals",
      "argv": [
        {
          "ref": "UseFIPS"
        },
        true
      ]
    }
  ],
  "type": "tree",
}
]
"rules": [
  {
    "conditions": [
      {
        "fn": "booleanEquals",

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        "argv": [
            true,
            {
                "fn": "getAttr",
                "argv": [
                    {
                        "ref": "PartitionResult"
                    },
                    "supportsFIPS"
                ]
            }
        ]
    },
    "type": "tree",
    "rules": [
        {
            "conditions": [],
            "endpoint": {
                "url": "https://license-manager-user-subscriptions-
fips.{Region}.{PartitionResult#dnsSuffix}",
                "properties": {},
                "headers": {}
            },
            "type": "endpoint"
        }
    ],
    {
        "conditions": [],
        "error": "FIPS is enabled but this partition does not support FIPS",
        "type": "error"
    }
],
{
    "conditions": [
        {
            "fn": "booleanEquals",
            "argv": [
                {
                    "ref": "UseDualStack"
                },
                true
            ]
        }
    ]
}

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],
"type": "tree",
"rules": [
  {
    "conditions": [
      {
        "fn": "booleanEquals",
        "argv": [
          true,
          {
            "fn": "getAttr",
            "argv": [
              {
                "ref": "PartitionResult"
              },
              "supportsDualStack"
            ]
          }
        ]
      }
    ]
  }
],
"type": "tree",
"rules": [
  {
    "conditions": [],
    "endpoint": {
      "url": "https://license-manager-user-
subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
      "properties": {},
      "headers": {}
    },
    "type": "endpoint"
  }
],
{
  "conditions": [],
  "error": "DualStack is enabled but this partition does
not support DualStack",
  "type": "error"
}
],
{
  "conditions": [],
  "endpoint": {

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        "url": "https://license-manager-user-
subscriptions.{Region}.{PartitionResult#dnsSuffix}",
        "properties": {},
        "headers": {}
    },
    "type": "endpoint"
}
]
}
],
{
    "conditions":
[],
    "error": "Invalid Configuration: Missing Region",
    "type": "error"
}
],
},
"smithy.rules#endpointTests": {
    "testCases": [
        {
            "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager-user-subscriptions-fips.us-east-1.api.aws"
                }
            },
            "params": {
                "Region": "us-east-1",
                "UseFIPS": true,
                "UseDualStack": true
            }
        },
        {
            "documentation":
"For region us-east-1 with FIPS enabled and DualStack disabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager-user-subscriptions-fips.us-east-1.amazonaws.com"
                }
            },
            "params": {
                "Region": "us-east-1",
                "UseFIPS": true,
                "UseDualStack": false
            }
        },
    ],
}

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{
  "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager-user-subscriptions.us-east-1.api.aws"
    }
  },
  "params": {
    "Region": "us-east-1",
    "UseFIPS": false,
    "UseDualStack": true
  }
},
{
  "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager-user-subscriptions.us-east-1.amazonaws.com"
    }
  },
  "params": {
    "Region": "us-east-1",
    "UseFIPS": false,
    "UseDualStack": false
  }
},
{
  "documentation": "For region cn-north-1 with
FIPS enabled and DualStack enabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager-user-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
    }
  },
  "params": {
    "Region": "cn-north-1",
    "UseFIPS": true,
    "UseDualStack": true
  }
},
{
  "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager-user-subscriptions-fips.cn-north-1.amazonaws.com.cn"
    }
  }
}

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    },
    "params": {
      "Region": "cn-north-1",
      "UseFIPS": true,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-user-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
      }
    },
    "params": {
      "Region": "cn-north-1",
      "UseFIPS": false,
      "UseDualStack": true
    }
  },
  {
    "documentation": "For region cn-north-1
with FIPS disabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-user-subscriptions.cn-north-1.amazonaws.com.cn"
      }
    },
    "params": {
      "Region": "cn-north-1",
      "UseFIPS": false,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.api.aws"
      }
    },
    "params": {
      "Region": "us-gov-east-1",
      "UseFIPS": true,
      "UseDualStack": true
    }
  }
}

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    },
    {
      "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-gov-east-1
with FIPS disabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions.us-gov-east-1.api.aws"
        }
      },
      "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": false,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions.us-gov-east-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
      "expect": {
        "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
      },
      "params": {

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        "Region": "us-iso-east-1",
        "UseFIPS": true,
        "UseDualStack": true
    }
},
{
    "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
    "expect":
{
        "endpoint": {
            "url": "https://license-manager-user-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
        }
    },
    "params": {
        "Region": "us-iso-east-1",
        "UseFIPS": true,
        "UseDualStack": false
    }
},
{
    "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
    "expect": {
        "error": "DualStack is enabled but this partition does not support DualStack"
    },
    "params": {
        "Region": "us-iso-east-1",
        "UseFIPS": false,
        "UseDualStack":
true
    }
},
{
    "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager-user-subscriptions.us-iso-east-1.c2s.ic.gov"
        }
    },
    "params": {
        "Region": "us-iso-east-1",
        "UseFIPS": false,
        "UseDualStack": false
    }
},
{
    "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
    "expect": {
        "error": "FIPS and DualStack are enabled, but

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this partition does not support one or both"

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    },
    "params": {
      "Region": "us-isob-east-1",
      "UseFIPS": true,
      "UseDualStack": true
    }
  },
  {
    "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-user-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
      }
    },
    "params": {
      "Region": "us-isob-east-1",
      "UseFIPS": true,
      "UseDualStack": false
    }
  },
},
{
  "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
  "expect": {
    "error": "DualStack is enabled but this partition does not support DualStack"
  },
  "params": {
    "Region": "us-isob-east-1",
    "UseFIPS": false,
    "UseDualStack": true
  }
},
{
  "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager-user-subscriptions.us-isob-east-1.sc2s.sgov.gov"
    }
  },
  "params": {
    "Region": "us-isob-east-1",
    "UseFIPS": false,
    "UseDualStack": false
  }
},
{
  "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
```

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"expect": {
  "endpoint": {
    "url": "https://example.com"
  }
},
"params": {
  "Region": "us-east-1",
  "UseFIPS": false,
  "UseDualStack": false,
  "Endpoint": "https://example.com"
}
},
{

```

"documentation": "For custom endpoint with region not set and fips disabled and dualstack disabled",

```

"expect": {
  "endpoint": {
    "url": "https://example.com"
  }
},
"params": {
  "UseFIPS": false,
  "UseDualStack": false,
  "Endpoint": "https://example.com"
}
},
{

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"documentation": "For custom endpoint with fips enabled and dualstack disabled",

```

"expect": {
  "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
},
"params": {
  "Region": "us-east-1",
  "UseFIPS": true,
  "UseDualStack": false,
  "Endpoint": "https://example.com"
}
},
{

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"documentation": "For custom endpoint with fips disabled and dualstack enabled",

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"expect": {
  "error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
},
"params": {
  "Region": "us-east-1",
  "UseFIPS": false,
  "UseDualStack": true,
  "Endpoint": "https://example.com"
}

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    }
  },
  {
    "documentation": "Missing region",
    "expect": {
      "error": "Invalid Configuration: Missing Region"
    }
  }
],
"version": "1.0"
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerErrorException"
    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Lists the identity providers for user-based subscriptions.</p>",
    "smithy.api#http": {
      "code": 200,

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        "method": "POST",
        "uri": "/identity-provider/ListIdentityProviders"
    },
    "smithy.api#paginated":
    {
        "inputToken": "NextToken",
        "outputToken": "NextToken",
        "pageSize": "MaxResults",
        "items": "IdentityProviderSummaries"
    }
    },
    "com.amazonaws.licenseanagerusersubscriptions#ListIdentityProvidersRequest": {
        "type": "structure",
        "members": {
            "MaxResults": {
                "target": "com.amazonaws.licenseanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        }
    },
    "com.amazonaws.licenseanagerusersubscriptions#ListIdentityProvidersResponse":
    {
        "type": "structure",
        "members": {
            "IdentityProviderSummaries": {
                "target": "com.amazonaws.licenseanagerusersubscriptions#IdentityProviderSummaryList",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the list identity providers operation.</p>",
                    "smithy.api#required": {}
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        }
    },

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"com.amazonaws.licenseanagerusersubscriptions#ListInstances": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licenseanagerusersubscriptions#ListInstancesRequest"
  },
  "output": {
    "target": "com.amazonaws.licenseanagerusersubscriptions#ListInstancesResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ConflictException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#InternalServerError"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ResourceNotFoundException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ServiceQuotaExceededException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ThrottlingException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Lists the EC2 instances providing user-based subscriptions.</p>",
    "smithy.api#http": {
      "code": 200,
      "method": "POST",
      "uri": "/instance/ListInstances"
    },
    "smithy.api#paginated": {
      "inputToken": "NextToken",
      "outputToken": "NextToken",
      "pageSize": "MaxResults",
      "items": "InstanceSummaries"
    }
  }
},
"com.amazonaws.licenseanagerusersubscriptions#ListInstancesRequest": {
  "type": "structure",

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"members": {
  "MaxResults": {
    "target": "com.amazonaws.licenseanagerusersubscriptions#BoxInteger",
    "traits": {
      "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
    }
  },
  "NextToken": {
    "target": "smithy.api#String",
    "traits": {
      "smithy.api#documentation": "<p>Token for the next set of results.</p>"
    }
  },
  "Filters": {
    "target": "com.amazonaws.licenseanagerusersubscriptions#FilterList",
    "traits": {
      "smithy.api#documentation": "<p>An array of structures that you can use to filter the results to those
that match one or\n more sets of key-value pairs that you specify.</p>"
    }
  }
},
"com.amazonaws.licenseanagerusersubscriptions#ListInstancesResponse": {
  "type":
"structure",
  "members": {
    "InstanceSummaries": {
      "target": "com.amazonaws.licenseanagerusersubscriptions#InstanceSummaryList",
      "traits": {
        "smithy.api#documentation": "<p>Metadata that describes the list instances operation.</p>"
      }
    },
    "NextToken": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>Token for the next set of results.</p>"
      }
    }
  }
},
"com.amazonaws.licenseanagerusersubscriptions#ListProductSubscriptions": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licenseanagerusersubscriptions#ListProductSubscriptionsRequest"
  },
  "output": {
    "target": "com.amazonaws.licenseanagerusersubscriptions#ListProductSubscriptionsResponse"
  }
}

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    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerError"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
      }
    ],
    "traits": {
      "smithy.api#documentation": "<p>Lists the user-based subscription products available from an identity provider.</p>",
      "smithy.api#http": {
        "code": 200,
        "method": "POST",
        "uri": "/user/ListProductSubscriptions"
      },
      "smithy.api#paginated": {
        "inputToken": "NextToken",
        "outputToken": "NextToken",
        "pageSize": "MaxResults",
        "items": "ProductUserSummaries"
      }
    }
  },
  "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest": {
    "type": "structure",
    "members": {
      "Product": {
        "target": "smithy.api#String",
        "traits": {
          "smithy.api#documentation": "<p>The name

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of the user-based subscription product.</p>",

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    "smithy.api#required": {}
  }
},
"IdentityProvider": {
  "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
  "traits": {
    "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
    "smithy.api#required": {}
  }
},
"MaxResults": {
  "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
  "traits": {
    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
  }
},
"Filters": {
  "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
  "traits": {
    "smithy.api#documentation": "<p>An array of structures that you can use to filter the results to those that match one or\n    more sets of key-value pairs that you specify.</p>"
  }
},
"NextToken": {
  "target": "smithy.api#String",
  "traits": {
    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
  }
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse": {
  "type": "structure",
  "members": {
    "ProductUserSummaries": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList",
      "traits": {
        "smithy.api#documentation": "<p>Metadata that describes the list product subscriptions operation.</p>"
      }
    }
  }
},
"NextToken": {
  "target": "smithy.api#String",
  "traits": {
    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
  }
}
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    }
  }
},
"com.amazonaws.licenseanagerusersubscriptions#ListUserAssociations": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licenseanagerusersubscriptions#ListUserAssociationsRequest"
  },
  "output": {
    "target": "com.amazonaws.licenseanagerusersubscriptions#ListUserAssociationsResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ConflictException"
    },
    {
      "target":
"com.amazonaws.licenseanagerusersubscriptions#InternalServerError"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ResourceNotFoundException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ServiceQuotaExceededException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ThrottlingException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Lists user associations for an identity provider.</p>",
    "smithy.api#http": {
      "code": 200,
      "method": "POST",
      "uri": "/user/ListUserAssociations"
    },
    "smithy.api#paginated":
{
  "inputToken": "NextToken",
  "outputToken": "NextToken",
  "pageSize": "MaxResults",

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        "items": "InstanceUserSummaries"
    }
}
},
"com.amazonaws.licenseanagerusersubscriptions#ListUserAssociationsRequest": {
    "type": "structure",
    "members": {
        "InstanceId": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
                "smithy.api#required": {}
            }
        },
        "IdentityProvider": {
            "target": "com.amazonaws.licenseanagerusersubscriptions#IdentityProvider",
            "traits": {
                "smithy.api#documentation": "<p>An object that specifies details for the identity
provider.</p>",
                "smithy.api#required": {}
            }
        },
        "MaxResults": {
            "target": "com.amazonaws.licenseanagerusersubscriptions#BoxInteger",
            "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
        },
        "Filters": {
            "target": "com.amazonaws.licenseanagerusersubscriptions#FilterList",
            "traits": {
                "smithy.api#documentation": "<p>An array of structures that you can use to filter the results to those
that match one or\n    more sets of key-value pairs that you specify.</p>"
            }
        },
        "NextToken": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for
the next set of results.</p>"
            }
        }
    }
},
"com.amazonaws.licenseanagerusersubscriptions#ListUserAssociationsResponse": {
    "type": "structure",
    "members": {

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"InstanceUserSummaries": {
  "target": "com.amazonaws.licenseanagerusersubscriptions#InstanceUserSummaryList",
  "traits": {
    "smithy.api#documentation": "<p>Metadata that describes the list user association operation.</p>"
  }
},
"NextToken": {
  "target": "smithy.api#String",
  "traits": {
    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
  }
}
},
"com.amazonaws.licenseanagerusersubscriptions#ProductUserSummary": {
  "type": "structure",
  "members": {

"Username": {
  "target": "smithy.api#String",
  "traits": {
    "smithy.api#documentation": "<p>The user name from the identity provider of the user.</p>",
    "smithy.api#required": {}
  }
},
"Product": {
  "target": "smithy.api#String",
  "traits": {
    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
    "smithy.api#required": {}
  }
},
"IdentityProvider": {
  "target": "com.amazonaws.licenseanagerusersubscriptions#IdentityProvider",
  "traits": {
    "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
    "smithy.api#required": {}
  }
},

"Status": {
  "target": "smithy.api#String",
  "traits": {
    "smithy.api#documentation": "<p>The status of a product for a user.</p>",
    "smithy.api#required": {}
  }
},
"StatusMessage": {

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    "target": "smithy.api#String",
    "traits": {
      "smithy.api#documentation": "<p>The status message for a product for a user.</p>"
    }
  },
  "Domain": {
    "target": "smithy.api#String",
    "traits": {
      "smithy.api#documentation": "<p>The domain name of the user.</p>"
    }
  },
  "SubscriptionStartDate": {
    "target": "smithy.api#String",
    "traits": {
      "smithy.api#documentation": "<p>The
start date of a subscription.</p>"
    }
  },
  "SubscriptionEndDate": {
    "target": "smithy.api#String",
    "traits": {
      "smithy.api#documentation": "<p>The end date of a subscription.</p>"
    }
  }
},
"traits": {
  "smithy.api#documentation": "<p>The summary of the user-based subscription products for a user.</p>"
}
},
"com.amazonaws.licenseanagerusersubscriptions#ProductUserSummaryList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licenseanagerusersubscriptions#ProductUserSummary"
  }
},
"com.amazonaws.licenseanagerusersubscriptions#RegisterIdentityProvider": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licenseanagerusersubscriptions#RegisterIdentityProviderRequest"
  },
  "output": {
    "target": "com.amazonaws.licenseanagerusersubscriptions#RegisterIdentityProviderResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#AccessDeniedException"
    },
    {

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    "target": "com.amazonaws.licenseanagerusersubscriptions#ConflictException"
  },
  {
    "target": "com.amazonaws.licenseanagerusersubscriptions#InternalServerErrorException"
  },
  {
    "target": "com.amazonaws.licenseanagerusersubscriptions#ResourceNotFoundException"
  },
  {
    "target": "com.amazonaws.licenseanagerusersubscriptions#ServiceQuotaExceededException"
  },
  {
    "target": "com.amazonaws.licenseanagerusersubscriptions#ThrottlingException"
  },
  {
    "target": "com.amazonaws.licenseanagerusersubscriptions#ValidationException"
  }
],
"traits": {
  "smithy.api#documentation": "<p>Registers an identity provider for user-based subscriptions.</p>",
  "smithy.api#http": {
    "code": 200,
    "method": "POST",
    "uri": "/identity-provider/RegisterIdentityProvider"
  },
  "smithy.api#idempotent": {}
}
},
"com.amazonaws.licenseanagerusersubscriptions#RegisterIdentityProviderRequest": {
  "type": "structure",
  "members": {
    "IdentityProvider": {
      "target": "com.amazonaws.licenseanagerusersubscriptions#IdentityProvider",
      "traits": {
        "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
        "smithy.api#required": {}
      }
    },
    "Product": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
        "smithy.api#required": {}
      }
    },
    "Settings": {
      "target": "com.amazonaws.licenseanagerusersubscriptions#Settings",

```

```

        "traits": {
            "smithy.api#documentation": "<p>The registered identity providers product related configuration
settings such as the\n    subnets to provision VPC endpoints.</p>"
        }
    },
    "com.amazonaws.licenseanagerusersubscriptions#RegisterIdentityProviderResponse": {
        "type": "structure",
        "members": {
            "IdentityProviderSummary": {
                "target": "com.amazonaws.licenseanagerusersubscriptions#IdentityProviderSummary",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the results of an identity provider
operation.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "com.amazonaws.licenseanagerusersubscriptions#ResourceNotFoundException": {
            "type": "structure",
            "members": {
                "message": {
                    "target": "smithy.api#String"
                }
            },
            "traits": {
                "smithy.api#documentation": "<p>The resource couldn't be found.</p>",
                "smithy.api#error": "client",
                "smithy.api#httpError": 404
            }
        },
        "com.amazonaws.licenseanagerusersubscriptions#SecurityGroup": {
            "type": "string",
            "traits": {
                "smithy.api#length": {
                    "min": 5,
                    "max": 200
                },
                "smithy.api#pattern": "^sg-([0-9a-z]{8})([0-9a-z]{17})$"
            }
        },
        "com.amazonaws.licenseanagerusersubscriptions#ServiceQuotaExceededException": {
            "type": "structure",
            "members": {

```

```

    "message": {
      "target": "smithy.api#String"
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>The request failed because a service quota is exceeded.</p>",
    "smithy.api#error": "client"
  }
},
"com.amazonaws.licenseanagerusersubscriptions#Settings": {
  "type": "structure",
  "members": {
    "Subnets": {
      "target": "com.amazonaws.licenseanagerusersubscriptions#Subnets",
      "traits": {
        "smithy.api#documentation":
"<p>The subnets defined for the registered identity provider.</p>",
        "smithy.api#length": {
          "min": 1
        },
        "smithy.api#required": {}
      }
    },
    "SecurityGroupId": {
      "target": "com.amazonaws.licenseanagerusersubscriptions#SecurityGroup",
      "traits": {
        "smithy.api#documentation": "<p>A security group ID that allows inbound TCP port 1688
communication between resources in\n  your VPC and the VPC endpoint for activation servers.</p>",
        "smithy.api#required": {}
      }
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>The registered identity providers product related configuration settings
such as the\n  subnets to provision VPC endpoints, and the security group ID that
is associated with the VPC\n  endpoints. The security group should permit inbound TCP port 1688
communication from resources\n  in the VPC.</p>"
  }
},
"com.amazonaws.licenseanagerusersubscriptions#StartProductSubscription": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licenseanagerusersubscriptions#StartProductSubscriptionRequest"
  },
  "output": {
    "target": "com.amazonaws.licenseanagerusersubscriptions#StartProductSubscriptionResponse"
  },
  "errors": [

```

```

    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ConflictException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#InternalServerError"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ResourceNotFoundException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ServiceQuotaExceededException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ThrottlingException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Starts a product subscription for a user with the specified identity provider.</p>\n    <note>\n      <p>Your estimated bill for charges on the number of users and related costs will take 48\n      hours to appear for billing periods that haven't closed (marked as <b>Pending</b> billing status) in Amazon Web Services Billing.\n      For more information, see <a href=\n      \"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your\n      monthly charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p>\n    </note>",
    "smithy.api#http": {
      "code": 200,
      "method": "POST",
      "uri": "/user/StartProductSubscription"
    }
  }
},
"com.amazonaws.licenseanagerusersubscriptions#StartProductSubscriptionRequest": {
  "type": "structure",
  "members": {
    "Username": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>The user name from the identity provider of the user.</p>",
        "smithy.api#required": {}
      }
    }
  },
  "IdentityProvider": {

```

```

    "target": "com.amazonaws.licenseanagerusersubscriptions#IdentityProvider",
    "traits": {
      "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
      "smithy.api#required": {}
    }
  },
  "Product": {
    "target": "smithy.api#String",
    "traits": {
      "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
      "smithy.api#required": {}
    }
  },
  "Domain": {
    "target": "smithy.api#String",
    "traits": {
      "smithy.api#documentation": "<p>The domain name of the user.</p>"
    }
  }
},
"com.amazonaws.licenseanagerusersubscriptions#StartProductSubscriptionResponse": {
  "type": "structure",
  "members": {
    "ProductUserSummary": {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ProductUserSummary",
      "traits": {
        "smithy.api#documentation": "<p>Metadata that describes the start product subscription operation.</p>",
        "smithy.api#required": {}
      }
    }
  }
},
"com.amazonaws.licenseanagerusersubscriptions#StopProductSubscription": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licenseanagerusersubscriptions#StopProductSubscriptionRequest"
  },
  "output": {
    "target": "com.amazonaws.licenseanagerusersubscriptions#StopProductSubscriptionResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#AccessDeniedException"
    }
  ]
},
{

```

```

        "target": "com.amazonaws.licenseanagerusersubscriptions#ConflictException"
    },
    {
        "target": "com.amazonaws.licenseanagerusersubscriptions#InternalServerErrorException"
    },
    {
        "target": "com.amazonaws.licenseanagerusersubscriptions#ResourceNotFoundException"
    },
    {
        "target": "com.amazonaws.licenseanagerusersubscriptions#ServiceQuotaExceededException"
    },
    {
        "target": "com.amazonaws.licenseanagerusersubscriptions#ThrottlingException"
    },
    {
        "target": "com.amazonaws.licenseanagerusersubscriptions#ValidationException"
    }
],
"traits": {
    "smithy.api#documentation": "<p>Stops a product subscription for a user with the specified identity
provider.</p>",
    "smithy.api#http": {
        "code": 200,
        "method": "POST",
        "uri": "/user/StopProductSubscription"
    }
},
"com.amazonaws.licenseanagerusersubscriptions#StopProductSubscriptionRequest": {
    "type": "structure",
    "members": {
        "Username": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>",
                "smithy.api#required": {}
            }
        },
        "IdentityProvider": {
            "target": "com.amazonaws.licenseanagerusersubscriptions#IdentityProvider",
            "traits": {
                "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                "smithy.api#required": {}
            }
        }
    }
},
"Product": {
    "target": "smithy.api#String",

```

```

    "traits": {
      "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
      "smithy.api#required": {}
    }
  },
  "Domain": {
    "target": "smithy.api#String",
    "traits": {
      "smithy.api#documentation": "<p>The domain name of the user.</p>"
    }
  }
},
"com.amazonaws.licenseanagerusersubscriptions#StopProductSubscriptionResponse": {
  "type": "structure",
  "members": {
    "ProductUserSummary": {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ProductUserSummary",
      "traits": {
        "smithy.api#documentation":
"<p>Metadata that describes the start product subscription operation.</p>",
        "smithy.api#required": {}
      }
    }
  }
},
"com.amazonaws.licenseanagerusersubscriptions#StringList": {
  "type": "list",
  "member": {
    "target": "smithy.api#String"
  }
},
"com.amazonaws.licenseanagerusersubscriptions#Subnet": {
  "type": "string",
  "traits": {
    "smithy.api#pattern": "subnet-[a-z0-9]{8,17}"
  }
},
"com.amazonaws.licenseanagerusersubscriptions#Subnets": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licenseanagerusersubscriptions#Subnet"
  }
},
"com.amazonaws.licenseanagerusersubscriptions#ThrottlingException": {
  "type": "structure",
  "members": {
    "message": {

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        "target": "smithy.api#String"
    }
},
"traits": {
    "smithy.api#documentation": "<p>The request was denied because of request throttling. Retry the
request.</p>",
    "smithy.api#error": "client"
}
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerErrorException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Updates additional product configuration settings for the registered
identity\n provider.</p>",
        "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/identity-provider/UpdateIdentityProviderSettings"
        },
        "smithy.api#idempotent": {}
    }
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest": {
    "type": "structure",
    "members": {
        "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",

```



```

    "traits": {
      "smithy.api#required": {}
    }
  },
  "Product": {
    "target": "smithy.api#String",
    "traits": {
      "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
      "smithy.api#required": {}
    }
  },
  "UpdateSettings": {
    "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings",
    "traits": {
      "smithy.api#documentation": "<p>Updates the registered identity providers product related configuration settings. You can\n    update any combination of settings in a single operation such as the:</p>\n<ul>\n  <li>\n    <p>Subnets which you want to add to provision VPC endpoints.</p>\n  </li>\n  <li>\n    <p>Subnets which you want to remove the VPC endpoints from.</p>\n  </li>\n  <li>\n    <p>Security group ID which permits traffic to the VPC endpoints.</p>\n  </li>\n</ul>",
      "smithy.api#required": {}
    }
  }
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse": {
  "type": "structure",
  "members": {
    "IdentityProviderSummary": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
      "traits": {
        "smithy.api#required": {}
      }
    }
  }
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateSettings": {
  "type": "structure",
  "members": {
    "AddSubnets": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
      "traits": {
        "smithy.api#documentation": "<p>The ID of one or more subnets in which License Manager will create a VPC endpoint for products that\n    require connectivity to activation servers.</p>",
        "smithy.api#required": {}
      }
    },
    "RemoveSubnets": {

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```

    "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
    "traits": {
      "smithy.api#documentation": "<p>The ID of one or more subnets to remove.</p>",
      "smithy.api#required": {}
    }
  },
  "SecurityGroupId": {
    "target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
    "traits": {
      "smithy.api#documentation": "<p>A security group ID
that allows inbound TCP port 1688 communication between resources in\n    your VPC and the VPC endpoints for
activation servers.</p>"
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>Updates the registered identity providers product related configuration
settings such as\n    the subnets to provision VPC endpoints.</p>"
  }
},
"com.amazonaws.licensemanagerusersubscriptions#ValidationException": {
  "type": "structure",
  "members": {
    "message": {
      "target": "smithy.api#String"
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>A parameter is not valid.</p>",
    "smithy.api#error": "client"
  }
}
}
{
  "smithy": "2.0",
  "metadata": {
    "suppressions": [
      {
        "id": "HttpMethodSemantics",
        "namespace": "*"
      },
      {
        "id": "HttpResponseCodeSemantics",
        "namespace": "*"
      },
      {
        "id": "PaginatedTrait",

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    "namespace": "*"
  },
  {
    "id": "HttpHeaderTrait",
    "namespace": "*"
  },
  {
    "id": "HttpUriConflict",
    "namespace": "*"
  },
  {
    "id": "Service",
    "namespace": "*"
  }
]
},
"shapes": {
  "com.amazonaws.licensemanager#AWSLicenseManager": {
    "type": "service",
    "version": "2018-08-01",
    "operations": [
      {
        "target": "com.amazonaws.licensemanager#AcceptGrant"
      },
      {
        "target": "com.amazonaws.licensemanager#CheckInLicense"
      },
      {
        "target": "com.amazonaws.licensemanager#CheckoutBorrowLicense"
      },
      {
        "target": "com.amazonaws.licensemanager#CheckoutLicense"
      },
      {
        "target": "com.amazonaws.licensemanager#CreateGrant"
      },
      {
        "target": "com.amazonaws.licensemanager#CreateGrantVersion"
      },
      {
        "target": "com.amazonaws.licensemanager#CreateLicense"
      },
      {
        "target": "com.amazonaws.licensemanager#CreateLicenseConfiguration"
      },
      {
        "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource"
      }
    ]
  }
}

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    },
    {
      "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator"
    },
    {
      "target": "com.amazonaws.licensemanager#CreateLicenseVersion"
    },
    {
      "target": "com.amazonaws.licensemanager#CreateToken"
    },
    {
      "target": "com.amazonaws.licensemanager#DeleteGrant"
    },
    {
      "target": "com.amazonaws.licensemanager#DeleteLicense"
    },
    {
      "target": "com.amazonaws.licensemanager#DeleteLicenseConfiguration"
    },
    {
      "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator"
    },
    {
      "target": "com.amazonaws.licensemanager#DeleteToken"
    },
    {
      "target": "com.amazonaws.licensemanager#ExtendLicenseConsumption"
    }
  },
  {
    "target": "com.amazonaws.licensemanager#GetAccessToken"
  },
  {
    "target": "com.amazonaws.licensemanager#GetGrant"
  },
  {
    "target": "com.amazonaws.licensemanager#GetLicense"
  },
  {
    "target": "com.amazonaws.licensemanager#GetLicenseConfiguration"
  },
  {
    "target": "com.amazonaws.licensemanager#GetLicenseConversionTask"
  },
  {
    "target": "com.amazonaws.licensemanager#GetLicenseManagerReportGenerator"
  },
  {

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```

    "target": "com.amazonaws.licensemanager#GetLicenseUsage"
  },
  {
    "target": "com.amazonaws.licensemanager#GetServiceSettings"
  },
  {
    "target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration"
  },
  {
    "target": "com.amazonaws.licensemanager#ListDistributedGrants"
  },
  {
    "target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations"
  },
  {
    "target": "com.amazonaws.licensemanager#ListLicenseConfigurations"
  },
  {
    "target": "com.amazonaws.licensemanager#ListLicenseConversionTasks"
  },
  {
    "target": "com.amazonaws.licensemanager#ListLicenseManagerReportGenerators"
  },
  {
    "target": "com.amazonaws.licensemanager#ListLicenses"
  },
  {
    "target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResource"
  },
  {
    "target": "com.amazonaws.licensemanager#ListLicenseVersions"
  },
  {
    "target": "com.amazonaws.licensemanager#ListReceivedGrants"
  },
  {
    "target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganization"
  },
  {
    "target": "com.amazonaws.licensemanager#ListReceivedLicenses"
  },
  {
    "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganization"
  },
  {
    "target": "com.amazonaws.licensemanager#ListResourceInventory"
  },
  },

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```

    {
      "target": "com.amazonaws.licensemanager#ListTagsForResource"
    },
    {
      "target": "com.amazonaws.licensemanager#ListTokens"
    },
    {
      "target": "com.amazonaws.licensemanager#ListUsageForLicenseConfiguration"
    },
    {
      "target": "com.amazonaws.licensemanager#RejectGrant"
    },
    {
      "target": "com.amazonaws.licensemanager#TagResource"
    },
    {
      "target": "com.amazonaws.licensemanager#UntagResource"
    },
    {
      "target": "com.amazonaws.licensemanager#UpdateLicenseConfiguration"
    },
    {
      "target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator"
    },
    {
      "target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource"
    },
    {
      "target": "com.amazonaws.licensemanager#UpdateServiceSettings"
    }
  ],
  "traits": {
    "aws.api#service": {
      "sdkId": "License Manager",
      "arnNamespace": "license-manager",
      "cloudFormationName": "LicenseManager",
      "cloudTrailEventSource": "licensemanager.amazonaws.com",
      "endpointPrefix": "license-manager"
    },
    "aws.auth#sigv4": {
      "name": "license-manager"
    },
    "aws.protocols#awsJson1_1": {},
    "smithy.api#documentation": "<p>License Manager makes it easier to manage licenses from software vendors across multiple \n      Amazon Web Services accounts and on-premises servers.</p>",
    "smithy.api#title": "AWS License Manager",
    "smithy.api#xmlNamespace": {
      "uri": "https://license-manager.amazonaws.com/doc/2018_08_01"
    }
  }
}

```

```

},
"smithy.rules#endpointRuleSet": {
  "version": "1.0",
  "parameters": {
    "Region": {
      "builtIn": "AWS::Region",
      "required": false,
      "documentation": "The AWS region used to dispatch the request.",
      "type": "String"
    },
    "UseDualStack": {
      "builtIn": "AWS::UseDualStack",
      "required": true,
      "default": false,
      "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not
support dual-stack, dispatching the request MAY return an error.",
      "type": "Boolean"
    },
    "UseFIPS": {
      "builtIn": "AWS::UseFIPS",
      "required": true,
      "default": false,
      "documentation": "When true, send
this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant
endpoint, dispatching the request will return an error.",
      "type": "Boolean"
    },
    "Endpoint": {
      "builtIn": "SDK::Endpoint",
      "required": false,
      "documentation": "Override the endpoint used to send this request",
      "type": "String"
    }
  },
  "rules": [
    {
      "conditions": [
        {
          "fn": "isSet",
          "argv": [
            {
              "ref": "Endpoint"
            }
          ]
        }
      ]
    }
  ],
  "type": "tree",

```

```

"rules": [
  {
    "conditions": [
      {
        "fn": "booleanEquals",
        "argv": [
          {
            "ref": "UseFIPS"
          },
          true
        ]
      }
    ],
    "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
    "type": "error"
  },
  {
    "conditions": [
      {
        "fn": "booleanEquals",
        "argv": [
          {
            "ref": "UseDualStack"
          },
          true
        ]
      }
    ],
    "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
    "type": "error"
  },
  {
    "conditions": [],
    "endpoint": {
      "url": {
        "ref": "Endpoint"
      },
      "properties": {},
      "headers": {}
    },
    "type": "endpoint"
  }
],
{
  "conditions": [
    {

```



```

    "fn": "isSet",
    "argv": [
      {
        "ref": "Region"
      }
    ]
  },
],
"type": "tree",
"rules": [
  {
    "conditions": [
      {
        "fn": "aws.partition",
        "argv": [
          {
            "ref": "Region"
          }
        ],
        "assign": "PartitionResult"
      }
    ],
    "type": "tree",
    "rules": [
      {
        "conditions": [
          {
            "fn": "booleanEquals",
            "argv": [
              {
                "ref":
"UseFIPS"
              },
              true
            ]
          },
          {
            "fn": "booleanEquals",
            "argv": [
              {
                "ref": "UseDualStack"
              },
              true
            ]
          }
        ],
        "type": "tree",
        "rules": [

```

```

{
  "conditions": [
    {
      "fn": "booleanEquals",
      "argv": [
        true,
        {
          "fn": "getAttr",
          "argv": [
            {
              "ref": "PartitionResult"
            },
            "supportsFIPS"
          ]
        }
      ]
    }
  ],
  "fn": "booleanEquals",
  "argv": [
    true,
    {
      "fn": "getAttr",
      "argv": [
        {
          "ref": "PartitionResult"
        },
        "supportsDualStack"
      ]
    }
  ]
},
{
  "type": "tree",
  "rules": [
    {
      "conditions": [],
      "endpoint": {
        "url": "https://license-manager-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
        "properties": {},
        "headers": {}
      }
    },
    {
      "type": "endpoint"
    }
  ]
}

```

both",

```
    ]
  },
  {
    "conditions": [],
    "error": "FIPS and DualStack are enabled, but this partition does not support one or
both",
    "type": "error"
  }
],
},
{
  "conditions": [
    {
      "fn": "booleanEquals",

"argv": [
  {
    "ref": "UseFIPS"
  },
  true
]
}
],
"type": "tree",
"rules": [
  {
    "conditions": [
      {
        "fn": "booleanEquals",
        "argv": [
          true,

{
          "fn": "getAttr",
          "argv": [
            {
              "ref": "PartitionResult"
            },
            "supportsFIPS"
          ]
        }
      ]
    }
  ]
},
],
"type": "tree",
"rules": [
```

```

    {
        "conditions": [],
        "endpoint": {
            "url": "https://license-manager-fips.{Region}.{PartitionResult#dnsSuffix}",
            "properties": {},
            "headers": {}
        },
        "type": "endpoint"
    }
]
},
{
    "conditions": [],
    "error": "FIPS is enabled but this
partition does not support FIPS",
    "type": "error"
}
],
{
    "conditions": [
        {
            "fn": "booleanEquals",
            "argv": [
                {
                    "ref": "UseDualStack"
                },
                true
            ]
        }
    ],
    "type": "tree",
    "rules": [
        {
            "conditions": [
                {
                    "fn": "booleanEquals",
                    "argv": [
                        true,
                        {
                            "fn": "getAttr",
                            "argv": [
                                {
                                    "ref": "PartitionResult"
                                },
                                ],
                            }
                        ]
                    ]
                }
            ]
        }
    ],
    "supportsDualStack"
}
]

```

```

        }
      ]
    }
  ],
  "type": "tree",
  "rules": [
    {
      "conditions": [],
      "endpoint": {
        "url": "https://license-
manager.{Region}.{PartitionResult#dualStackDnsSuffix}",
        "properties": {},
        "headers": {}
      },
      "type": "endpoint"
    }
  ],
  {
    "conditions": [],
    "error": "DualStack is enabled but this partition does not support DualStack",
    "type": "error"
  }
]
},
{
  "conditions": [],
  "endpoint": {
    "url": "https://license-manager.{Region}.{PartitionResult#dnsSuffix}",
    "properties": {},
    "headers": {}
  },
  "type": "endpoint"
}
]
},
{
  "conditions": [],
  "error": "Invalid Configuration: Missing Region",
  "type": "error"
}
]
},
"smithy.rules#endpointTests": {
  "testCases": [

```

```

{
  "documentation": "For region af-south-1 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint":
      {
        "url": "https://license-manager.af-south-1.amazonaws.com"
      }
  },
  "params": {
    "Region": "af-south-1",
    "UseFIPS": false,
    "UseDualStack": false
  }
},
{
  "documentation": "For region ap-east-1 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager.ap-east-1.amazonaws.com"
    }
  },
  "params": {
    "Region": "ap-east-1",
    "UseFIPS": false,
    "UseDualStack": false
  }
},
{
  "documentation": "For region ap-northeast-1 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager.ap-northeast-1.amazonaws.com"
    }
  },
  "params": {
    "Region": "ap-northeast-1",
    "UseFIPS": false,
    "UseDualStack": false
  }
},
{
  "documentation": "For region ap-northeast-2 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager.ap-northeast-2.amazonaws.com"
    }
  },
  "params": {

```

```

        "Region": "ap-northeast-2",
        "UseFIPS": false,
        "UseDualStack": false
    }
},
{
    "documentation": "For region ap-northeast-3 with FIPS disabled and DualStack disabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager.ap-northeast-3.amazonaws.com"
        }
    },
    "params": {
        "Region": "ap-northeast-3",
        "UseFIPS": false,
        "UseDualStack": false
    }
},
{
    "documentation": "For region ap-south-1 with FIPS disabled and DualStack disabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager.ap-south-1.amazonaws.com"
        }
    },
    "params": {
        "Region": "ap-south-1",
        "UseFIPS": false,
        "UseDualStack": false
    }
},
{
    "documentation": "For region ap-southeast-1 with FIPS disabled and DualStack disabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager.ap-southeast-1.amazonaws.com"
        }
    }
},
{
    "params": {
        "Region": "ap-southeast-1",
        "UseFIPS": false,
        "UseDualStack": false
    }
},
{
    "documentation": "For region ap-southeast-2 with FIPS disabled and DualStack disabled",

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```

    "expect": {
      "endpoint": {
        "url": "https://license-manager.ap-southeast-2.amazonaws.com"
      }
    },
    "params": {
      "Region": "ap-southeast-2",
      "UseFIPS": false,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For region ap-southeast-3 with FIPS disabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager.ap-southeast-3.amazonaws.com"
      }
    },
    "params": {
      "Region": "ap-southeast-3",
      "UseFIPS": false,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For region ca-central-1 with FIPS disabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager.ca-central-1.amazonaws.com"
      }
    },
    "params": {
      "Region": "ca-central-1",
      "UseFIPS": false,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For region eu-central-1 with FIPS disabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager.eu-central-1.amazonaws.com"
      }
    },
    "params": {
      "Region": "eu-central-1",

```



```

        "UseFIPS": false,
        "UseDualStack": false
    }
},
{
    "documentation": "For region eu-north-1 with FIPS
disabled and DualStack disabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager.eu-north-1.amazonaws.com"
        }
    },
    "params": {
        "Region": "eu-north-1",
        "UseFIPS": false,
        "UseDualStack": false
    }
},
{
    "documentation": "For region eu-south-1 with FIPS disabled and DualStack disabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager.eu-south-1.amazonaws.com"
        }
    },
    "params": {
        "Region":
"eu-south-1",
        "UseFIPS": false,
        "UseDualStack": false
    }
},
{
    "documentation": "For region eu-west-1 with FIPS disabled and DualStack disabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager.eu-west-1.amazonaws.com"
        }
    },
    "params": {
        "Region": "eu-west-1",
        "UseFIPS": false,
        "UseDualStack": false
    }
},
{
    "documentation": "For region eu-west-2 with FIPS disabled and DualStack disabled",
    "expect": {

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    "endpoint": {
      "url": "https://license-manager.eu-west-2.amazonaws.com"
    }
  },
  "params": {
    "Region": "eu-west-2",
    "UseFIPS": false,
    "UseDualStack": false
  }
},
{
  "documentation": "For region eu-west-3 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager.eu-west-3.amazonaws.com"
    }
  },
  "params": {
    "Region": "eu-west-3",
    "UseFIPS": false,
    "UseDualStack": false
  }
},
{
  "documentation": "For region me-south-1 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager.me-south-1.amazonaws.com"
    }
  },
  "params": {
    "Region": "me-south-1",
    "UseFIPS": false,
    "UseDualStack": false
  }
},
{
  "documentation": "For region sa-east-1 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager.sa-east-1.amazonaws.com"
    }
  },
  "params": {
    "Region": "sa-east-1",
    "UseFIPS": false,

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        "UseDualStack": false
    }
},
{
    "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager.us-east-1.amazonaws.com"
        }
    },
    "params": {
        "Region": "us-east-1",
        "UseFIPS": false,
        "UseDualStack": false
    }
},
{
    "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager-fips.us-east-1.amazonaws.com"
        }
    },
    "params": {
        "Region": "us-east-1",
        "UseFIPS": true,
        "UseDualStack": false
    }
},
{
    "documentation": "For region us-east-2 with FIPS disabled and DualStack disabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager.us-east-2.amazonaws.com"
        }
    },
    "params": {
        "Region": "us-east-2",
        "UseFIPS": false,
        "UseDualStack": false
    }
},
{
    "documentation": "For region us-east-2 with FIPS enabled and DualStack disabled",
    "expect": {
        "endpoint": {

```

```

        "url": "https://license-manager-fips.us-east-2.amazonaws.com"
    }
},
"params": {
    "Region": "us-east-2",
    "UseFIPS": true,
    "UseDualStack": false
}
},
{
    "documentation": "For region
us-west-1 with FIPS disabled and DualStack disabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager.us-west-1.amazonaws.com"
        }
    },
    "params": {
        "Region": "us-west-1",
        "UseFIPS": false,
        "UseDualStack": false
    }
},
{
    "documentation": "For region us-west-1 with FIPS enabled and DualStack disabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager-fips.us-west-1.amazonaws.com"
        }
    },
    "params": {
        "Region": "us-west-1",
        "UseFIPS": true,
        "UseDualStack": false
    }
},
{
    "documentation": "For region us-west-2 with FIPS disabled and DualStack disabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager.us-west-2.amazonaws.com"
        }
    },
    "params": {
        "Region": "us-west-2",
        "UseFIPS": false,
        "UseDualStack": false
    }
}

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```

    }
  },
  {
    "documentation": "For region us-west-2 with FIPS enabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-fips.us-west-2.amazonaws.com"
      }
    },
    "params": {
      "Region": "us-west-2",
      "UseFIPS": true,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-fips.us-east-1.api.aws"
      }
    },
    "params": {
      "Region": "us-east-1",
      "UseFIPS": true,
      "UseDualStack": true
    }
  },
  {
    "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager.us-east-1.api.aws"
      }
    },
    "params": {
      "Region": "us-east-1",
      "UseFIPS": false,
      "UseDualStack": true
    }
  },
  {
    "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url":

```

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"https://license-manager.cn-north-1.amazonaws.com.cn"
  }
},
"params": {
  "Region": "cn-north-1",
  "UseFIPS": false,
  "UseDualStack": false
}
},
{
  "documentation": "For region cn-northwest-1 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager.cn-northwest-1.amazonaws.com.cn"
    }
  },
  "params": {
    "Region": "cn-northwest-1",
    "UseFIPS": false,
    "UseDualStack": false
  }
}
},
{
  "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager-fips.cn-north-1.api.amazonwebservices.com.cn"
    }
  },
  "params": {
    "Region": "cn-north-1",
    "UseFIPS": true,
    "UseDualStack": true
  }
},
{
  "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager-fips.cn-north-1.amazonaws.com.cn"
    }
  },
  "params": {
    "Region": "cn-north-1",
    "UseFIPS": true,
    "UseDualStack": false
  }
}

```

```

    },
    {
      "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.cn-north-1.api.amazonwebservices.com.cn"
        }
      },
      "params": {
        "Region": "cn-north-1",
        "UseFIPS": false,
        "UseDualStack": true
      }
    },
  ],

  {
    "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager.us-gov-east-1.amazonaws.com"
      }
    },
    "params": {
      "Region": "us-gov-east-1",
      "UseFIPS": false,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-fips.us-gov-east-1.amazonaws.com"
      }
    },
    "params": {
      "Region": "us-gov-east-1",
      "UseFIPS": true,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For region us-gov-west-1 with FIPS disabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager.us-gov-west-1.amazonaws.com"
      }
    },
  },

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```

    "params": {
      "Region": "us-gov-west-1",
      "UseFIPS": false,
      "UseDualStack": false
    }
  },
  {
    "documentation":
    "For region us-gov-west-1 with FIPS enabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-fips.us-gov-west-1.amazonaws.com"
      }
    },
    "params": {
      "Region": "us-gov-west-1",
      "UseFIPS": true,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-fips.us-gov-east-1.api.aws"
      }
    },
    "params": {
      "Region": "us-gov-east-1",
      "UseFIPS": true,
      "UseDualStack": true
    }
  },
  {
    "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager.us-gov-east-1.api.aws"
      }
    },
    "params": {
      "Region": "us-gov-east-1",
      "UseFIPS": false,
      "UseDualStack": true
    }
  },
  {

```



```

disabled",
  "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack
disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager.us-iso-east-1.c2s.ic.gov"
    }
  },
  "params": {
    "Region": "us-iso-east-1",
    "UseFIPS": false,
    "UseDualStack": false
  }
},
{
  "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
  "expect": {
    "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
  },
  "params": {
    "Region": "us-iso-east-1",
    "UseFIPS": true,
    "UseDualStack": true
  }
},
{
  "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager-fips.us-iso-east-1.c2s.ic.gov"
    }
  },
  "params": {
    "Region": "us-iso-east-1",
    "UseFIPS": true,
    "UseDualStack": false
  }
},
{
  "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
  "expect": {
    "error": "DualStack is enabled
but this partition does not support DualStack"
  },
  "params": {
    "Region": "us-iso-east-1",
    "UseFIPS": false,
    "UseDualStack": true
  }
}

```

```

    },
    {
      "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.us-isob-east-1.sc2s.sgov.gov"
        }
      },
      "params": {
        "Region": "us-isob-east-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
      "expect": {
        "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
      },
      "params": {
        "Region": "us-isob-east-1",
        "UseFIPS": true,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-fips.us-isob-east-1.sc2s.sgov.gov"
        }
      },
      "params": {
        "Region": "us-isob-east-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
      "expect": {
        "error": "DualStack is enabled but this partition does not support DualStack"
      },
      "params": {
        "Region": "us-isob-east-1",
        "UseFIPS": false,

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        "UseDualStack": true
    }
},
{
    "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
    "expect": {
        "endpoint": {
            "url": "https://example.com"
        }
    },
    "params": {
        "Region": "us-east-1",
        "UseFIPS": false,
        "UseDualStack": false,
        "Endpoint": "https://example.com"
    }
},
{
    "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
    "expect": {
        "endpoint": {
            "url": "https://example.com"
        }
    },
    "params": {
        "UseFIPS": false,
        "UseDualStack": false,
        "Endpoint": "https://example.com"
    }
},
{
    "documentation": "For custom endpoint with fips enabled and dualstack disabled",
    "expect": {
        "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
    },
    "params": {
        "Region": "us-east-1",
        "UseFIPS": true,
        "UseDualStack": false,
        "Endpoint": "https://example.com"
    }
},
{
    "documentation": "For custom endpoint with fips disabled and dualstack enabled",
    "expect": {

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        "error":
"Invalid Configuration: Dualstack and custom endpoint are not supported"
    },
    "params": {
        "Region": "us-east-1",
        "UseFIPS": false,
        "UseDualStack": true,
        "Endpoint": "https://example.com"
    }
    },
    {
        "documentation": "Missing region",
        "expect": {
            "error": "Invalid Configuration: Missing Region"
        }
    }
    ],
    "version": "1.0"
}
},
"com.amazonaws.licensemanager#AcceptGrant": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#AcceptGrantRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#AcceptGrantResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
    ]
}

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    },
    {
      "target": "com.amazonaws.licensemanager#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Accepts the specified grant.</p>"
  }
},
"com.amazonaws.licensemanager#AcceptGrantRequest": {
  "type": "structure",
  "members": {
    "GrantArn": {
      "target": "com.amazonaws.licensemanager#Arn",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
        "smithy.api#required": {}
      }
    }
  },
  "traits": {
    "smithy.api#input": {}
  }
},
"com.amazonaws.licensemanager#AcceptGrantResponse": {
  "type": "structure",
  "members": {
    "GrantArn": {
      "target": "com.amazonaws.licensemanager#Arn",
      "traits": {
        "smithy.api#documentation": "<p>Grant
ARN.</p>"
      }
    }
  },
  "Status": {
    "target": "com.amazonaws.licensemanager#GrantStatus",
    "traits": {
      "smithy.api#documentation": "<p>Grant status.</p>"
    }
  },
  "Version": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Grant version.</p>"
    }
  }
},

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```

    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanager#AccessDeniedException": {
    "type": "structure",
    "members": {
      "Message": {
        "target": "com.amazonaws.licensemanager#Message"
      }
    },
    "traits": {
      "aws.protocols#awsQueryError": {}
    }
  },
  "code": "ServiceAccessDenied",
  "httpResponseCode": 401,
  "smithy.api#documentation": "<p>Access to resource denied.</p>",
  "smithy.api#error": "client",
  "smithy.api#httpError": 401
},
"com.amazonaws.licensemanager#ActivationOverrideBehavior": {
  "type": "enum",
  "members": {
    "DISTRIBUTED_GRANTS_ONLY": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "DISTRIBUTED_GRANTS_ONLY"
      }
    },
    "ALL_GRANTS_PERMITTED_BY_ISSUER": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "ALL_GRANTS_PERMITTED_BY_ISSUER"
      }
    }
  }
},
"com.amazonaws.licensemanager#AllowedOperation": {
  "type": "enum",
  "members": {
    "CREATE_GRANT": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "CreateGrant"
      }
    }
  }
}

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    },
    "CHECKOUT_LICENSE": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "CheckoutLicense"
      }
    },
    "CHECKOUT_BORROW_LICENSE": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "CheckoutBorrowLicense"
      }
    },
    "CHECK_IN_LICENSE": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "CheckInLicense"
      }
    },
    "EXTEND_CONSUMPTION_LICENSE":
  {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "ExtendConsumptionLicense"
    }
  },
  "LIST_PURCHASED_LICENSES": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "ListPurchasedLicenses"
    }
  },
  "CREATE_TOKEN": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "CreateToken"
    }
  }
}
},
"com.amazonaws.licensemanager#AllowedOperationList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanager#AllowedOperation"
  },
  "traits": {
    "smithy.api#length": {
      "min": 1,

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        "max":
7      }
    }
  },
  "com.amazonaws.licensemanager#Arn": {
    "type": "string",
    "traits": {
      "smithy.api#length": {
        "min": 0,
        "max": 2048
      },
      "smithy.api#pattern": "^arn:aws(-(cn|us-gov|iso-b|iso-c|iso-d)?:[A-Za-z0-9][A-Za-z0-9_/.-]{0,62}):[A-Za-
z0-9_/.-]{0,63}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9][A-Za-z0-9:/_+=,@.-]{0,1023}$"
    }
  },
  "com.amazonaws.licensemanager#ArnList": {
    "type": "list",
    "member": {
      "target": "com.amazonaws.licensemanager#Arn"
    }
  },
  "com.amazonaws.licensemanager#AuthorizationException": {
    "type": "structure",
    "members": {
      "Message": {
        "target": "com.amazonaws.licensemanager#Message"
      }
    },
    "traits": {
      "aws.protocols#awsQueryError":
{
      "code": "AuthorizationFailure",
      "httpResponseCode": 403
    },
      "smithy.api#documentation": "<p>The Amazon Web Services user account does not have permission to
perform the action. Check the IAM\n      policy associated with this account.</p>",
      "smithy.api#error": "client",
      "smithy.api#httpError": 403
    }
  },
  "com.amazonaws.licensemanager#AutomatedDiscoveryInformation": {
    "type": "structure",
    "members": {
      "LastRunTime": {
        "target": "com.amazonaws.licensemanager#DateTime",
        "traits": {
          "smithy.api#documentation": "<p>Time that automated discovery last ran.</p>"
        }
      }
    }
  },

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    }
  },
  "traits": {
    "smithy.api#documentation": "<p>Describes automated discovery.</p>"
  }
},

"com.amazonaws.licensemanager#Boolean": {
  "type": "boolean",
  "traits": {
    "smithy.api#default": false
  }
},

"com.amazonaws.licensemanager#BorrowConfiguration": {
  "type": "structure",
  "members": {
    "AllowEarlyCheckIn": {
      "target": "com.amazonaws.licensemanager#BoxBoolean",
      "traits": {
        "smithy.api#documentation": "<p>Indicates whether early check-ins are allowed.</p>",
        "smithy.api#required": {}
      }
    },
    "MaxTimeToLiveInMinutes": {
      "target": "com.amazonaws.licensemanager#BoxInteger",
      "traits": {
        "smithy.api#documentation": "<p>Maximum time for the borrow configuration, in minutes.</p>",
        "smithy.api#required": {}
      }
    }
  }
},

"traits": {
  "smithy.api#documentation": "<p>Details about a borrow configuration.</p>"
}
},

"com.amazonaws.licensemanager#BoxBoolean": {
  "type": "boolean"
},

"com.amazonaws.licensemanager#BoxInteger": {
  "type": "integer"
},

"com.amazonaws.licensemanager#BoxLong": {
  "type": "long"
},

"com.amazonaws.licensemanager#CheckInLicense": {
  "type": "operation",

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"input": {
  "target": "com.amazonaws.licensemanager#CheckInLicenseRequest"
},
"output": {
  "target": "com.amazonaws.licensemanager#CheckInLicenseResponse"
},
"errors": [
  {
    "target": "com.amazonaws.licensemanager#AccessDeniedException"
  },
  {
    "target": "com.amazonaws.licensemanager#AuthorizationException"
  },
  {
    "target": "com.amazonaws.licensemanager#ConflictException"
  },
  {
    "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
  },
  {
    "target": "com.amazonaws.licensemanager#RateLimitExceededException"
  },
  {
    "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
  },
  {
    "target": "com.amazonaws.licensemanager#ServerInternalException"
  },
  {
    "target": "com.amazonaws.licensemanager#ValidationException"
  }
],
"traits": {
  "smithy.api#documentation": "<p>Checks in the specified license. Check in a license when it is no longer
in use.</p>"
}
},
"com.amazonaws.licensemanager#CheckInLicenseRequest":
{
  "type": "structure",
  "members": {
    "LicenseConsumptionToken": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>License consumption token.</p>",
        "smithy.api#required": {}
      }
    }
  }
}

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    },
    "Beneficiary": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>License beneficiary.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#input": {}
  }
},
"com.amazonaws.licensemanager#CheckInLicenseResponse": {
  "type": "structure",
  "members": {},
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#CheckoutBorrowLicense":
{
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#EntitlementNotAllowedException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
    },
    {
      "target":
"com.amazonaws.licensemanager#RateLimitExceededException"
    }
  ],
}

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    {
      "target": "com.amazonaws.licensemanager#RedirectException"
    },
    {
      "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    },
    {
      "target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
    },
    {
      "target": "com.amazonaws.licensemanager#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Checks out the specified license for offline use.</p>"
  }
},
"com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest": {
  "type": "structure",
  "members":
  {
    "LicenseArn": {
      "target": "com.amazonaws.licensemanager#Arn",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license. The license must use the borrow consumption configuration.</p>",
        "smithy.api#required": {}
      }
    },
    "Entitlements": {
      "target": "com.amazonaws.licensemanager#EntitlementDataList",
      "traits": {
        "smithy.api#documentation": "<p>License entitlements. Partial checkouts are not supported.</p>",
        "smithy.api#required": {}
      }
    },
    "DigitalSignatureMethod": {
      "target": "com.amazonaws.licensemanager#DigitalSignatureMethod",
      "traits": {
        "smithy.api#documentation": "<p>Digital signature method. The possible value is JSON Web Signature (JWS) algorithm PS384.\n    For more information, see <a href=\"https://tools.ietf.org/html/rfc7518#section-3.5\">RFC 7518 Digital Signature with RSASSA-PSS</a>.</p>",
        "smithy.api#required": {}
      }
    }
  },

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"NodeId": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>Node ID.</p>"
  }
},
"CheckoutMetadata": {
  "target": "com.amazonaws.licensemanager#MetadataList",
  "traits": {
    "smithy.api#documentation": "<p>Information about constraints.</p>"
  }
},
"ClientToken": {
  "target": "com.amazonaws.licensemanager#ClientToken",
  "traits": {
    "smithy.api#documentation":
"<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
    "smithy.api#required": {}
  }
},
"traits": {
  "smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse": {
  "type": "structure",
  "members": {
    "LicenseArn": {
      "target": "com.amazonaws.licensemanager#Arn",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
      }
    },
    "LicenseConsumptionToken": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>License consumption token.</p>"
      }
    },
    "EntitlementsAllowed": {
      "target": "com.amazonaws.licensemanager#EntitlementDataList",
      "traits": {
        "smithy.api#documentation": "<p>Allowed license entitlements.</p>"
      }
    }
  },
  "NodeId": {

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    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Node ID.</p>"
    }
  },
  "SignedToken": {
    "target": "com.amazonaws.licensemanager#SignedToken",
    "traits": {
      "smithy.api#documentation": "<p>Signed token.</p>"
    }
  },
  "IssuedAt": {
    "target": "com.amazonaws.licensemanager#ISO8601DateTime",
    "traits": {
      "smithy.api#documentation": "<p>Date and time at which the license checkout
is issued.</p>"
    }
  },
  "Expiration": {
    "target": "com.amazonaws.licensemanager#ISO8601DateTime",
    "traits": {
      "smithy.api#documentation": "<p>Date and time at which the license checkout expires.</p>"
    }
  },
  "CheckoutMetadata": {
    "target": "com.amazonaws.licensemanager#MetadataList",
    "traits": {
      "smithy.api#documentation": "<p>Information about constraints.</p>"
    }
  },
  "traits": {
    "smithy.api#output": {}
  },
  "com.amazonaws.licensemanager#CheckoutLicense": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#CheckoutLicenseRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#CheckoutLicenseResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {

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    "target": "com.amazonaws.licensemanager#AuthorizationException"
  },
  {
    "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
  },
  {
    "target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
  },
  {
    "target": "com.amazonaws.licensemanager#RateLimitExceededException"
  },
  {
    "target": "com.amazonaws.licensemanager#RedirectException"
  },
  {
    "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
  },
  {
    "target":
"com.amazonaws.licensemanager#ServerInternalException"
  },
  {
    "target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
  },
  {
    "target": "com.amazonaws.licensemanager#ValidationException"
  }
],
"traits": {
  "smithy.api#documentation": "<p>Checks out the specified license.</p>\n      <note>\n      <p>If the
account that created the license is the same that is performing the check out, you must\n      specify the account
as the beneficiary.</p>\n      </note>"
}
},
"com.amazonaws.licensemanager#CheckoutLicenseRequest": {
  "type": "structure",
  "members": {
    "ProductSKU": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Product
SKU.</p>",
        "smithy.api#required": {}
      }
    },
    "CheckoutType": {
      "target": "com.amazonaws.licensemanager#CheckoutType",
      "traits": {

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        "smithy.api#documentation": "<p>Checkout type.</p>",
        "smithy.api#required": {}
    }
},
"KeyFingerprint": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
        "smithy.api#documentation": "<p>Key fingerprint identifying the license.</p>",
        "smithy.api#required": {}
    }
},
"Entitlements": {
    "target": "com.amazonaws.licensemanager#EntitlementDataList",
    "traits": {
        "smithy.api#documentation": "<p>License entitlements.</p>",

"smithy.api#required": {}
    }
},
"ClientToken": {
    "target": "com.amazonaws.licensemanager#ClientToken",
    "traits": {
        "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the
idempotency of the request.</p>",
        "smithy.api#required": {}
    }
},
"Beneficiary": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
        "smithy.api#documentation": "<p>License beneficiary.</p>"
    }
},
"NodeId": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
        "smithy.api#documentation": "<p>Node ID.</p>"
    }
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CheckoutLicenseResponse": {
    "type": "structure",
    "members": {

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"CheckoutType": {
  "target": "com.amazonaws.licensemanager#CheckoutType",
  "traits": {
    "smithy.api#documentation": "<p>Checkout type.</p>"
  }
},
"LicenseConsumptionToken": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>License consumption token.</p>"
  }
},
"EntitlementsAllowed": {
  "target": "com.amazonaws.licensemanager#EntitlementDataList",
  "traits": {
    "smithy.api#documentation": "<p>Allowed license entitlements.</p>"
  }
},
"SignedToken": {
  "target": "com.amazonaws.licensemanager#SignedToken",
  "traits": {
    "smithy.api#documentation": "<p>Signed token.</p>"
  }
},
"NodeId": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>Node ID.</p>"
  }
},
"IssuedAt": {
  "target": "com.amazonaws.licensemanager#ISO8601DateTime",
  "traits": {
    "smithy.api#documentation": "<p>Date and time at which the license checkout is issued.</p>"
  }
},
"Expiration": {
  "target": "com.amazonaws.licensemanager#ISO8601DateTime",
  "traits": {
    "smithy.api#documentation": "<p>Date and
time at which the license checkout expires.</p>"
  }
},
"LicenseArn": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the checkout license.</p>"
  }
}

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    }
  },
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#CheckoutType": {
  "type": "enum",
  "members": {
    "PROVISIONAL": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "PROVISIONAL"
      }
    },
    "PERPETUAL": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "PERPETUAL"
      }
    }
  }
},
"com.amazonaws.licensemanager#ClientRequestToken": {
  "type": "string",
  "traits": {
    "smithy.api#length": {
      "min": 1,
      "max": 36
    }
  }
},
"com.amazonaws.licensemanager#ClientToken": {
  "type": "string",
  "traits": {
    "smithy.api#length": {
      "min": 0,
      "max": 2048
    },
    "smithy.api#pattern": "^\\S+$"
  }
},
"com.amazonaws.licensemanager#ConflictException": {
  "type": "structure",
  "members": {
    "Message": {
      "target": "com.amazonaws.licensemanager#Message"
    }
  }
}

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    },
    "traits": {
      "aws.protocols#awsQueryError": {
        "code": "ConflictException",
        "httpResponseCode":
409
      },
      "smithy.api#documentation": "<p>There was a conflict processing the request. Try your request
again.</p>",
      "smithy.api#error": "client",
      "smithy.api#httpError": 409
    }
  },
  "com.amazonaws.licensemanager#ConsumedLicenseSummary": {
    "type": "structure",
    "members": {
      "ResourceType": {
        "target": "com.amazonaws.licensemanager#ResourceType",
        "traits": {
          "smithy.api#documentation": "<p>Resource type of the resource consuming a license.</p>"
        }
      },
      "ConsumedLicenses": {
        "target": "com.amazonaws.licensemanager#BoxLong",
        "traits": {
          "smithy.api#documentation": "<p>Number of licenses consumed by the resource.</p>"
        }
      }
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>Details about license consumption.</p>"
  }
},
"com.amazonaws.licensemanager#ConsumedLicenseSummaryList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanager#ConsumedLicenseSummary"
  }
},
"com.amazonaws.licensemanager#ConsumptionConfiguration": {
  "type": "structure",
  "members": {
    "RenewType": {
      "target": "com.amazonaws.licensemanager#RenewType",
      "traits": {
        "smithy.api#documentation": "<p>Renewal frequency.</p>"
      }
    }
  }
}

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    },
    "ProvisionalConfiguration": {
      "target": "com.amazonaws.licensemanager#ProvisionalConfiguration",
      "traits": {
        "smithy.api#documentation": "<p>Details about a provisional configuration.</p>"
      }
    },
    "BorrowConfiguration": {
      "target": "com.amazonaws.licensemanager#BorrowConfiguration",
      "traits": {
        "smithy.api#documentation": "<p>Details about a borrow configuration.</p>"
      }
    },
    "traits": {
      "smithy.api#documentation": "<p>Details about a consumption configuration.</p>"
    }
  },
  "com.amazonaws.licensemanager#CreateGrant": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#CreateGrantRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#CreateGrantResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target":
"com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
      },
      {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ServerInternalException"
      },
      {
        "target": "com.amazonaws.licensemanager#ValidationException"
      }
    ]
  }
}

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    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Creates a grant for the specified license. A grant shares the use of
license\n entitlements with a specific Amazon Web Services account, an organization, or an\n
organizational unit (OU). For more
information, see <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/granted-
licenses.html\">Granted licenses in License Manager</a> in the <i>License Manager User Guide</i>.</p>"
  }
},
"com.amazonaws.licensemanager#CreateGrantRequest": {
  "type": "structure",
  "members": {
    "ClientToken": {
      "target": "com.amazonaws.licensemanager#ClientToken",
      "traits": {
        "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the
idempotency of the request.</p>",
        "smithy.api#required": {}
      }
    },
    "GrantName": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Grant name.</p>",
        "smithy.api#required": {}
      }
    }
  }
},
"LicenseArn": {
  "target": "com.amazonaws.licensemanager#Arn",
  "traits": {
    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
    "smithy.api#required": {}
  }
},
"Principals": {
  "target": "com.amazonaws.licensemanager#PrincipalArnList",
  "traits": {
    "smithy.api#documentation": "<p>The grant principals. You can specify one of the following as an
Amazon Resource Name\n (ARN):</p>\n <ul>\n <li>\n <p>An Amazon Web Services
account, which includes only the account specified.</p>\n </li>\n </ul>\n <ul>\n <li>\n
<p>An organizational unit (OU), which includes all accounts in the OU.</p>\n </li>\n </ul>\n
<ul>\n <li>\n <p>An organization, which will include all accounts across your organization.</p>\n
</li>\n </ul>",
    "smithy.api#required": {}
  }
}
}

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    },
    "HomeRegion": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Home Region of the grant.</p>",
        "smithy.api#required": {}
      }
    },
    "AllowedOperations": {
      "target": "com.amazonaws.licensemanager#AllowedOperationList",
      "traits": {
        "smithy.api#documentation": "<p>Allowed operations for the grant.</p>",
        "smithy.api#required": {}
      }
    }
  },
  "traits": {
    "smithy.api#input": {}
  }
},
"com.amazonaws.licensemanager#CreateGrantResponse": {
  "type": "structure",
  "members": {
    "GrantArn": {
      "target": "com.amazonaws.licensemanager#Arn",
      "traits": {
        "smithy.api#documentation": "<p>Grant ARN.</p>"
      }
    },
    "Status": {
      "target": "com.amazonaws.licensemanager#GrantStatus",
      "traits": {
        "smithy.api#documentation": "<p>Grant status.</p>"
      }
    },
    "Version": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Grant version.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#CreateGrantVersion":

```

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{
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#CreateGrantVersionRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#CreateGrantVersionResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    },
    {
      "target": "com.amazonaws.licensemanager#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Creates a new version of the specified grant. For more information, see\n    <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/granted-licenses.html\">Granted licenses in License Manager</a> in the <i>License Manager User Guide</i>.</p>"
  }
},
"com.amazonaws.licensemanager#CreateGrantVersionRequest": {
  "type": "structure",
  "members": {
    "ClientToken": {
      "target": "com.amazonaws.licensemanager#ClientToken",
      "traits": {
        "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
      }
    }
  }
}

```

```

},
"GrantArn": {
  "target": "com.amazonaws.licensemanager#Arn",
  "traits": {
    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
    "smithy.api#required": {}
  }
},
"GrantName": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>Grant name.</p>"
  }
},
"AllowedOperations": {
  "target": "com.amazonaws.licensemanager#AllowedOperationList",
  "traits": {
    "smithy.api#documentation": "<p>Allowed operations for the grant.</p>"
  }
},
"Status": {
  "target": "com.amazonaws.licensemanager#GrantStatus",
  "traits": {
    "smithy.api#documentation": "<p>Grant status.</p>"
  }
},
"StatusReason": {
  "target": "com.amazonaws.licensemanager#StatusReasonMessage",
  "traits": {
    "smithy.api#documentation": "<p>Grant status reason.</p>"
  }
},
"SourceVersion": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>Current version of the grant.</p>"
  }
},
"Options": {
  "target": "com.amazonaws.licensemanager#Options",
  "traits": {
    "smithy.api#documentation": "<p>The options specified for the grant.</p>"
  }
}
},
"traits": {
  "smithy.api#input": {}
}
}

```



```

    },
    "com.amazonaws.licensemanager#CreateGrantVersionResponse": {
      "type": "structure",
      "members": {
        "GrantArn": {
          "target": "com.amazonaws.licensemanager#Arn",
          "traits": {
            "smithy.api#documentation": "<p>Grant ARN.</p>"
          }
        },
        "Status": {
          "target": "com.amazonaws.licensemanager#GrantStatus",
          "traits": {
            "smithy.api#documentation": "<p>Grant status.</p>"
          }
        },
        "Version": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>New version of the grant.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#CreateLicense": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#CreateLicenseRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#CreateLicenseResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        }
      ]
    }
  }
}

```

```

    },
    {
      "target": "com.amazonaws.licensemanager#RedirectException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    },
    {
      "target": "com.amazonaws.licensemanager#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Creates a license.</p>"
  }
},
"com.amazonaws.licensemanager#CreateLicenseConfiguration": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#CreateLicenseConfigurationRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#CreateLicenseConfigurationResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Creates a license configuration.</p>\n    <p>A license configuration is an abstraction of a customer license agreement that can be\n    consumed and enforced by License Manager. Components include specifications for the license\n    type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n    Dedicated Instance, Dedicated Host, or"
  }
}

```

all of these), license affinity to host (how long a license must be associated with a host), and the number of licenses purchased and used.

```
    }
  },
  "com.amazonaws.licensemanager#CreateLicenseConfigurationRequest": {
    "type": "structure",
    "members": {
      "Name": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Name of the license configuration.</p>",
          "smithy.api#required": {}
        }
      },
      "Description": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Description of the license configuration.</p>"
        }
      },
      "LicenseCountingType": {
        "target": "com.amazonaws.licensemanager#LicenseCountingType",
        "traits": {
          "smithy.api#documentation": "<p>Dimension used to track the license inventory.</p>",
          "smithy.api#required": {}
        }
      },
      "LicenseCount": {
        "target": "com.amazonaws.licensemanager#BoxLong",
        "traits": {
          "smithy.api#documentation": "<p>Number of licenses managed by the license configuration.</p>"
        }
      },
      "LicenseCountHardLimit": {
        "target": "com.amazonaws.licensemanager#BoxBoolean",
        "traits": {
          "smithy.api#documentation": "<p>Indicates whether hard or soft license enforcement is used. Exceeding a hard limit blocks the launch of new instances.</p>"
        }
      },
      "LicenseRules": {
        "target": "com.amazonaws.licensemanager#StringList",
        "traits": {
          "smithy.api#documentation": "<p>License rules. The syntax is #name=value (for example, #allowedTenancy=EC2-DedicatedHost). The available rules vary by dimension, as follows.</p><ul><li><code>Cores</code> dimension: <code>allowedTenancy</code> |<code>licenseAffinityToHost</code> |<code>maximumCores</code> |</li></ul>"
        }
      }
    }
  }
}
```

```

<code>minimumCores</code>\n          </p>\n          </li>\n          <li>\n          <p>\n
<code>Instances</code> dimension: <code>allowedTenancy</code> | \n          <code>maximumCores</code> |
<code>minimumCores</code> | \n          <code>maximumSockets</code> | <code>minimumSockets</code> | \n
          <code>maximumVcpus</code> | <code>minimumVcpus</code>\n          </p>\n          </li>\n
<li>\n
  <p>\n          <code>Sockets</code> dimension: <code>allowedTenancy</code> | \n
<code>licenseAffinityToHost</code> | \n          <code>maximumSockets</code> |
<code>minimumSockets</code>\n          </p>\n          </li>\n          <li>\n          <p>\n
<code>vCPUs</code> dimension: <code>allowedTenancy</code> | \n
<code>honorVcpuOptimization</code> | \n          <code>maximumVcpus</code> |
<code>minimumVcpus</code>\n          </p>\n          </li>\n          </ul>\n          <p>\n
The unit for <code>licenseAffinityToHost</code> is days and the range is 1 to 180. The possible \n
values for <code>allowedTenancy</code> are <code>EC2-Default</code>, <code>EC2-DedicatedHost</code>, and \n
<code>EC2-DedicatedInstance</code>. The possible values for <code>honorVcpuOptimization</code> are \n
<code>True</code> and <code>False</code>.</p>"

```

```

    }
  },

```

```

"Tags": {
  "target": "com.amazonaws.licensemanager#TagList",
  "traits": {
    "smithy.api#documentation": "<p>Tags to add to the license configuration.</p>"
  }
},
"DisassociateWhenNotFound": {
  "target": "com.amazonaws.licensemanager#BoxBoolean",
  "traits": {
    "smithy.api#documentation": "<p>When true, disassociates a resource when software is
uninstalled.</p>"
  }
},
"ProductInformationList": {
  "target": "com.amazonaws.licensemanager#ProductInformationList",
  "traits": {
    "smithy.api#documentation": "<p>Product information.</p>"
  }
},
"traits": {
  "smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseConfigurationResponse":
{
  "type": "structure",
  "members": {
    "LicenseConfigurationArn": {
      "target": "com.amazonaws.licensemanager#String",

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    "traits": {
      "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
    }
  },
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    },
    {
      "target": "com.amazonaws.licensemanager#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Creates a new license conversion task.</p>"
  }
},
"com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest": {
  "type": "structure",
  "members": {
    "ResourceArn": {
      "target": "com.amazonaws.licensemanager#Arn",
      "traits": {

```

```

    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource you are converting
the license type for.</p>",
    "smithy.api#required": {}
  },
  "SourceLicenseContext": {
    "target": "com.amazonaws.licensemanager#LicenseConversionContext",
    "traits": {
      "smithy.api#documentation": "<p>Information that identifies the license type you are converting
from. \n\n For the structure of the source license, see <a href=\"https://docs.aws.amazon.com/license-
manager/latest/userguide/conversion-procedures.html#conversion-cli\">Convert a license type using the CLI </a> in
the <i>License Manager User Guide</i>.</p>",
      "smithy.api#required": {}
    }
  },
  "DestinationLicenseContext":
{
    "target": "com.amazonaws.licensemanager#LicenseConversionContext",
    "traits": {
      "smithy.api#documentation": "<p>Information that identifies the license type you are converting to.
For the structure of the destination license, see <a href=\"https://docs.aws.amazon.com/license-
manager/latest/userguide/conversion-procedures.html#conversion-cli\">Convert a license type using the CLI </a> in
the <i>License Manager User Guide</i>.</p>",
      "smithy.api#required": {}
    }
  },
  "traits": {
    "smithy.api#input": {}
  }
},
"com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse": {
  "type": "structure",
  "members": {
    "LicenseConversionTaskId": {
      "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",

      "traits": {
        "smithy.api#documentation": "<p>The ID of the created license type conversion task.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator": {
  "type": "operation",

```

```



```

```

    "target": "com.amazonaws.licensemanager#ReportTypeList",
    "traits": {
      "smithy.api#documentation": "<p>Type of reports to generate. The following report types an be
generated:</p>\n    <ul>\n      <li>\n        <p>License configuration report - Reports the number and
details of consumed licenses for a license configuration.</p>\n      </li>\n      <li>\n        <p>Resource
report - Reports the tracked licenses and resource consumption for a license configuration.</p>\n      </li>\n
</ul>",
      "smithy.api#required": {}
    }
  },
  "ReportContext": {
    "target": "com.amazonaws.licensemanager#ReportContext",
    "traits": {
      "smithy.api#documentation": "<p>Defines the type of license configuration the report generator
tracks.</p>",
      "smithy.api#required": {}
    }
  },
  "ReportFrequency": {
    "target": "com.amazonaws.licensemanager#ReportFrequency",
    "traits": {
      "smithy.api#documentation": "<p>Frequency by which reports are generated. Reports can be
generated daily, monthly, or weekly.</p>",
      "smithy.api#required": {}
    }
  },
  "ClientToken": {
    "target": "com.amazonaws.licensemanager#ClientRequestToken",
    "traits": {
      "smithy.api#documentation": "<p>Unique,
case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
      "smithy.api#required": {}
    }
  },
  "Description": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Description of the report generator.</p>"
    }
  },
  "Tags": {
    "target": "com.amazonaws.licensemanager#TagList",
    "traits": {
      "smithy.api#documentation": "<p>Tags to add to the report generator.</p>"
    }
  }
},

```



```

    "traits": {
      "smithy.api#input": {}
    }
  },
  "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse": {
    "type": "structure",
    "members": {
      "LicenseManagerReportGeneratorArn":
    {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the new report
generator.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#CreateLicenseRequest": {
  "type": "structure",
  "members": {
    "LicenseName": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>License name.</p>",
        "smithy.api#required": {}
      }
    },
    "ProductName": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Product
name.</p>",
        "smithy.api#required": {}
      }
    },
    "ProductSKU": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Product SKU.</p>",
        "smithy.api#required": {}
      }
    },
    "Issuer": {
      "target": "com.amazonaws.licensemanager#Issuer",
      "traits": {

```

```

    "smithy.api#documentation": "<p>License issuer.</p>",
    "smithy.api#required": {}
  }
},
"HomeRegion": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>Home Region for the license.</p>",
    "smithy.api#required": {}
  }
}
},
"Validity": {
  "target": "com.amazonaws.licensemanager#DatetimeRange",
  "traits": {
    "smithy.api#documentation": "<p>Date and time range during which the license is valid, in ISO8601-
UTC format.</p>",
    "smithy.api#required": {}
  }
},
"Entitlements": {
  "target": "com.amazonaws.licensemanager#EntitlementList",
  "traits": {
    "smithy.api#documentation": "<p>License entitlements.</p>",
    "smithy.api#required": {}
  }
},
"Beneficiary": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>License beneficiary.</p>",
    "smithy.api#required": {}
  }
},
"ConsumptionConfiguration": {
  "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
  "traits": {
    "smithy.api#documentation": "<p>Configuration for consumption of the license. Choose a provisional
configuration for workloads\n      running with continuous connectivity. Choose a borrow configuration for
workloads with offline\n      usage.</p>",
    "smithy.api#required": {}
  }
},
"LicenseMetadata": {
  "target": "com.amazonaws.licensemanager#MetadataList",
  "traits": {
    "smithy.api#documentation": "<p>Information about the license.</p>"
  }
}

```

```

    },
    "ClientToken": {
      "target": "com.amazonaws.licensemanager#ClientToken",
      "traits": {
        "smithy.api#documentation":
"<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
        "smithy.api#required": {}
      }
    }
  },
  "traits": {
    "smithy.api#input": {}
  }
},
"com.amazonaws.licensemanager#CreateLicenseResponse": {
  "type": "structure",
  "members": {
    "LicenseArn": {
      "target": "com.amazonaws.licensemanager#Arn",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
      }
    },
    "Status": {
      "target": "com.amazonaws.licensemanager#LicenseStatus",
      "traits": {
        "smithy.api#documentation": "<p>License status.</p>"
      }
    },
    "Version": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>License version.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#CreateLicenseVersion": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#CreateLicenseVersionRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#CreateLicenseVersionResponse"
  },
}

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```

"errors": [
  {
    "target": "com.amazonaws.licensemanager#AccessDeniedException"
  },
  {
    "target": "com.amazonaws.licensemanager#AuthorizationException"
  },
  {
    "target": "com.amazonaws.licensemanager#ConflictException"
  },
  {
    "target": "com.amazonaws.licensemanager#RateLimitExceededException"
  },
  {
    "target": "com.amazonaws.licensemanager#RedirectException"
  },
  {
    "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
  },
  {
    "target": "com.amazonaws.licensemanager#ServerInternalException"
  },
  {
    "target": "com.amazonaws.licensemanager#ValidationException"
  }
],
"traits": {
  "smithy.api#documentation": "<p>Creates a new version of the specified license.</p>"
}
},
"com.amazonaws.licensemanager#CreateLicenseVersionRequest": {
  "type": "structure",
  "members": {
    "LicenseArn": {
      "target":
"com.amazonaws.licensemanager#Arn",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
        "smithy.api#required": {}
      }
    },
    "LicenseName": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>License name.</p>",
        "smithy.api#required": {}
      }
    }
  },
}

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```

"ProductName": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>Product name.</p>",
    "smithy.api#required": {}
  }
},
"Issuer": {
  "target": "com.amazonaws.licensemanager#Issuer",
  "traits":
{
  "smithy.api#documentation": "<p>License issuer.</p>",
  "smithy.api#required": {}
}
},
"HomeRegion": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>Home Region of the license.</p>",
    "smithy.api#required": {}
  }
},
"Validity": {
  "target": "com.amazonaws.licensemanager#DatetimeRange",
  "traits": {
    "smithy.api#documentation": "<p>Date and time range during which the license is valid, in ISO8601-
UTC format.</p>",
    "smithy.api#required": {}
  }
},
"LicenseMetadata": {
  "target": "com.amazonaws.licensemanager#MetadataList",
  "traits": {
    "smithy.api#documentation": "<p>Information about the license.</p>"
  }
},
"Entitlements": {
  "target": "com.amazonaws.licensemanager#EntitlementList",
  "traits": {
    "smithy.api#documentation": "<p>License entitlements.</p>",
    "smithy.api#required": {}
  }
},
"ConsumptionConfiguration": {
  "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
  "traits": {
    "smithy.api#documentation": "<p>Configuration for consumption of the license. Choose a provisional
configuration for workloads\n      running with continuous connectivity. Choose a borrow configuration for

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```

workloads with offline\n      usage.</p>",
      "smithy.api#required": {}
    }
  },

  "Status": {
    "target": "com.amazonaws.licensemanager#LicenseStatus",
    "traits": {
      "smithy.api#documentation": "<p>License status.</p>",
      "smithy.api#required": {}
    }
  },
  "ClientToken": {
    "target": "com.amazonaws.licensemanager#ClientToken",
    "traits": {
      "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the
idempotency of the request.</p>",
      "smithy.api#required": {}
    }
  },
  "SourceVersion": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Current version of the license.</p>"
    }
  }
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseVersionResponse": {
  "type": "structure",
  "members": {
    "LicenseArn": {
      "target": "com.amazonaws.licensemanager#Arn",
      "traits": {
        "smithy.api#documentation": "<p>License ARN.</p>"
      }
    },
    "Version": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>New version of the license.</p>"
      }
    }
  },
  "Status": {

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        "target": "com.amazonaws.licensemanager#LicenseStatus",
        "traits": {
          "smithy.api#documentation": "<p>License status.</p>"
        }
      },
    "traits": {
      "smithy.api#output":
    }
  },
  "com.amazonaws.licensemanager#CreateToken": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#CreateTokenRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#CreateTokenResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#RedirectException"
      },
      {
        "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
      },
      {
        "target": "com.amazonaws.licensemanager#ServerInternalException"
      },
      {
        "target": "com.amazonaws.licensemanager#ValidationException"
      }
    ],
    "traits": {
      "smithy.api#documentation": "<p>Creates a long-lived token.</p>\n      <p>A refresh token is a JWT"
    }
  }
}

```

token used to get an access token. With an access token,\n you can call AssumeRoleWithWebIdentity to get role credentials that you can use to \n call License Manager to manage the specified license.</p>

```
    }
  },
  "com.amazonaws.licensemanager#CreateTokenRequest": {
    "type": "structure",
    "members": {
      "LicenseArn": {
        "target": "com.amazonaws.licensemanager#Arn",
        "traits": {
          {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license. The ARN is mapped to the aud claim of the\n JWT token.</p>",
            "smithy.api#required": {}
          }
        },
        "RoleArns": {
          "target": "com.amazonaws.licensemanager#ArnList",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the IAM roles to embed in the token. \n License Manager does not check whether the roles are in use.</p>"
          }
        },
        "ExpirationInDays": {
          "target": "com.amazonaws.licensemanager#Integer",
          "traits": {
            "smithy.api#documentation": "<p>Token expiration, in days, counted from token creation. The default is 365 days.</p>"
          }
        },
        "TokenProperties": {
          "target": "com.amazonaws.licensemanager#MaxSize3StringList",
          "traits": {
            "smithy.api#documentation": "<p>Data specified by the caller to be included in the JWT token. The data is mapped\n to the amr claim of the JWT token.</p>"
          }
        },
        "ClientToken": {
          "target": "com.amazonaws.licensemanager#ClientToken",
          "traits": {
            "smithy.api#documentation": "<p>Idempotency token, valid for 10 minutes.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    }
  }
}
```



```

},
"com.amazonaws.licensemanager#CreateTokenResponse": {
  "type": "structure",
  "members": {
    "TokenId": {
      "target": "com.amazonaws.licensemanager#String",

      "traits": {
        "smithy.api#documentation": "<p>Token ID.</p>"
      }
    },
    "TokenType": {
      "target": "com.amazonaws.licensemanager#TokenType",
      "traits": {
        "smithy.api#documentation": "<p>Token type.</p>"
      }
    },
    "Token": {
      "target": "com.amazonaws.licensemanager#TokenString",
      "traits": {
        "smithy.api#documentation": "<p>Refresh token, encoded as a JWT token.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#DateTime": {
  "type": "timestamp"
},
"com.amazonaws.licensemanager#DatetimeRange": {
  "type": "structure",
  "members": {
    "Begin": {
      "target": "com.amazonaws.licensemanager#ISO8601DateTime",
      "traits": {
        "smithy.api#documentation": "<p>Start of the time range.</p>",
        "smithy.api#required": {}
      }
    },
    "End": {
      "target": "com.amazonaws.licensemanager#ISO8601DateTime",
      "traits": {
        "smithy.api#documentation": "<p>End of the time range.</p>"
      }
    }
  },
  "traits": {}
},

```

```

    "traits": {
      "smithy.api#documentation": "<p>Describes a time range, in ISO8601-UTC format.</p>"
    }
  },
  "com.amazonaws.licensemanager#DeleteGrant": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#DeleteGrantRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#DeleteGrantResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
      },
      {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ServerInternalException"
      },
      {
        "target": "com.amazonaws.licensemanager#ValidationException"
      }
    ],
    "traits": {
      "smithy.api#documentation": "<p>Deletes
the specified grant.</p>"
    }
  },
  "com.amazonaws.licensemanager#DeleteGrantRequest": {
    "type": "structure",
    "members": {
      "GrantArn": {
        "target": "com.amazonaws.licensemanager#Arn",
        "traits": {
          "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
          "smithy.api#required": {}
        }
      }
    }
  }
}

```

```

    }
  },
  "StatusReason": {
    "target": "com.amazonaws.licensemanager#StatusReasonMessage",
    "traits": {
      "smithy.api#documentation": "<p>The Status reason for the delete request.</p>"
    }
  },
  "Version": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Current version of the
grant.</p>",
      "smithy.api#required": {}
    }
  },
  "traits": {
    "smithy.api#input": {}
  }
},
"com.amazonaws.licensemanager#DeleteGrantResponse": {
  "type": "structure",
  "members": {
    "GrantArn": {
      "target": "com.amazonaws.licensemanager#Arn",
      "traits": {
        "smithy.api#documentation": "<p>Grant ARN.</p>"
      }
    },
    "Status": {
      "target": "com.amazonaws.licensemanager#GrantStatus",
      "traits": {
        "smithy.api#documentation": "<p>Grant status.</p>"
      }
    },
    "Version": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation":
"<p>Grant version.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#output": {}
  }
},

```

```

"com.amazonaws.licensemanager#DeleteLicense": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#DeleteLicenseRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#DeleteLicenseResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#ConflictException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    }
  ],
  {
    "target": "com.amazonaws.licensemanager#RateLimitExceededException"
  },
  {
    "target": "com.amazonaws.licensemanager#RedirectException"
  },
  {
    "target": "com.amazonaws.licensemanager#ServerInternalException"
  },
  {
    "target": "com.amazonaws.licensemanager#ValidationException"
  }
],
  "traits": {
    "smithy.api#documentation": "<p>Deletes the specified license.</p>"
  }
},
"com.amazonaws.licensemanager#DeleteLicenseConfiguration": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse"
  },

```

```

"errors": [
  {
    "target": "com.amazonaws.licensemanager#AccessDeniedException"
  },
  {
    "target": "com.amazonaws.licensemanager#AuthorizationException"
  },
  {
    "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
  },
  {
    "target": "com.amazonaws.licensemanager#RateLimitExceededException"
  },
  {
    "target": "com.amazonaws.licensemanager#ServerInternalException"
  }
],
"traits": {
  "smithy.api#documentation": "<p>Deletes the specified license configuration.</p>\n    <p>You cannot delete a license configuration that is in use.</p>"
}
},
"com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest": {
  "type": "structure",
  "members":
{
  "LicenseConfigurationArn": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>ID of the license configuration.</p>",
      "smithy.api#required": {}
    }
  }
},
  "traits": {
    "smithy.api#input": {}
  }
},
"com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse": {
  "type": "structure",
  "members": {},
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator": {
  "type": "operation",
  "input": {

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```

    "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    },
    {
      "target": "com.amazonaws.licensemanager#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Deletes the specified report generator.</p>\n    <p>This action deletes the report generator, which stops it from generating future reports.\n    The action cannot be reversed. It has no effect on the previous reports from this generator.</p>"
  }
},
"com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest": {
  "type": "structure",
  "members": {
    "LicenseManagerReportGeneratorArn": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator to be deleted.</p>",
        "smithy.api#required": {}
      }
    }
  }
}

```

```

    },
    "traits": {

"smithy.api#input": { }
    }
  },
  "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse": {
    "type": "structure",
    "members": {},
    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanager#DeleteLicenseRequest": {
    "type": "structure",
    "members": {
      "LicenseArn": {
        "target": "com.amazonaws.licensemanager#Arn",
        "traits": {
          "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
          "smithy.api#required": {}
        }
      },
      "SourceVersion": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Current version of the license.</p>",
          "smithy.api#required":
{}
        }
      }
    },
    "traits": {
      "smithy.api#input": {}
    }
  },
  "com.amazonaws.licensemanager#DeleteLicenseResponse": {
    "type": "structure",
    "members": {
      "Status": {
        "target": "com.amazonaws.licensemanager#LicenseDeletionStatus",
        "traits": {
          "smithy.api#documentation": "<p>License status.</p>"
        }
      },
      "DeletionDate": {
        "target": "com.amazonaws.licensemanager#ISO8601DateTime",
        "traits": {

```

```

        "smithy.api#documentation": "<p>Date when the license is deleted.</p>"
    }
}
},
"traits": {
    "smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#DeleteToken": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#DeleteTokenRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#DeleteTokenResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#RedirectException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Deletes the specified token. Must be called in the license home
Region.</p>"
    }
},
"com.amazonaws.licensemanager#DeleteTokenRequest": {
    "type": "structure",
    "members": {

```



```

    "tokenId": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Token ID.</p>",
        "smithy.api#required": {}
      }
    }
  },
  "traits": {
    "smithy.api#input": {}
  }
},
"com.amazonaws.licensemanager#DeleteTokenResponse": {
  "type": "structure",
  "members": {},
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#DigitalSignatureMethod": {
  "type": "enum",
  "members": {
    "JWT_PS384": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "JWT_PS384"
      }
    }
  }
},
"com.amazonaws.licensemanager#Entitlement": {
  "type": "structure",
  "members": {
    "Name": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Entitlement name.</p>",
        "smithy.api#required": {}
      }
    },
    "Value": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Entitlement resource. Use only
if the unit is None.</p>"
      }
    }
  },

```

```

"MaxCount": {
  "target": "com.amazonaws.licensemanager#Long",
  "traits": {
    "smithy.api#documentation": "<p>Maximum entitlement count. Use if the unit is not None.</p>"
  }
},
"Overage": {
  "target": "com.amazonaws.licensemanager#BoxBoolean",
  "traits": {
    "smithy.api#documentation": "<p>Indicates whether overages are allowed.</p>"
  }
},
"Unit": {
  "target": "com.amazonaws.licensemanager#EntitlementUnit",
  "traits": {
    "smithy.api#documentation": "<p>Entitlement unit.</p>",
    "smithy.api#required": {}
  }
},
"AllowCheckIn": {
  "target":
"com.amazonaws.licensemanager#BoxBoolean",
  "traits": {
    "smithy.api#documentation": "<p>Indicates whether check-ins are allowed.</p>"
  }
},
"traits": {
  "smithy.api#documentation": "<p>Describes a resource entitled for use with a license.</p>"
}
},
"com.amazonaws.licensemanager#EntitlementData": {
  "type": "structure",
  "members": {
    "Name": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Entitlement data name.</p>",
        "smithy.api#required": {}
      }
    },
    "Value": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Entitlement
data value.</p>"
      }
    }
  },
}

```

```

    "Unit": {
      "target": "com.amazonaws.licensemanager#EntitlementDataUnit",
      "traits": {
        "smithy.api#documentation": "<p>Entitlement data unit.</p>",
        "smithy.api#required": {}
      }
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>Data associated with an entitlement resource.</p>"
  }
},
"com.amazonaws.licensemanager#EntitlementDataList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanager#EntitlementData"
  }
},
"com.amazonaws.licensemanager#EntitlementDataUnit": {
  "type": "enum",
  "members": {
    "COUNT": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "Count"
      }
    },
    "NONE": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "None"
      }
    },
    "SECONDS": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "Seconds"
      }
    },
    "MICROSECONDS": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "Microseconds"
      }
    },
    "MILLISECONDS": {
      "target": "smithy.api#Unit",

```

```

    "traits": {
      "smithy.api#enumValue": "Milliseconds"
    }
  },
  "BYTES": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Bytes"
    }
  },
  "KILOBYTES": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Kilobytes"
    }
  },
  "MEGABYTES": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Megabytes"
    }
  },
  "GIGABYTES": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Gigabytes"
    }
  },
  "TERABYTES": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Terabytes"
    }
  },
  "BITS":
  {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Bits"
    }
  },
  "KILOBITS": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Kilobits"
    }
  },
  "MEGABITS": {

```

```

    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Megabits"
    }
  },
  "GIGABITS": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Gigabits"
    }
  },
  "TERABITS": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Terabits"
    }
  }
},
"PERCENT": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "Percent"
  }
},
"BYTES_PER_SECOND": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "Bytes/Second"
  }
},
"KILOBYTES_PER_SECOND": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "Kilobytes/Second"
  }
},
"MEGABYTES_PER_SECOND": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "Megabytes/Second"
  }
},
"GIGABYTES_PER_SECOND": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "Gigabytes/Second"
  }
},

```

```

"TERABYTES_PER_SECOND": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "Terabytes/Second"
  }
},
"BITS_PER_SECOND": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "Bits/Second"
  }
},
"KILOBITS_PER_SECOND": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "Kilobits/Second"
  }
},
"MEGABITS_PER_SECOND": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue":
"Megabits/Second"
  }
},
"GIGABITS_PER_SECOND": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "Gigabits/Second"
  }
},
"TERABITS_PER_SECOND": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "Terabits/Second"
  }
},
"COUNT_PER_SECOND": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "Count/Second"
  }
}
},
"com.amazonaws.licensemanager#EntitlementList": {
  "type": "list",
  "member": {

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```

        "target": "com.amazonaws.licensemanager#Entitlement"
    }
},
"com.amazonaws.licensemanager#EntitlementNotAllowedException":
{
    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>The entitlement is not allowed.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
    }
},
"com.amazonaws.licensemanager#EntitlementUnit": {
    "type": "enum",
    "members": {
        "COUNT": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Count"
            }
        },
        "NONE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "None"
            }
        },
        "SECONDS":
    {
        "target": "smithy.api#Unit",
        "traits": {
            "smithy.api#enumValue": "Seconds"
        }
    },
        "MICROSECONDS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Microseconds"
            }
        },
        "MILLISECONDS": {
            "target": "smithy.api#Unit",
            "traits": {

```

```

    "smithy.api#enumValue": "Milliseconds"
  }
},
"BYTES": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "Bytes"
  }
},
"KILOBYTES": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "Kilobytes"
  }
},
"MEGABYTES": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "Megabytes"
  }
},
"GIGABYTES": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "Gigabytes"
  }
},
"TERABYTES": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "Terabytes"
  }
},
"BITS": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "Bits"
  }
},
"KILOBITS": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "Kilobits"
  }
},
"MEGABITS": {
  "target": "smithy.api#Unit",

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```

    "traits": {
      "smithy.api#enumValue": "Megabits"
    }
  },
  "GIGABITS": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Gigabits"
    }
  },
  "TERABITS": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Terabits"
    }
  },
  "PERCENT": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Percent"
    }
  },
  "BYTES_PER_SECOND": {
    "target":
"smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Bytes/Second"
    }
  },
  "KILOBYTES_PER_SECOND": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Kilobytes/Second"
    }
  },
  "MEGABYTES_PER_SECOND": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Megabytes/Second"
    }
  },
  "GIGABYTES_PER_SECOND": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Gigabytes/Second"
    }
  },
  "TERABYTES_PER_SECOND": {

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        "target": "smithy.api#Unit",
        "traits": {
"smithy.api#enumValue": "Terabytes/Second"
        }
    },
    "BITS_PER_SECOND": {
        "target": "smithy.api#Unit",
        "traits": {
            "smithy.api#enumValue": "Bits/Second"
        }
    },
    "KILOBITS_PER_SECOND": {
        "target": "smithy.api#Unit",
        "traits": {
            "smithy.api#enumValue": "Kilobits/Second"
        }
    },
    "MEGABITS_PER_SECOND": {
        "target": "smithy.api#Unit",
        "traits": {
            "smithy.api#enumValue": "Megabits/Second"
        }
    },
    "GIGABITS_PER_SECOND": {
        "target": "smithy.api#Unit",
        "traits": {
            "smithy.api#enumValue": "Gigabits/Second"
        }
    },
    "TERABITS_PER_SECOND": {
        "target": "smithy.api#Unit",
        "traits": {
            "smithy.api#enumValue": "Terabits/Second"
        }
    },
    "COUNT_PER_SECOND": {
        "target": "smithy.api#Unit",
        "traits": {
            "smithy.api#enumValue": "Count/Second"
        }
    }
},
"com.amazonaws.licensemanager#EntitlementUsage": {
    "type": "structure",
    "members": {

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    "Name": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Entitlement usage name.</p>",
        "smithy.api#required": {}
      }
    },
    "ConsumedValue": {
      "target": "com.amazonaws.licensemanager#String",

      "traits": {
        "smithy.api#documentation": "<p>Resource usage consumed.</p>",
        "smithy.api#required": {}
      }
    },
    "MaxCount": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Maximum entitlement usage count.</p>"
      }
    },
    "Unit": {
      "target": "com.amazonaws.licensemanager#EntitlementDataUnit",
      "traits": {
        "smithy.api#documentation": "<p>Entitlement usage unit.</p>",
        "smithy.api#required": {}
      }
    },
    "traits": {
      "smithy.api#documentation": "<p>Usage associated with an entitlement resource.</p>"
    }
  },
  "com.amazonaws.licensemanager#EntitlementUsageList":
  {
    "type": "list",
    "member": {
      "target": "com.amazonaws.licensemanager#EntitlementUsage"
    }
  },
  "com.amazonaws.licensemanager#ExtendLicenseConsumption": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse"
    }
  },

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"errors": [
  {
    "target": "com.amazonaws.licensemanager#AccessDeniedException"
  },
  {
    "target": "com.amazonaws.licensemanager#AuthorizationException"
  },
  {
    "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
  },
  {
    "target": "com.amazonaws.licensemanager#RateLimitExceededException"
  },
  {
    "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
  },
  {
    "target": "com.amazonaws.licensemanager#ServerInternalException"
  },
  {
    "target": "com.amazonaws.licensemanager#ValidationException"
  }
],
"traits": {
  "smithy.api#documentation": "<p>Extends the expiration date for license consumption.</p>"
}
},
"com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest": {
  "type": "structure",
  "members": {
    "LicenseConsumptionToken": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>License consumption token.</p>",
        "smithy.api#required": {}
      }
    }
  },
  "DryRun": {
    "target": "com.amazonaws.licensemanager#Boolean",
    "traits": {
      "smithy.api#default": false,
      "smithy.api#documentation": "<p>Checks whether you have the required permissions for the action, without actually making the request. Provides an error response if you do not have the required permissions.</p>"
    }
  }
},
"traits": {

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    "smithy.api#input": {}
  }
},
"com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse": {
  "type": "structure",
  "members": {
    "LicenseConsumptionToken": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>License consumption token.</p>"
      }
    },
    "Expiration": {
      "target": "com.amazonaws.licensemanager#ISO8601DateTime",
      "traits": {
        "smithy.api#documentation": "<p>Date and time at which the license consumption expires.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#FailedDependencyException": {
  "type": "structure",
  "members": {
    "Message": {
      "target": "com.amazonaws.licensemanager#Message"
    },
    "ErrorCode": {
      "target": "com.amazonaws.licensemanager#String"
    }
  },
  "traits": {
    "aws.protocols#awsQueryError": {
      "code": "FailedDependency",
      "httpResponseCode": 424
    },
    "smithy.api#documentation":
    "<p>A dependency required to run the API is missing.</p>",
    "smithy.api#error": "client",
    "smithy.api#httpError": 424
  }
},
"com.amazonaws.licensemanager#Filter": {
  "type": "structure",
  "members": {

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    "Name": {
      "target": "com.amazonaws.licensemanager#FilterName",
      "traits": {
        "smithy.api#documentation": "<p>Name of the filter. Filter names are case-sensitive.</p>"
      }
    },
    "Values": {
      "target": "com.amazonaws.licensemanager#FilterValues",
      "traits": {
        "smithy.api#documentation": "<p>The value of the filter, which is case-sensitive. You can only
specify one value for the filter.</p>"
      }
    },
    "traits": {
      "smithy.api#documentation": "<p>A filter
name and value pair that is used to return more specific results from a\n      describe operation. Filters can be used
to match a set of resources by specific criteria,\n      such as tags, attributes, or IDs.</p>"
    },
    "com.amazonaws.licensemanager#FilterLimitExceededException": {
      "type": "structure",
      "members": {
        "Message": {
          "target": "com.amazonaws.licensemanager#Message"
        }
      },
      "traits": {
        "aws.protocols#awsQueryError": {
          "code": "FilterLimitExceeded",
          "httpResponseCode": 400
        },
        "smithy.api#documentation": "<p>The request uses too many filters or too many filter values.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
      }
    },
    "com.amazonaws.licensemanager#FilterList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanager#Filter"
      }
    },
    "com.amazonaws.licensemanager#FilterName": {
      "type": "string"
    },
    "com.amazonaws.licensemanager#FilterValue": {
      "type": "string"
    }

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},
"com.amazonaws.licensemanager#FilterValues": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanager#FilterValue",
    "traits": {
      "smithy.api#xmlName": "item"
    }
  }
},
"com.amazonaws.licensemanager#Filters": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanager#Filter",
    "traits": {
      "smithy.api#xmlName": "item"
    }
  }
},
"com.amazonaws.licensemanager#GetAccessToken": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#GetAccessTokenRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#GetAccessTokenResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    },
    {
      "target": "com.amazonaws.licensemanager#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Gets a temporary access token to use with AssumeRoleWithWebIdentity. Access

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tokens\n      are valid for one hour.</p>"
    }
  },
  "com.amazonaws.licensemanager#GetAccessTokenRequest": {
    "type": "structure",
    "members": {
      "Token": {
        "target": "com.amazonaws.licensemanager#TokenString",
        "traits": {
          "smithy.api#documentation": "<p>Refresh token, encoded as a JWT token.</p>",
          "smithy.api#required": {}
        }
      }
    },
    "TokenProperties": {
      "target": "com.amazonaws.licensemanager#MaxSize3StringList",
      "traits": {
        "smithy.api#documentation": "<p>Token properties to validate against those present in the JWT
token.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#input": {}
  }
},
"com.amazonaws.licensemanager#GetAccessTokenResponse":
{
  "type": "structure",
  "members": {
    "AccessToken": {
      "target": "com.amazonaws.licensemanager#TokenString",
      "traits": {
        "smithy.api#documentation": "<p>Temporary access token.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#GetGrant": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#GetGrantRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#GetGrantResponse"
  },
}

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"errors": [
  {
    "target": "com.amazonaws.licensemanager#AccessDeniedException"
  },
  {
    "target": "com.amazonaws.licensemanager#AuthorizationException"
  },
  {
    "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
  },
  {
    "target": "com.amazonaws.licensemanager#RateLimitExceededException"
  },
  {
    "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
  },
  {
    "target": "com.amazonaws.licensemanager#ServerInternalException"
  },
  {
    "target": "com.amazonaws.licensemanager#ValidationException"
  }
],
"traits": {
  "smithy.api#documentation": "<p>Gets detailed information about the specified grant.</p>"
}
},
"com.amazonaws.licensemanager#GetGrantRequest": {
  "type": "structure",
  "members": {
    "GrantArn": {
      "target": "com.amazonaws.licensemanager#Arn",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
        "smithy.api#required": {}
      }
    },
    "Version": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Grant version.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#input": {}
  }
}

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    },
    "com.amazonaws.licensemanager#GetGrantResponse": {
      "type": "structure",
      "members": {
        "Grant": {
          "target": "com.amazonaws.licensemanager#Grant",
          "traits": {
            "smithy.api#documentation": "<p>Grant details.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#GetLicense": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#GetLicenseRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#GetLicenseResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
      ],
      {
        "target": "com.amazonaws.licensemanager#ValidationException"
      }
    ],
    "traits": {
      "smithy.api#documentation": "<p>Gets detailed information about the specified license.</p>"
    }
  }

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```

    },
    "com.amazonaws.licensemanager#GetLicenseConfiguration": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#GetLicenseConfigurationRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#GetLicenseConfigurationResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Gets detailed information about the specified license configuration.</p>"
      }
    },
    "com.amazonaws.licensemanager#GetLicenseConfigurationRequest": {
      "type": "structure",
      "members": {
        "LicenseConfigurationArn": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
  },

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"com.amazonaws.licensemanager#GetLicenseConfigurationResponse": {
  "type": "structure",
  "members": {
    "LicenseConfigurationId": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Unique ID for the license configuration.</p>"
      }
    },
    "LicenseConfigurationArn": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
      }
    },
    "Name": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Name of the license configuration.</p>"
      }
    },
    "Description": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Description of the license configuration.</p>"
      }
    },
    "LicenseCountingType": {
      "target": "com.amazonaws.licensemanager#LicenseCountingType",
      "traits": {
        "smithy.api#documentation": "<p>Dimension for which the licenses are counted.</p>"
      }
    },
    "LicenseRules": {
      "target": "com.amazonaws.licensemanager#StringList",
      "traits": {
        "smithy.api#documentation": "<p>License rules.</p>"
      }
    },
    "LicenseCount": {
      "target": "com.amazonaws.licensemanager#BoxLong",
      "traits": {
        "smithy.api#documentation": "<p>Number of available licenses.</p>"
      }
    },
    "LicenseCountHardLimit": {
      "target": "com.amazonaws.licensemanager#BoxBoolean",

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    "traits": {
      "smithy.api#documentation": "<p>Sets the number of available licenses as a hard limit.</p>"
    }
  },
  "ConsumedLicenses": {
    "target": "com.amazonaws.licensemanager#BoxLong",
    "traits": {
      "smithy.api#documentation": "<p>Number of licenses assigned to resources.</p>"
    }
  },
  "Status": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>License configuration status.</p>"
    }
  }
},
"OwnerAccountId": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>Account ID of the owner of the license configuration.</p>"
  }
},
"ConsumedLicenseSummaryList": {
  "target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
  "traits": {
    "smithy.api#documentation": "<p>Summaries of the licenses consumed by resources.</p>"
  }
},
"ManagedResourceSummaryList": {
  "target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
  "traits": {
    "smithy.api#documentation": "<p>Summaries of the managed resources.</p>"
  }
},
"Tags": {
  "target": "com.amazonaws.licensemanager#TagList",
  "traits": {
    "smithy.api#documentation": "<p>Tags for the license configuration.</p>"
  }
},
"ProductInformationList": {
  "target": "com.amazonaws.licensemanager#ProductInformationList",
  "traits": {
    "smithy.api#documentation": "<p>Product information.</p>"
  }
},
"AutomatedDiscoveryInformation": {

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    "target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
    "traits": {
      "smithy.api#documentation": "<p>Automated discovery information.</p>"
    }
  },
  "DisassociateWhenNotFound": {
    "target": "com.amazonaws.licensemanager#BoxBoolean",
    "traits": {
      "smithy.api#documentation": "<p>When
true, disassociates a resource when software is uninstalled.</p>"
    }
  },
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#GetLicenseConversionTask": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#GetLicenseConversionTaskRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#GetLicenseConversionTaskResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Gets information about the specified license type conversion task.</p>"
  }
},
"com.amazonaws.licensemanager#GetLicenseConversionTaskRequest": {

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"type": "structure",
"members": {
  "LicenseConversionTaskId": {
    "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
    "traits": {
      "smithy.api#documentation": "<p>ID of the license type conversion task to retrieve information
on.</p>",
      "smithy.api#required": {}
    }
  },
  "traits": {
    "smithy.api#input": {}
  }
},
"com.amazonaws.licensemanager#GetLicenseConversionTaskResponse": {
  "type": "structure",
  "members": {
    "LicenseConversionTaskId": {
      "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
      "traits": {
        "smithy.api#documentation": "<p>ID of the license type conversion task.</p>"
      }
    },
    "ResourceArn": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the resources the license
conversion task is associated with.</p>"
      }
    },
    "SourceLicenseContext": {
      "target": "com.amazonaws.licensemanager#LicenseConversionContext",
      "traits": {
        "smithy.api#documentation": "<p>Information
about the license type converted from.</p>"
      }
    },
    "DestinationLicenseContext": {
      "target": "com.amazonaws.licensemanager#LicenseConversionContext",
      "traits": {
        "smithy.api#documentation": "<p>Information about the license type converted to.</p>"
      }
    },
    "StatusMessage": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>The status message for the conversion task.</p>"
      }
    }
  }
}

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    }
  },
  "Status": {
    "target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
    "traits": {
      "smithy.api#documentation": "<p>Status of the license type conversion task.</p>"
    }
  },
  "StartTime": {
    "target": "com.amazonaws.licensemanager#DateTime",
    "traits": {
      "smithy.api#documentation": "<p>Time at which the license type conversion task was started .</p>"
    }
  },
  "LicenseConversionTime": {
    "target": "com.amazonaws.licensemanager#DateTime",
    "traits": {
      "smithy.api#documentation": "<p>Amount of time to complete the license type conversion.</p>"
    }
  },
  "EndTime": {
    "target": "com.amazonaws.licensemanager#DateTime",
    "traits": {
      "smithy.api#documentation": "<p>Time at which the license type conversion task was
completed.</p>"
    }
  },
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#GetLicenseManagerReportGenerator":
{
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    }
  ]
}

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    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    },
    {
      "target": "com.amazonaws.licensemanager#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Gets information about the specified report generator.</p>"
  }
},
"com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest": {
  "type": "structure",
  "members": {
    "LicenseManagerReportGeneratorArn": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator.</p>",
        "smithy.api#required":
      }
    }
  }
},
"traits": {
  "smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse": {
  "type": "structure",
  "members": {
    "ReportGenerator": {
      "target": "com.amazonaws.licensemanager#ReportGenerator",
      "traits": {
        "smithy.api#documentation": "<p>A report generator that creates periodic reports about your license

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configurations.</p>"
    }
  }
},
"traits": {
  "smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetLicenseRequest": {
  "type": "structure",
  "members": {
    "LicenseArn": {
      "target": "com.amazonaws.licensemanager#Arn",
      "traits": {
"smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
        "smithy.api#required": {}
      }
    },
    "Version": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>License version.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#input": {}
  }
},
"com.amazonaws.licensemanager#GetLicenseResponse": {
  "type": "structure",
  "members": {
    "License": {
      "target": "com.amazonaws.licensemanager#License",
      "traits": {
        "smithy.api#documentation": "<p>License details.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#GetLicenseUsage": {
  "type": "operation",
  "input": {

```

```

    "target": "com.amazonaws.licensemanager#GetLicenseUsageRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#GetLicenseUsageResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    },
    {
      "target": "com.amazonaws.licensemanager#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Gets detailed information about the usage of the specified license.</p>"
  },
  "com.amazonaws.licensemanager#GetLicenseUsageRequest": {
    "type": "structure",
    "members": {
      "LicenseArn": {
        "target": "com.amazonaws.licensemanager#Arn",
        "traits": {
          "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
          "smithy.api#required": {}
        }
      }
    },
    "traits": {
      "smithy.api#input": {}
    }
  },
  "com.amazonaws.licensemanager#GetLicenseUsageResponse": {
    "type": "structure",
    "members": {

```

```

    "LicenseUsage": {
      "target":
"com.amazonaws.licensemanager#LicenseUsage",
      "traits": {
        "smithy.api#documentation": "<p>License usage details.</p>"
      }
    },
    "traits": {
      "smithy.api#output": {}
    },
    "com.amazonaws.licensemanager#GetServiceSettings": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#GetServiceSettingsRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#GetServiceSettingsResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Gets the License Manager settings for the current Region.</p>"
      }
    },
    "com.amazonaws.licensemanager#GetServiceSettingsRequest": {
      "type": "structure",
      "members": {},
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#GetServiceSettingsResponse": {
      "type": "structure",
      "members": {

```

```

    "S3BucketArn": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Regional S3 bucket path for storing reports, license trail event data,
discovery data,\n      and so on.</p>"
      }
    },
    "SnsTopicArn": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>SNS topic configured to receive notifications from License
Manager.</p>"
      }
    },
    "OrganizationConfiguration": {
      "target": "com.amazonaws.licensemanager#OrganizationConfiguration",
      "traits": {
        "smithy.api#documentation": "<p>Indicates whether Organizations is integrated with License
Manager for\n      cross-account discovery.</p>"
      }
    },
    "EnableCrossAccountsDiscovery": {
      "target": "com.amazonaws.licensemanager#BoxBoolean",
      "traits": {
        "smithy.api#documentation": "<p>Indicates whether cross-account discovery is enabled.</p>"
      }
    },
    "LicenseManagerResourceShareArn": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource share. The License
Manager management account \n      provides member accounts with access to this share.</p>"
      }
    },
    "traits": {
      "smithy.api#output": {}
    },
    "com.amazonaws.licensemanager#Grant": {
      "type": "structure",
      "members": {
        "GrantArn": {
          "target": "com.amazonaws.licensemanager#Arn",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",

```

```

        "smithy.api#required": {}
    }
},
"GrantName": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
        "smithy.api#documentation": "<p>Grant name.</p>",
        "smithy.api#required": {}
    }
},
"ParentArn": {
    "target": "com.amazonaws.licensemanager#Arn",
    "traits": {
        "smithy.api#documentation": "<p>Parent ARN.</p>",
        "smithy.api#required": {}
    }
},
"LicenseArn": {
    "target": "com.amazonaws.licensemanager#Arn",
    "traits": {
        "smithy.api#documentation": "<p>License ARN.</p>",
        "smithy.api#required": {}
    }
},
"GranteePrincipalArn": {
    "target": "com.amazonaws.licensemanager#Arn",
    "traits": {
        "smithy.api#documentation": "<p>The grantee principal ARN.</p>",
        "smithy.api#required": {}
    }
},
"HomeRegion": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
        "smithy.api#documentation": "<p>Home Region of the grant.</p>",
        "smithy.api#required": {}
    }
},
"GrantStatus": {
    "target": "com.amazonaws.licensemanager#GrantStatus",
    "traits": {
        "smithy.api#documentation": "<p>Grant status.</p>",
        "smithy.api#required": {}
    }
},
"StatusReason": {

```

```

    "target": "com.amazonaws.licensemanager#StatusReasonMessage",
    "traits": {
      "smithy.api#documentation": "<p>Grant status reason.</p>"
    }
  },
  "Version": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Grant version.</p>",
      "smithy.api#required": {}
    }
  },
  "GrantedOperations": {
    "target": "com.amazonaws.licensemanager#AllowedOperationList",
    "traits": {
      "smithy.api#documentation": "<p>Granted operations.</p>",
      "smithy.api#required": {}
    }
  },
  "Options": {
    "target": "com.amazonaws.licensemanager#Options",
    "traits": {
      "smithy.api#documentation": "<p>The options specified for the grant.</p>"
    }
  }
},
"traits": {
  "smithy.api#documentation":
"<p>Describes a grant.</p>"
}
},
"com.amazonaws.licensemanager#GrantList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanager#Grant"
  }
},
"com.amazonaws.licensemanager#GrantStatus": {
  "type": "enum",
  "members": {
    "PENDING_WORKFLOW": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "PENDING_WORKFLOW"
      }
    },
    "PENDING_ACCEPT": {
      "target": "smithy.api#Unit",

```

```

    "traits": {
      "smithy.api#enumValue": "PENDING_ACCEPT"
    }
  },
  "REJECTED": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "REJECTED"
    }
  },
  "ACTIVE": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "ACTIVE"
    }
  },
  "FAILED_WORKFLOW": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "FAILED_WORKFLOW"
    }
  },
  "DELETED": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "DELETED"
    }
  },
  "PENDING_DELETE": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "PENDING_DELETE"
    }
  },
  "DISABLED": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "DISABLED"
    }
  },
  "WORKFLOW_COMPLETED": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "WORKFLOW_COMPLETED"
    }
  }
}

```



```

    }
  },
  "com.amazonaws.licensemanager#GrantedLicense": {
    "type": "structure",
    "members": {
      "LicenseArn": {
        "target": "com.amazonaws.licensemanager#Arn",
        "traits": {
          "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
        }
      },
      "LicenseName": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>License name.</p>"
        }
      }
    }
  },
  "ProductName": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Product name.</p>"
    }
  },
  "ProductSKU": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Product SKU.</p>"
    }
  },
  "Issuer": {
    "target": "com.amazonaws.licensemanager#IssuerDetails",
    "traits": {
      "smithy.api#documentation": "<p>Granted license issuer.</p>"
    }
  },
  "HomeRegion": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Home Region of the granted license.</p>"
    }
  },
  "Status": {
    "target": "com.amazonaws.licensemanager#LicenseStatus",
    "traits": {
      "smithy.api#documentation": "<p>Granted license status.</p>"
    }
  }
}

```

```

    },
    "Validity": {
      "target": "com.amazonaws.licensemanager#DatetimeRange",
      "traits": {
        "smithy.api#documentation": "<p>Date and time range during which the granted license is valid, in ISO8601-UTC format.</p>"
      }
    },
    "Beneficiary": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Granted license beneficiary.</p>"
      }
    },
    "Entitlements": {
      "target": "com.amazonaws.licensemanager#EntitlementList",
      "traits": {
        "smithy.api#documentation": "<p>License entitlements.</p>"
      }
    },
    "ConsumptionConfiguration": {
      "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
      "traits": {
        "smithy.api#documentation": "<p>Configuration for consumption of the license.</p>"
      }
    },
    "LicenseMetadata": {
      "target": "com.amazonaws.licensemanager#MetadataList",
      "traits": {
        "smithy.api#documentation": "<p>Granted license metadata.</p>"
      }
    },
    "CreateTime": {
      "target": "com.amazonaws.licensemanager#ISO8601DateTime",
      "traits": {
        "smithy.api#documentation": "<p>Creation time of the granted license.</p>"
      }
    }
  }
},
"Version": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>Version of the granted license.</p>"
  }
},
"ReceivedMetadata": {
  "target": "com.amazonaws.licensemanager#ReceivedMetadata",
  "traits": {

```

```

        "smithy.api#documentation": "<p>Granted license received metadata.</p>"
    }
}
},
"traits": {
    "smithy.api#documentation": "<p>Describes a license that is granted to a grantee.</p>"
}
},
"com.amazonaws.licensemanager#GrantedLicenseList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#GrantedLicense"
    }
},
"com.amazonaws.licensemanager#ISO8601DateTime":
{
    "type": "string",
    "traits": {
        "smithy.api#length": {
            "min": 0,
            "max": 50
        },
        "smithy.api#pattern": "^(-?(?:[1-9][0-9]*)?[0-9]{4})-(1[0-2]|0[1-9])-(3[0-1]|0[1-9]|[1-2][0-9])T(2[0-3]|[0-1][0-9]):([0-5][0-9]):([0-5][0-9])(\\.([0-9]+)?(?:Z[+-](?:2[ 0-3]|[0-1][0-9]):[0-5][0-9])+$)"
    }
},
"com.amazonaws.licensemanager#Integer": {
    "type": "integer"
},
"com.amazonaws.licensemanager#InvalidParameterValueException": {
    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "aws.protocols#awsQueryError": {
            "code": "InvalidParameterValueProvided",
            "httpResponseCode": 400
        },
        "smithy.api#documentation":
"<p>One or more parameter values are not valid.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
    }
},
"com.amazonaws.licensemanager#InvalidResourceStateException": {

```

```

"type": "structure",
"members": {
  "Message": {
    "target": "com.amazonaws.licensemanager#Message"
  }
},
"traits": {
  "aws.protocols#awsQueryError": {
    "code": "InvalidResourceState",
    "httpResponseCode": 400
  },
  "smithy.api#documentation": "<p>License Manager cannot allocate a license to a resource because of its
state. </p>\n    <p>For example, you cannot allocate a license to an instance in the process of shutting\n
down.</p>",
  "smithy.api#error": "client",
  "smithy.api#httpError": 400
}
},

"com.amazonaws.licensemanager#InventoryFilter": {
  "type": "structure",
  "members": {
    "Name": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Name of the filter.</p>",
        "smithy.api#required": {}
      }
    },
    "Condition": {
      "target": "com.amazonaws.licensemanager#InventoryFilterCondition",
      "traits": {
        "smithy.api#documentation": "<p>Condition of the filter.</p>",
        "smithy.api#required": {}
      }
    },
    "Value": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Value of the filter.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>An inventory filter.</p>"
  }
},

```

```

"com.amazonaws.licensemanager#InventoryFilterCondition": {
  "type": "enum",
  "members": {
    "EQUALS": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "EQUALS"
      }
    },
    "NOT_EQUALS": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "NOT_EQUALS"
      }
    },
    "BEGINS_WITH": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "BEGINS_WITH"
      }
    },
    "CONTAINS": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "CONTAINS"
      }
    }
  }
},
"com.amazonaws.licensemanager#InventoryFilterList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanager#InventoryFilter"
  }
},
"com.amazonaws.licensemanager#Issuer": {
  "type": "structure",
  "members": {
    "Name": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Issuer name.</p>",
        "smithy.api#required": {}
      }
    },
    "SignKey": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {

```

```

    "smithy.api#documentation": "<p>Asymmetric KMS key from Key Management Service. The KMS
key must have a key usage
of sign and verify, \n    and support the RSASSA-PSS SHA-256 signing algorithm.</p>"
  }
}
},
"traits": {
  "smithy.api#documentation": "<p>Details about the issuer of a license.</p>"
}
},
"com.amazonaws.licensemanager#IssuerDetails": {
  "type": "structure",
  "members": {
    "Name": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Issuer name.</p>"
      }
    },
    "SignKey": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Asymmetric KMS key from Key Management Service. The KMS
key must have a key usage of sign and verify, \n    and support the RSASSA-PSS SHA-256 signing
algorithm.</p>"
      }
    },
    "KeyFingerprint": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Issuer key fingerprint.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>Details associated with the issuer of a license.</p>"
  }
},
"com.amazonaws.licensemanager#License": {
  "type": "structure",
  "members": {
    "LicenseArn": {
      "target": "com.amazonaws.licensemanager#Arn",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
      }
    },
    "LicenseName": {

```

```

    "target": "com.amazonaws.licensemanager#String",
    "traits": {

"smithy.api#documentation": "<p>License name.</p>"
    }
},
"ProductName": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
        "smithy.api#documentation": "<p>Product name.</p>"
    }
},
"ProductSKU": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
        "smithy.api#documentation": "<p>Product SKU.</p>"
    }
},
"Issuer": {
    "target": "com.amazonaws.licensemanager#IssuerDetails",
    "traits": {
        "smithy.api#documentation": "<p>License issuer.</p>"
    }
},
"HomeRegion": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {

"smithy.api#documentation": "<p>Home Region of the license.</p>"
    }
},
"Status": {
    "target": "com.amazonaws.licensemanager#LicenseStatus",
    "traits": {
        "smithy.api#documentation": "<p>License status.</p>"
    }
},
"Validity": {
    "target": "com.amazonaws.licensemanager#DatetimeRange",
    "traits": {
        "smithy.api#documentation": "<p>Date and time range during which the license is valid, in ISO8601-
UTC format.</p>"
    }
},
"Beneficiary": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
        "smithy.api#documentation": "<p>License beneficiary.</p>"
    }
}

```

```

    }
  },
  "Entitlements": {
    "target": "com.amazonaws.licensemanager#EntitlementList",
    "traits": {
      "smithy.api#documentation": "<p>License entitlements.</p>"
    }
  },
  "ConsumptionConfiguration": {
    "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
    "traits": {
      "smithy.api#documentation": "<p>Configuration for consumption of the license.</p>"
    }
  },
  "LicenseMetadata": {
    "target": "com.amazonaws.licensemanager#MetadataList",
    "traits": {
      "smithy.api#documentation": "<p>License metadata.</p>"
    }
  },
  "CreateTime": {
    "target": "com.amazonaws.licensemanager#ISO8601DateTime",
    "traits": {
      "smithy.api#documentation": "<p>License
creation time.</p>"
    }
  },
  "Version": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>License version.</p>"
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>Software license that is managed in License Manager.</p>"
  },
  "com.amazonaws.licensemanager#LicenseConfiguration": {
    "type": "structure",
    "members": {
      "LicenseConfigurationId": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Unique ID of the license configuration.</p>"
        }
      },
    },
  },

```



```

"LicenseConfigurationArn": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
  }
},
"Name": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>Name of the license configuration.</p>"
  }
},
>Description": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>Description of the license configuration.</p>"
  }
},
"LicenseCountingType": {
  "target": "com.amazonaws.licensemanager#LicenseCountingType",
  "traits": {
    "smithy.api#documentation": "<p>Dimension to use to track the license inventory.</p>"
  }
},
"LicenseRules": {
  "target": "com.amazonaws.licensemanager#StringList",
  "traits": {
    "smithy.api#documentation": "<p>License rules.</p>"
  }
},
"LicenseCount": {
  "target": "com.amazonaws.licensemanager#BoxLong",
  "traits": {
    "smithy.api#documentation": "<p>Number of licenses managed by the license configuration.</p>"
  }
},
"LicenseCountHardLimit": {
  "target": "com.amazonaws.licensemanager#BoxBoolean",
  "traits": {
    "smithy.api#documentation": "<p>Number of available licenses as a hard limit.</p>"
  }
},
"DisassociateWhenNotFound": {
  "target": "com.amazonaws.licensemanager#BoxBoolean",
  "traits": {
    "smithy.api#documentation": "<p>When true, disassociates a resource when software is
uninstalled.</p>"
  }
}

```

```

},
"ConsumedLicenses": {
  "target": "com.amazonaws.licensemanager#BoxLong",
  "traits": {
    "smithy.api#documentation": "<p>Number of licenses consumed. </p>"
  }
},
"Status": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>Status of the license configuration.</p>"
  }
},
"OwnerAccountId": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>Account ID of the license configuration's owner.</p>"
  }
},
"ConsumedLicenseSummaryList": {
  "target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
  "traits": {
    "smithy.api#documentation": "<p>Summaries for licenses consumed by various resources.</p>"
  }
},
"ManagedResourceSummaryList": {
  "target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
  "traits": {
    "smithy.api#documentation": "<p>Summaries for managed resources.</p>"
  }
},
"ProductInformationList": {
  "target": "com.amazonaws.licensemanager#ProductInformationList",
  "traits": {
    "smithy.api#documentation": "<p>Product information.</p>"
  }
},
"AutomatedDiscoveryInformation": {
  "target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
  "traits": {
    "smithy.api#documentation": "<p>Automated discovery information.</p>"
  }
},
"traits": {
  "smithy.api#documentation": "<p>A license configuration is an abstraction of a customer license

```

agreement that can be consumed and enforced by License Manager. Components include specifications for the license type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, Dedicated Instance, Dedicated Host, or all of these), host affinity (how long a VM must be associated with a host), and the number of licenses purchased and used.

```

    }
  },
  "com.amazonaws.licensemanager#LicenseConfigurationAssociation": {
    "type": "structure",
    "members": {
      "ResourceArn": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
        }
      },
      "ResourceType": {
        "target": "com.amazonaws.licensemanager#ResourceType",
        "traits": {
          "smithy.api#documentation": "<p>Type of server resource.</p>"
        }
      },
      "ResourceOwnerId": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>ID of the Amazon Web Services account that owns the resource consuming licenses.</p>"
        }
      },
      "AssociationTime": {
        "target": "com.amazonaws.licensemanager#DateTime",
        "traits": {
          "smithy.api#documentation": "<p>Time when the license configuration was associated with the resource.</p>"
        }
      },
      "AmiAssociationScope": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Scope of AMI associations. The possible value is <code>cross-account</code>.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#documentation": "<p>Describes an association with a license configuration.</p>"
    }
  },

```

```

"com.amazonaws.licensemanager#LicenseConfigurationAssociations": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanager#LicenseConfigurationAssociation"
  }
},
"com.amazonaws.licensemanager#LicenseConfigurationStatus": {
  "type": "enum",
  "members":
{
  "AVAILABLE": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "AVAILABLE"
    }
  },
  "DISABLED": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "DISABLED"
    }
  }
}
},
"com.amazonaws.licensemanager#LicenseConfigurationUsage": {
  "type": "structure",
  "members": {
    "ResourceArn": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
      }
    },
    "ResourceType": {
      "target": "com.amazonaws.licensemanager#ResourceType",
      "traits":
{
      "smithy.api#documentation": "<p>Type of resource.</p>"
    }
  },
    "ResourceStatus": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Status of the resource.</p>"
      }
    },
    "ResourceOwnerId": {
      "target": "com.amazonaws.licensemanager#String",

```

```

    "traits": {
      "smithy.api#documentation": "<p>ID of the account that owns the resource.</p>"
    }
  },
  "AssociationTime": {
    "target": "com.amazonaws.licensemanager#DateTime",
    "traits": {
      "smithy.api#documentation": "<p>Time when the license configuration was initially associated with
the resource.</p>"
    }
  },

  "ConsumedLicenses": {
    "target": "com.amazonaws.licensemanager#BoxLong",
    "traits": {
      "smithy.api#documentation": "<p>Number of licenses consumed by the resource.</p>"
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>Details about the usage of a resource associated with a license
configuration.</p>"
  },
  "com.amazonaws.licensemanager#LicenseConfigurationUsageList": {
    "type": "list",
    "member": {
      "target": "com.amazonaws.licensemanager#LicenseConfigurationUsage"
    }
  },
  "com.amazonaws.licensemanager#LicenseConfigurations": {
    "type": "list",
    "member": {
      "target": "com.amazonaws.licensemanager#LicenseConfiguration"
    }
  },
  "com.amazonaws.licensemanager#LicenseConversionContext": {

"type": "structure",
  "members": {
    "UsageOperation": {
      "target": "com.amazonaws.licensemanager#UsageOperation",
      "traits": {
        "smithy.api#documentation": "<p>The Usage operation value that corresponds to the license type you
are converting your resource from. For more information about which platforms correspond to which usage
operation values see <a href='\"https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/billing-info-
fields.html#billing-info\">Sample data: usage operation by platform\n  </a>\n  </p>"
      }
    }
  }

```

```

    }
  },
  "traits": {
    "smithy.api#documentation": "<p>Information about a license type conversion task.</p>"
  }
},
"com.amazonaws.licensemanager#LicenseConversionTask": {
  "type": "structure",
  "members": {
    "LicenseConversionTaskId": {

      "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
      "traits": {
        "smithy.api#documentation": "<p>The ID of the license type conversion task.</p>"
      }
    },
    "ResourceArn": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource associated
with the license type\n    conversion task.</p>"
      }
    },
    "SourceLicenseContext": {
      "target": "com.amazonaws.licensemanager#LicenseConversionContext",
      "traits": {
        "smithy.api#documentation": "<p>Information about the license type this conversion task converted
from.</p>"
      }
    },
    "DestinationLicenseContext": {
      "target":
"com.amazonaws.licensemanager#LicenseConversionContext",
      "traits": {
        "smithy.api#documentation": "<p>Information about the license type this conversion task converted
to.</p>"
      }
    },
    "Status": {
      "target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
      "traits": {
        "smithy.api#documentation": "<p>The status of the conversion task.</p>"
      }
    },
    "StatusMessage": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>The status message for the conversion task.</p>"
      }
    }
  }
}

```

```

    }
  },
  "StartTime": {
    "target": "com.amazonaws.licensemanager#DateTime",
    "traits": {
      "smithy.api#documentation":
"<p>The time the conversion task was started at.</p>"
    }
  },
  "LicenseConversionTime": {
    "target": "com.amazonaws.licensemanager#DateTime",
    "traits": {
      "smithy.api#documentation": "<p>The time the usage operation value of the resource was
changed.</p>"
    }
  },
  "EndTime": {
    "target": "com.amazonaws.licensemanager#DateTime",
    "traits": {
      "smithy.api#documentation": "<p>The time the conversion task was completed.</p>"
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>Information about a license type conversion task.</p>"
  }
},
"com.amazonaws.licensemanager#LicenseConversionTaskId": {
  "type": "string",
  "traits": {

    "smithy.api#length": {
      "min": 0,
      "max": 50
    },
    "smithy.api#pattern": "^\\lct-[a-zA-Z0-9]*$"
  }
},
"com.amazonaws.licensemanager#LicenseConversionTaskStatus": {
  "type": "enum",
  "members": {
    "IN_PROGRESS": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "IN_PROGRESS"
      }
    },
    "SUCCEEDED": {

```

```

        "target": "smithy.api#Unit",
        "traits": {
            "smithy.api#enumValue": "SUCCEEDED"
        }
    },
    "FAILED": {
        "target": "smithy.api#Unit",
        "traits": {
            "smithy.api#enumValue": "FAILED"
        }
    }
}
},
"com.amazonaws.licensemanager#LicenseConversionTasks":
{
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#LicenseConversionTask"
    }
},
"com.amazonaws.licensemanager#LicenseCountingType": {
    "type": "enum",
    "members": {
        "VCPU": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "vCPU"
            }
        },
        "INSTANCE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Instance"
            }
        },
        "CORE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Core"
            }
        },
        "SOCKET": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Socket"
            }
        }
    }
}
}

```



```

},
"com.amazonaws.licensemanager#LicenseDeletionStatus": {
  "type": "enum",
  "members": {
    "PENDING_DELETE": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "PENDING_DELETE"
      }
    },
    "DELETED": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "DELETED"
      }
    }
  }
},
"com.amazonaws.licensemanager#LicenseList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanager#License"
  }
},
"com.amazonaws.licensemanager#LicenseOperationFailure": {
  "type": "structure",
  "members": {
    "ResourceArn": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
      }
    },
    "ResourceType": {
      "target": "com.amazonaws.licensemanager#ResourceType",
      "traits": {
        "smithy.api#documentation": "<p>Resource type.</p>"
      }
    },
    "ErrorMessage": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Error message.</p>"
      }
    },
    "FailureTime": {
      "target": "com.amazonaws.licensemanager#DateTime",

```

```

    "traits": {
      "smithy.api#documentation": "<p>Failure time.</p>"
    }
  },
  "OperationName": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Name of the operation.</p>"
    }
  },
  "ResourceOwnerId": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>ID of the Amazon Web Services account that owns the
resource.</p>"
    }
  },
  "OperationRequestedBy": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>The requester is \"License Manager Automated Discovery\".</p>"
    }
  },
  "MetadataList": {
    "target": "com.amazonaws.licensemanager#MetadataList",
    "traits": {
      "smithy.api#documentation": "<p>Reserved.</p>"
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>Describes the failure of a license operation.</p>"
  }
},
"com.amazonaws.licensemanager#LicenseOperationFailureList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanager#LicenseOperationFailure"
  }
},
"com.amazonaws.licensemanager#LicenseSpecification": {
  "type": "structure",
  "members": {
    "LicenseConfigurationArn": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {

```

"smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>",

```
    "smithy.api#required": {}
  },
  "AmiAssociationScope": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Scope of AMI associations. The possible value is <code>cross-account</code>.</p>"
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>Details for associating a license configuration with a resource.</p>"
  },
  "com.amazonaws.licensemanager#LicenseSpecifications": {
    "type": "list",
    "member": {
      "target": "com.amazonaws.licensemanager#LicenseSpecification"
    }
  },
  "com.amazonaws.licensemanager#LicenseStatus": {
    "type": "enum",
    "members": {
      "AVAILABLE": {
        "target": "smithy.api#Unit",

        "traits": {
          "smithy.api#enumValue": "AVAILABLE"
        }
      },
      "PENDING_AVAILABLE": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "PENDING_AVAILABLE"
        }
      },
      "DEACTIVATED": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "DEACTIVATED"
        }
      },
      "SUSPENDED": {
        "target": "smithy.api#Unit",
```

```

    "traits": {
      "smithy.api#enumValue": "SUSPENDED"
    }
  },
  "EXPIRED": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "EXPIRED"
    }
  },
  "PENDING_DELETE": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "PENDING_DELETE"
    }
  },
  "DELETED": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "DELETED"
    }
  }
},
"com.amazonaws.licensemanager#LicenseUsage": {
  "type": "structure",
  "members": {
    "EntitlementUsages": {
      "target": "com.amazonaws.licensemanager#EntitlementUsageList",
      "traits": {
        "smithy.api#documentation": "<p>License entitlement usages.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>Describes the entitlement usage associated with a license.</p>"
  }
},
"com.amazonaws.licensemanager#LicenseUsageException": {
  "type": "structure",
  "members": {
    "Message": {
      "target": "com.amazonaws.licensemanager#Message"
    }
  },
  "traits": {

```

```

    "aws.protocols#awsQueryError": {
      "code": "LicenseUsageFailure",
      "httpResponseCode": 412
    },
    "smithy.api#documentation": "<p>You do not have enough licenses available to support a new resource
launch.</p>",
    "smithy.api#error": "client",
    "smithy.api#httpError": 412
  }
},
"com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Lists the resource associations for the
specified license configuration.</p>\n    <p>Resource associations need not consume licenses from a license
configuration. \n    For example, an AMI or a stopped instance might not consume a license (depending on \n
the license rules).</p>"
  }
},
"com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest": {
  "type": "structure",

```

```

"members": {
  "LicenseConfigurationArn": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of a license configuration.</p>",
      "smithy.api#required": {}
    }
  },
  "MaxResults": {
    "target": "com.amazonaws.licensemanager#BoxInteger",
    "traits": {
      "smithy.api#documentation": "<p>Maximum number of results
to return in a single call.</p>"
    }
  },
  "NextToken": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Token for the next set of results.</p>"
    }
  }
},
"traits": {
  "smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse": {
  "type": "structure",
  "members": {
    "LicenseConfigurationAssociations": {
      "target": "com.amazonaws.licensemanager#LicenseConfigurationAssociations",
      "traits": {
        "smithy.api#documentation": "<p>Information about the associations for the license
configuration.</p>"
      }
    },
    "NextToken": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Token for the next set of results.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#output": {}
  }
},

```

```

"com.amazonaws.licensemanager#ListDistributedGrants": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#ListDistributedGrantsRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#ListDistributedGrantsResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    },
    {
      "target": "com.amazonaws.licensemanager#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Lists the grants distributed for the specified license.</p>"
  }
},
"com.amazonaws.licensemanager#ListDistributedGrantsRequest": {
  "type": "structure",
  "members": {
    "GrantArns": {
      "target": "com.amazonaws.licensemanager#ArnList",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the grants.</p>"
      }
    },
    "Filters": {
      "target": "com.amazonaws.licensemanager#FilterList",
      "traits": {

```

```

    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n    <ul>\n        <li>\n            <p>\n                <code>LicenseArn</code>\n            </p>\n            </li>\n            <li>\n                <p>\n                    <code>GrantStatus</code>\n                </p>\n            </li>\n            <li>\n                <p>\n                    <code>GranteePrincipalARN</code>\n                </p>\n            </li>\n            <li>\n                <p>\n                    <code>ProductSKU</code>\n                </p>\n            </li>\n            <li>\n                <p>\n                    <code>LicenseIssuerName</code>\n                </p>\n            </li>\n        </ul>\n    }\n},\n\"NextToken\": {\n    \"target\": \"com.amazonaws.licensemanager#String\",\n    \"traits\": {\n        \"smithy.api#documentation\": \"<p>Token for the next set of results.</p>\"\n    }\n},\n\"MaxResults\": {\n    \"target\": \"com.amazonaws.licensemanager#MaxSize100\",\n    \"traits\": {\n        \"smithy.api#documentation\": \"<p>Maximum number of results to return in a single call.</p>\"\n    }\n},\n\"traits\": {\n    \"smithy.api#input\": {}\n},\n},\n\"com.amazonaws.licensemanager#ListDistributedGrantsResponse\": {\n    \"type\": \"structure\",\n    \"members\": {\n        \"Grants\": {\n            \"target\": \"com.amazonaws.licensemanager#GrantList\",\n\n\"traits\": {\n        \"smithy.api#documentation\": \"<p>Distributed grant details.</p>\"\n    }\n},\n    \"NextToken\": {\n        \"target\": \"com.amazonaws.licensemanager#String\",\n        \"traits\": {\n            \"smithy.api#documentation\": \"<p>Token for the next set of results.</p>\"\n        }\n    }\n},\n\"traits\": {\n    \"smithy.api#output\": {}\n},\n},\n\"com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations\": {

```



```

"type": "operation",
"input": {
  "target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest"
},
"output": {
  "target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse"
},
"errors": [
  {
    "target": "com.amazonaws.licensemanager#AccessDeniedException"
  },
  {
    "target": "com.amazonaws.licensemanager#AuthorizationException"
  },
  {
    "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
  },
  {
    "target": "com.amazonaws.licensemanager#RateLimitExceededException"
  },
  {
    "target": "com.amazonaws.licensemanager#ServerInternalException"
  }
],
"traits": {
  "smithy.api#documentation": "<p>Lists the license configuration operations that failed.</p>"
}
},
"com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest": {
  "type": "structure",
  "members": {
    "LicenseConfigurationArn": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name of the license configuration.</p>",
        "smithy.api#required": {}
      }
    },
    "MaxResults": {
      "target": "com.amazonaws.licensemanager#BoxInteger",
      "traits": {
        "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
      }
    },
    "NextToken": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {

```

```
        "smithy.api#documentation": "<p>Token for the next set of results.</p>"
      }
    },
    "traits": {
      "smithy.api#input": {}
    }
  },
  "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse":
{
  "type": "structure",
  "members": {
    "LicenseOperationFailureList": {
      "target": "com.amazonaws.licensemanager#LicenseOperationFailureList",
      "traits": {
        "smithy.api#documentation": "<p>License configuration operations that failed.</p>"
      }
    },
    "NextToken": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Token for the next set of results.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#ListLicenseConfigurations": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#ListLicenseConfigurationsRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#ListLicenseConfigurationsResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
    }
  ]
}
```

```

    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Lists the license configurations
for your account.</p>"
  }
},
"com.amazonaws.licensemanager#ListLicenseConfigurationsRequest": {
  "type": "structure",
  "members": {
    "LicenseConfigurationArns": {
      "target": "com.amazonaws.licensemanager#StringList",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the license
configurations.</p>"
      }
    },
    "MaxResults": {
      "target": "com.amazonaws.licensemanager#BoxInteger",
      "traits": {
        "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
      }
    },
    "NextToken": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Token for the next
set of results.</p>"
      }
    },
    "Filters": {
      "target": "com.amazonaws.licensemanager#Filters",
      "traits": {
        "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical
operators\n are supported:</p>\n <ul>\n <li>\n <p>\n
<code>licenseCountingType</code> - The dimension for which licenses are counted.\n Possible values are
<code>vCPU</code> | <code>Instance</code> | <code>Core</code> | <code>Socket</code>.\n Logical
operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n </li>\n <li>\n
<p>\n <code>enforceLicenseCount</code> - A Boolean value that indicates whether hard license
enforcement is used. \n Logical operators are <code>EQUALS</code> |

```

`NOT_EQUALS`.

- `usagelimitExceeded` - A Boolean value that indicates whether the available licenses have been exceeded.

Logical operators are `EQUALS` | `NOT_EQUALS`.

```

    }
  },
  "traits": {
    "smithy.api#input": {}
  }
},
"com.amazonaws.licensemanager#ListLicenseConfigurationsResponse": {
  "type": "structure",
  "members": {
    "LicenseConfigurations": {
      "target": "com.amazonaws.licensemanager#LicenseConfigurations",
      "traits": {
        "smithy.api#documentation": "<p>Information about the license configurations.</p>"
      }
    },
    "NextToken": {
      "target": "com.amazonaws.licensemanager#String",

      "traits": {
        "smithy.api#documentation": "<p>Token for the next set of results.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#ListLicenseConversionTasks": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#ListLicenseConversionTasksRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#ListLicenseConversionTasksResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {

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        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
        "target": "com.amazonaws.licensemanager#ServerInternalException"
    }
],
"traits": {
    "smithy.api#documentation": "<p>Lists the license type conversion tasks for your account.</p>"
}
},
"com.amazonaws.licensemanager#ListLicenseConversionTasksRequest": {
    "type": "structure",
    "members": {
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        },
        "MaxResults": {
            "target": "com.amazonaws.licensemanager#BoxInteger",
            "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
        },
        "Filters": {
            "target": "com.amazonaws.licensemanager#Filters",
            "traits": {
                "smithy.api#documentation": "<p>\n    Filters to scope the results. Valid filters are
<code>ResourceArns</code> and <code>Status</code>.\n    </p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#ListLicenseConversionTasksResponse": {
    "type": "structure",
    "members": {
        "LicenseConversionTasks": {
            "target": "com.amazonaws.licensemanager#LicenseConversionTasks",
            "traits": {
                "smithy.api#documentation": "<p>Information about the license configuration tasks for your

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account.</p>"
  }
},
"NextToken": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
  }
}
},
"traits": {
  "smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListLicenseManagerReportGenerators": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target":
"com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    },
    {
      "target": "com.amazonaws.licensemanager#ValidationException"
    }
  ]
}

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    ],
    "traits": {
      "smithy.api#documentation": "<p>Lists the report generators for your account.</p>"
    }
  },
  "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest":
  {
    "type": "structure",
    "members": {
      "Filters": {
        "target": "com.amazonaws.licensemanager#FilterList",
        "traits": {
          "smithy.api#documentation": "<p>Filters to scope the results. The following filters are supported:
</p>\n  <ul>\n    <li>\n      <p>\n        <code>LicenseConfigurationArn</code>\n      </li>\n    </ul>"
        }
      },
      "NextToken": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Token for the next set of results.</p>"
        }
      },
      "MaxResults": {
        "target": "com.amazonaws.licensemanager#MaxSize100",
        "traits":
        {
          "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    }
  },
  "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse": {
    "type": "structure",
    "members": {
      "ReportGenerators": {
        "target": "com.amazonaws.licensemanager#ReportGeneratorList",
        "traits": {
          "smithy.api#documentation": "<p>A report generator that creates periodic reports about your license
configurations.</p>"
        }
      },
      "NextToken": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {

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    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
  }

}

},
"traits": {
  "smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListLicenseSpecificationsForResource": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Describes the license configurations for the specified resource.</p>"
  }
},
"com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest": {
  "type": "structure",
  "members": {
    "ResourceArn": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of a resource that has an associated license configuration.</p>",
        "smithy.api#required": {}
      }
    }
  }
}

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    },
    "MaxResults": {
      "target": "com.amazonaws.licensemanager#BoxInteger",
      "traits": {
        "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
      }
    },
    "NextToken": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Token for the next set of results.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#input": {}
  }
},
"com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse": {
  "type": "structure",
  "members": {
    "LicenseSpecifications": {
      "target": "com.amazonaws.licensemanager#LicenseSpecifications",
      "traits": {
        "smithy.api#documentation": "<p>License configurations associated with a resource.</p>"
      }
    },
    "NextToken": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Token for the next set of results.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#ListLicenseVersions": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#ListLicenseVersionsRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#ListLicenseVersionsResponse"
  },
  "errors": [

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    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Lists all versions of the specified license.</p>"
  }
},
"com.amazonaws.licensemanager#ListLicenseVersionsRequest": {
  "type": "structure",
  "members": {
    "LicenseArn": {
      "target": "com.amazonaws.licensemanager#Arn",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
        "smithy.api#required": {}
      }
    },
    "NextToken": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Token for the next set of results.</p>"
      }
    },
    "MaxResults": {
      "target": "com.amazonaws.licensemanager#MaxSize100",
      "traits": {
        "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#input": {}
  }
},
"com.amazonaws.licensemanager#ListLicenseVersionsResponse": {

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"type": "structure",
"members": {
  "Licenses": {
    "target": "com.amazonaws.licensemanager#LicenseList",
    "traits": {
      "smithy.api#documentation": "<p>License details.</p>"
    }
  },
  "NextToken": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Token for the next set of results.</p>"
    }
  },
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#ListLicenses": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#ListLicensesRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#ListLicensesResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    },
    {
      "target": "com.amazonaws.licensemanager#ValidationException"
    }
  ]
},

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"traits": {
  "smithy.api#documentation": "<p>Lists the licenses for your account.</p>"
}
},
"com.amazonaws.licensemanager#ListLicensesRequest": {
  "type": "structure",
  "members": {
    "LicenseArns": {
      "target": "com.amazonaws.licensemanager#ArnList",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the licenses.</p>"
      }
    }
  },

  "Filters": {
    "target": "com.amazonaws.licensemanager#FilterList",
    "traits": {
      "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n  <ul>\n    <li>\n      <p>\n        <code>Beneficiary</code>\n      </p>\n    </li>\n    <li>\n      <p>\n        <code>ProductSKU</code>\n      </p>\n    </li>\n    <li>\n      <p>\n        <code>Fingerprint</code>\n      </p>\n    </li>\n    <li>\n      <p>\n        <code>Status</code>\n      </p>\n    </li>\n  </ul>"
    }
  },
  "NextToken": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Token
for the next set of results.</p>"
    }
  },
  "MaxResults": {
    "target": "com.amazonaws.licensemanager#MaxSize100",
    "traits": {
      "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
    }
  }
},
"traits": {
  "smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListLicensesResponse": {
  "type": "structure",
  "members": {
    "Licenses": {
      "target": "com.amazonaws.licensemanager#LicenseList",
      "traits": {

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        "smithy.api#documentation": "<p>License details.</p>"
    }
},
"NextToken": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {

"smithy.api#documentation": "<p>Token for the next set of results.</p>"
    }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListReceivedGrants": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListReceivedGrantsRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListReceivedGrantsResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists grants that are received. Received grants are grants created while

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specifying the recipient as this Amazon Web Services account, your organization, or an organizational unit (OU) to which this member account belongs.</p>"

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    }
  },
  "com.amazonaws.licensemanager#ListReceivedGrantsForOrganization": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
      },
      {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ServerInternalException"
      },
      {
        "target":
"com.amazonaws.licensemanager#ValidationException"
      }
    ],
    "traits": {
      "smithy.api#documentation": "<p>Lists the grants received for all accounts in the organization.</p>"
    }
  },
  "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest": {
    "type": "structure",
    "members": {
      "LicenseArn": {
        "target": "com.amazonaws.licensemanager#Arn",
        "traits": {
          "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the received license.</p>",
          "smithy.api#required": {}
        }
      }
    }
  }
}
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    }
  },
  "Filters": {
    "target": "com.amazonaws.licensemanager#FilterList",
    "traits": {
      "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n
      <ul>\n
        <li>\n
          <p>\n
            <code>ParentArn</code>\n
          </p>\n
        </li>\n
        <li>\n
          <p>\n
            <code>GranteePrincipalArn</code>\n
          </p>\n
        </li>\n
      </ul>\n
    }
  },
  "NextToken": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Token for the next set of results.</p>"
    }
  },
  "MaxResults": {
    "target": "com.amazonaws.licensemanager#MaxSize100",
    "traits": {
      "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
    }
  },
},
"traits": {
  "smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse":
{
  "type": "structure",
  "members": {
    "Grants": {
      "target": "com.amazonaws.licensemanager#GrantList",
      "traits": {
        "smithy.api#documentation": "<p>Lists the grants the organization has received.</p>"
      }
    },
    "NextToken": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Token for the next set of results.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#output": {}
  }
}

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    },
    "com.amazonaws.licensemanager#ListReceivedGrantsRequest": {
      "type": "structure",
      "members": {
        "GrantArns": {
          "target": "com.amazonaws.licensemanager#ArnList",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the grants.</p>"
          }
        },
        "Filters": {
          "target": "com.amazonaws.licensemanager#FilterList",
          "traits": {
            "smithy.api#documentation": "<p>Filters to scope the results. The following filters are supported:</p>\n      <ul>\n        <li>\n          <p>\n            <code>ProductSKU</code>\n          </p>\n        </li>\n        <li>\n          <p>\n            <code>LicenseIssuerName</code>\n          </p>\n        </li>\n        <li>\n          <p>\n            <code>LicenseArn</code>\n          </p>\n        </li>\n        <li>\n          <p>\n            <code>GrantStatus</code>\n          </p>\n        </li>\n      </ul>\n      <code>GranterAccountId</code>\n    </p>\n      </li>\n      </ul>"
          }
        },
        "NextToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
          }
        },
        "MaxResults": {
          "target": "com.amazonaws.licensemanager#MaxSize100",
          "traits": {
            "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#ListReceivedGrantsResponse": {
      "type": "structure",
      "members": {
        "Grants": {
          "target": "com.amazonaws.licensemanager#GrantList",
          "traits": {
            "smithy.api#documentation": "<p>Received grant details.</p>"
          }
        }
      },
    },

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    "NextToken": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Token for the next set of results.</p>"
      }
    },
    "traits": {
      "smithy.api#output": {}
    },
    "com.amazonaws.licensemanager#ListReceivedLicenses": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#ListReceivedLicensesRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#ListReceivedLicensesResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
          "target": "com.amazonaws.licensemanager#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Lists received licenses.</p>"
      }
    },
    "com.amazonaws.licensemanager#ListReceivedLicensesForOrganization":

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{
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    },
    {
      "target": "com.amazonaws.licensemanager#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Lists the licenses received for all accounts in the organization.</p>"
  }
},
"com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest": {
  "type": "structure",
  "members": {
    "Filters": {
      "target": "com.amazonaws.licensemanager#FilterList",
      "traits": {
        "smithy.api#documentation": "<p>Filters to scope the results. The following filters are supported:</p>\n      <ul>\n        <li>\n          <p>\n            <code>Beneficiary</code>\n          </p>\n        </li>\n        <li>\n          <p>\n            <code>ProductSKU</code>\n          </p>\n        </li>\n      </ul>"
      }
    }
  },
}

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"NextToken": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
  }
},
"MaxResults": {
  "target": "com.amazonaws.licensemanager#MaxSize100",
  "traits": {
    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
  }
}
},
"traits": {
  "smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse": {
  "type": "structure",
  "members": {
    "Licenses": {
      "target": "com.amazonaws.licensemanager#GrantedLicenseList",
      "traits": {
        "smithy.api#documentation": "<p>Lists the licenses the organization has received.</p>"
      }
    },
    "NextToken": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Token for the next set of results.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#ListReceivedLicensesRequest": {
  "type": "structure",
  "members": {
    "LicenseArns": {
      "target": "com.amazonaws.licensemanager#ArnList",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the licenses.</p>"
      }
    }
  },

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"Filters": {
  "target": "com.amazonaws.licensemanager#FilterList",
  "traits": {
    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are supported:</p>\n  <ul>\n    <li>\n      <p>\n        <code>ProductSKU</code>\n      </p>\n    </li>\n    <li>\n      <p>\n        <code>Status</code>\n      </p>\n    </li>\n    <li>\n      <p>\n        <code>Fingerprint</code>\n      </p>\n    </li>\n    <li>\n      <p>\n        <code>IssuerName</code>\n      </p>\n    </li>\n    <li>\n      <p>\n        <code>Beneficiary</code>\n      </p>\n    </li>\n  </ul>"
  }
},
"NextToken": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
  }
},
"MaxResults": {
  "target": "com.amazonaws.licensemanager#MaxSize100",
  "traits": {
    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
  }
},
"traits": {
  "smithy.api#input": {}
},
"com.amazonaws.licensemanager#ListReceivedLicensesResponse": {
  "type": "structure",
  "members": {
    "Licenses": {
      "target": "com.amazonaws.licensemanager#GrantedLicenseList",
      "traits": {
        "smithy.api#documentation": "<p>Received license details.</p>"
      }
    }
  },
  "NextToken": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Token for the next set of results.</p>"
    }
  }
},
"traits": {
  "smithy.api#output": {}
}

```

```

},
"com.amazonaws.licensemanager#ListResourceInventory": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#ListResourceInventoryRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#ListResourceInventoryResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#FailedDependencyException"
    },
    {
      "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Lists resources managed using Systems Manager inventory.</p>"
  }
},
"com.amazonaws.licensemanager#ListResourceInventoryRequest": {
  "type": "structure",
  "members": {
    "MaxResults": {
      "target": "com.amazonaws.licensemanager#BoxInteger",
      "traits": {
        "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
      }
    },
    "NextToken": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {

```

```

    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
  }
},
"Filters": {
  "target": "com.amazonaws.licensemanager#InventoryFilterList",
  "traits": {
    "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical
operators\n are supported:</p>\n <ul>\n <li>\n <p>\n <code>account_id</code>\n
- The ID of the Amazon Web Services account that owns the resource.\n Logical operators are
<code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n
</li>\n <li>\n <p>\n <code>application_name</code> - The name of the
application. \n Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>.</p>\n
</li>\n <li>\n <p>\n <code>license_included</code> - The type of license included. \n
Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.\n Possible values
are <code>sql-server-enterprise</code> | \n <code>sql-server-standard</code> | \n <code>sql-
server-web</code> | \n <code>windows-server-datacenter</code>.</p>\n </li>\n <li>\n
<p>\n <code>platform</code> - The platform of the resource.\n Logical operators are
<code>EQUALS</code> | <code>BEGINS_WITH</code>.</p>\n </li>\n <li>\n <p>\n
<code>resource_id</code> - The ID of the resource. \n Logical operators are
<code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n </li>\n <li>\n <p>\n
<code>tag:<key></code> - The key/value combination of a tag assigned \n to the resource. Logical
operators are <code>EQUALS</code> (single account) or\n <code>EQUALS</code> |
<code>NOT_EQUALS</code> (cross account).</p>\n </li>\n </ul>"
  }
}
},
"traits": {
  "smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListResourceInventoryResponse": {
  "type": "structure",
  "members": {
    "ResourceInventoryList": {
      "target": "com.amazonaws.licensemanager#ResourceInventoryList",
      "traits": {
        "smithy.api#documentation": "<p>Information
about the resources.</p>"
      }
    },
    "NextToken": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Token for the next set of results.</p>"
      }
    }
  }
},
"traits": {

```

```

    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#ListTagsForResource": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#ListTagsForResourceRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#ListTagsForResourceResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Lists the tags for the specified license configuration.</p>"
  }
},
"com.amazonaws.licensemanager#ListTagsForResourceRequest": {
  "type": "structure",
  "members": {
    "ResourceArn": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>",

```

```

    },
    "com.amazonaws.licensemanager#ListTagsForResourceResponse": {
      "type": "structure",
      "members": {
        "Tags": {
          "target": "com.amazonaws.licensemanager#TagList",
          "traits": {
            "smithy.api#documentation": "<p>Information about the tags.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#ListTokens": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#ListTokensRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#ListTokensResponse"
      },
      "errors":
    [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ServerInternalException"
      },
      {
        "target": "com.amazonaws.licensemanager#ValidationException"
      }
    ],
      "traits": {
        "smithy.api#documentation": "<p>Lists your tokens.</p>"
      }
    },
    "com.amazonaws.licensemanager#ListTokensRequest": {
      "type": "structure",
      "members": {

```



```

"TokenIds": {
  "target": "com.amazonaws.licensemanager#StringList",
  "traits": {
    "smithy.api#documentation": "<p>Token IDs.</p>"
  }
},
"Filters": {
  "target": "com.amazonaws.licensemanager#FilterList",
  "traits": {
    "smithy.api#documentation": "<p>Filters to scope the results. The following filter is supported:</p>\n
<ul>\n  <li>\n    <p>\n      <code>LicenseArns</code>\n    </p>\n  </li>\n</ul>"
  }
},
"NextToken": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
  }
},
"MaxResults": {
  "target": "com.amazonaws.licensemanager#MaxSize100",
  "traits": {
    "smithy.api#documentation":
"<p>Maximum number of results to return in a single call.</p>"
  }
},
"traits": {
  "smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListTokensResponse": {
  "type": "structure",
  "members": {
    "Tokens": {
      "target": "com.amazonaws.licensemanager#TokenList",
      "traits": {
        "smithy.api#documentation": "<p>Received token details.</p>"
      }
    },
    "NextToken": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Token for the next set of results.</p>"
      }
    }
  }
}

```

```

    },
    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanager#ListUsageForLicenseConfiguration":
  {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
      },
      {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ServerInternalException"
      }
    ],
    "traits": {
      "smithy.api#documentation": "<p>Lists all license usage records for a license configuration, displaying license consumption details by resource at a selected point in time. Use this action to audit the current license consumption for any license inventory and configuration.</p>"
    }
  },
  "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest": {
    "type": "structure",
    "members": {
      "LicenseConfigurationArn": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>",

```

```

    "smithy.api#required": {}
  },
  "MaxResults": {
    "target": "com.amazonaws.licensemanager#BoxInteger",
    "traits": {
      "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
    }
  },
  "NextToken": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Token for the next set of results.</p>"
    }
  },
  "Filters": {
    "target": "com.amazonaws.licensemanager#Filters",
    "traits": {
      "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical
operators\n    are supported:</p>\n    <ul>\n      <li>\n        <p>\n<code>resourceArn</code> - The ARN of the license configuration resource.\n      Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n      </li>\n      <li>\n        <p>\n<code>resourceType</code> - The resource type\n      (<code>EC2_INSTANCE</code> | <code>EC2_HOST</code> | <code>EC2_AMI</code> | \n      <code>SYSTEMS_MANAGER_MANAGED_INSTANCE</code>). \n      Logical operators are\n      <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n      </li>\n      <li>\n        <p>\n<code>resourceAccount</code> - The ID of the account that owns the resource. \n      Logical operators\n      are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n      </li>\n    </ul>"
    }
  },
  "traits": {
    "smithy.api#input": {}
  },
  "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse": {
    "type": "structure",
    "members": {
      "LicenseConfigurationUsageList": {
        "target": "com.amazonaws.licensemanager#LicenseConfigurationUsageList",
        "traits": {
          "smithy.api#documentation": "<p>Information about the license configurations.</p>"
        }
      },
      "NextToken": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {

```

```

        "smithy.api#documentation": "<p>Token for the next set of results.</p>"
    }
}
},
"traits": {
    "smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#Location": {
    "type": "string"
},
"com.amazonaws.licensemanager#Long": {
    "type": "long"
},
"com.amazonaws.licensemanager#ManagedResourceSummary": {
    "type": "structure",
    "members": {
        "ResourceType":
{
            "target": "com.amazonaws.licensemanager#ResourceType",
            "traits": {
                "smithy.api#documentation": "<p>Type of resource associated with a license.</p>"
            }
        },
        "AssociationCount": {
            "target": "com.amazonaws.licensemanager#BoxLong",
            "traits": {
                "smithy.api#documentation": "<p>Number of resources associated with licenses.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Summary information about a managed resource.</p>"
    }
},
"com.amazonaws.licensemanager#ManagedResourceSummaryList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ManagedResourceSummary"
    }
},
"com.amazonaws.licensemanager#MaxSize100": {
    "type": "integer",
    "traits": {
        "smithy.api#range": {
            "min": 1,
            "max": 100
        }
    }
}
}

```

```

    }
  }
},
"com.amazonaws.licensemanager#MaxSize3StringList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanager#String"
  },
  "traits": {
    "smithy.api#length": {
      "min": 0,
      "max": 3
    }
  }
},
"com.amazonaws.licensemanager#Message": {
  "type": "string"
},
"com.amazonaws.licensemanager#Metadata": {
  "type": "structure",
  "members": {
    "Name": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>The key name.</p>"
      }
    }
  },
  "Value": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>The value.</p>"
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>Describes key/value pairs.</p>"
  }
},
"com.amazonaws.licensemanager#MetadataList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanager#Metadata"
  }
},
"com.amazonaws.licensemanager#NoEntitlementsAllowedException": {
  "type": "structure",
  "members": {

```

```

    "Message": {
      "target": "com.amazonaws.licensemanager#Message"
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>There are no entitlements found for this license, or the entitlement
maximum count is reached.</p>",
    "smithy.api#error": "client",
    "smithy.api#httpError": 400
  }
},
"com.amazonaws.licensemanager#Options": {
  "type": "structure",
  "members": {
    "ActivationOverrideBehavior": {
      "target": "com.amazonaws.licensemanager#ActivationOverrideBehavior",
      "traits": {
        "smithy.api#documentation": "<p>An activation option for your grant that determines the behavior of
activating a grant.\n      Activation options can only be used with granted licenses sourced from the Amazon Web
Services Marketplace. Additionally, the operation must specify the value of <code>ACTIVE</code> for the\n
<code>Status</code> parameter.</p>\n      <ul>\n        <li>\n          <p>As a license administrator, you can
optionally specify an\n          <code>ActivationOverrideBehavior</code> when activating a grant.</p>\n
</li>\n        <li>\n          <p>As a grantor, you can optionally specify an\n
<code>ActivationOverrideBehavior</code> when you activate a grant for a grantee\n          account in your
organization.</p>\n        </li>\n        <li>\n          <p>As a grantee, if the grantor creating the distributed
grant doesnt specify an\n          <code>ActivationOverrideBehavior</code>, you can optionally specify one
when you\n          are activating the grant.</p>\n        </li>\n      </ul>\n      <dl>\n
<dt>DISTRIBUTED_GRANTS_ONLY</dt>\n      <dd>\n        <p>Use this value to activate a grant
without replacing any member accounts\n          active grants for the same product.</p>\n      </dd>\n
<dt>ALL_GRANTS_PERMITTED_BY_ISSUER</dt>\n      <dd>\n        <p>Use this value to activate a
grant and disable other active grants in any\n          member accounts
for the same product. This action will also replace their\n          previously activated grants with this activated
grant.</p>\n      </dd>\n    </dl>"
      }
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>The options you can specify when you create a new version of a grant,
such as activation\n      override behavior. For more information, see <a
href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/granted-licenses.html\">Granted licenses in
License Manager</a> in the <i>License Manager User Guide</i>.</p>"
  }
},
"com.amazonaws.licensemanager#OrganizationConfiguration": {
  "type": "structure",
  "members": {
    "EnableIntegration": {
      "target": "com.amazonaws.licensemanager#Boolean",

```

```

    "traits": {
      "smithy.api#default": false,
      "smithy.api#documentation":
"<p>Enables Organizations integration.</p>",
      "smithy.api#required": {}
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>Configuration information for Organizations.</p>"
  }
},
"com.amazonaws.licensemanager#PrincipalArnList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanager#Arn"
  },
  "traits": {
    "smithy.api#length": {
      "min": 1,
      "max": 1
    }
  }
},
"com.amazonaws.licensemanager#ProductInformation": {
  "type": "structure",
  "members": {
    "ResourceType": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Resource type. The
possible values are <code>SSM_MANAGED</code> | <code>RDS</code>.</p>",
        "smithy.api#required": {}
      }
    }
  },
  "ProductInformationFilterList": {
    "target": "com.amazonaws.licensemanager#ProductInformationFilterList",
    "traits": {
      "smithy.api#documentation": "<p>A Product information filter consists of a
<code>ProductInformationFilterComparator</code> which is a logical operator, a
<code>ProductInformationFilterName</code> which specifies the type of filter being declared, and a
<code>ProductInformationFilterValue</code> that specifies the value to filter on. </p>\n    <p>Accepted values
for <code>ProductInformationFilterName</code> are listed here along with descriptions and valid options for
<code>ProductInformationFilterComparator</code>. </p>\n    <p>The following filters and are supported when
the resource type \n    is <code>SSM_MANAGED</code>:</p>\n
    <ul>\n      <li>\n        <p>\n          <code>Application Name</code> - The name of the
application.\n          Logical operator is <code>EQUALS</code>.</p>\n      </li>\n      <li>\n        <p>\n          <code>Application Publisher</code> - The publisher of the application.\n          Logical

```

operator is `EQUALS`.

- `Application Version` - The version of the application. Logical operator is `EQUALS`.
- `Platform Name` - The name of the platform. Logical operator is `EQUALS`.
- `Platform Type` - The platform type. Logical operator is `EQUALS`.
- `Tag:key` - The key of a tag attached to an Amazon Web Services resource you wish to exclude from automated discovery. Logical operator is `NOT_EQUALS`. The key for your tag must be appended to `Tag:` following the example: `Tag:name-of-your-key`. `ProductInformationFilterValue` is optional if you are not using values for the key.
- `AccountId` - The 12-digit ID of an Amazon Web Services account you wish to exclude from automated discovery. Logical operator is `NOT_EQUALS`.
- `License Included` - The type of license included. Logical operators are `EQUALS` and `NOT_EQUALS`. Possible values are:
  - `sql-server-enterprise` | `sql-server-standard` | `sql-server-web` | `windows-server-datacenter`.

The following filters and logical operators are supported when the resource type is `RDS`:

- `Engine Edition` - The edition of the database engine. Logical operator is `EQUALS`. Possible values are: `oracle-ee` | `oracle-se` | `oracle-se1` | `oracle-se2`.
- `License Pack` - The license pack. Logical operator is `EQUALS`. Possible values are: `data guard` | `diagnostic pack sqlt` | `tuning pack sqlt` | `ols` | `olap`.

```

"smithy.api#required": {}
}
},
"traits": {
  "smithy.api#documentation": "<p>Describes product information for a license configuration.</p>"
}
},
"com.amazonaws.licensemanager#ProductInformationFilter": {
  "type": "structure",
  "members": {
    "ProductInformationFilterName": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Filter name.</p>",
        "smithy.api#required": {}
      }
    },
    "ProductInformationFilterValue": {
      "target": "com.amazonaws.licensemanager#StringList",

```



```

"traits": {
  "smithy.api#documentation": "<p>Filter value.</p>"
}
},
"ProductInformationFilterComparator": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>Logical operator.</p>",
    "smithy.api#required": {}
  }
}
},
"traits": {
  "smithy.api#documentation": "<p>Describes product information filters.</p>"
}
},
"com.amazonaws.licensemanager#ProductInformationFilterList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanager#ProductInformationFilter"
  }
},
"com.amazonaws.licensemanager#ProductInformationList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanager#ProductInformation"
  }
},
"com.amazonaws.licensemanager#ProvisionalConfiguration": {
  "type": "structure",
  "members": {
    "MaxTimeToLiveInMinutes": {
      "target": "com.amazonaws.licensemanager#BoxInteger",
      "traits": {
        "smithy.api#documentation": "<p>Maximum time for the provisional configuration, in minutes.</p>",
        "smithy.api#required": {}
      }
    }
  }
},
"traits": {
  "smithy.api#documentation": "<p>Details about a provisional configuration.</p>"
}
},
"com.amazonaws.licensemanager#RateLimitExceededException": {
  "type": "structure",
  "members": {
    "Message": {
      "target": "com.amazonaws.licensemanager#Message"
    }
  }
}

```

```

    }
  },
  "traits": {
    "aws.protocols#awsQueryError": {
      "code": "RateLimitExceeded",
      "httpResponseCode": 429
    },
    "smithy.api#documentation": "<p>Too many requests have been submitted. Try again after a brief
wait.</p>",
    "smithy.api#error": "client",
    "smithy.api#httpError": 429
  }
},
"com.amazonaws.licensemanager#ReceivedMetadata": {
  "type": "structure",
  "members": {
    "ReceivedStatus": {
      "target": "com.amazonaws.licensemanager#ReceivedStatus",
      "traits": {
        "smithy.api#documentation": "<p>Received status.</p>"
      }
    },
    "ReceivedStatusReason": {
      "target": "com.amazonaws.licensemanager#StatusReasonMessage",
      "traits": {
        "smithy.api#documentation": "<p>Received
status reason.</p>"
      }
    },
    "AllowedOperations": {
      "target": "com.amazonaws.licensemanager#AllowedOperationList",
      "traits": {
        "smithy.api#documentation": "<p>Allowed operations.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>Metadata associated with received licenses and grants.</p>"
  }
},
"com.amazonaws.licensemanager#ReceivedStatus": {
  "type": "enum",
  "members": {
    "PENDING_WORKFLOW": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "PENDING_WORKFLOW"
      }
    }
  }
}

```

```

    },
    "PENDING_ACCEPT": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue":
"PENDING_ACCEPT"
      }
    },
    "REJECTED": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "REJECTED"
      }
    },
    "ACTIVE": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "ACTIVE"
      }
    },
    "FAILED_WORKFLOW": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "FAILED_WORKFLOW"
      }
    },
    "DELETED": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "DELETED"
      }
    },
    "DISABLED": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "DISABLED"
      }
    },
    "WORKFLOW_COMPLETED": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "WORKFLOW_COMPLETED"
      }
    }
  }
},
"com.amazonaws.licensemanager#RedirectException": {
  "type": "structure",

```

```

"members": {
  "Location": {
    "target": "com.amazonaws.licensemanager#Location",
    "traits": {
      "smithy.api#httpHeader": "Location"
    }
  },
  "Message": {
    "target": "com.amazonaws.licensemanager#Message"
  }
},
"traits": {
  "smithy.api#documentation": "<p>This is not the correct Region for the resource. Try again.</p>",
  "smithy.api#error": "client",
  "smithy.api#httpError": 308
}
},
"com.amazonaws.licensemanager#RejectGrant": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#RejectGrantRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#RejectGrantResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target":
"com.amazonaws.licensemanager#ResourceLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    },
    {
      "target": "com.amazonaws.licensemanager#ValidationException"
    }
  ]
}

```

```

],
"traits": {
  "smithy.api#documentation": "<p>Rejects the specified grant.</p>"
}
},
"com.amazonaws.licensemanager#RejectGrantRequest": {
  "type": "structure",
  "members": {
    "GrantArn": {
      "target": "com.amazonaws.licensemanager#Arn",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
        "smithy.api#required": {}
      }
    }
  },
  "traits": {
    "smithy.api#input": {}
  }
}
},
"com.amazonaws.licensemanager#RejectGrantResponse": {
  "type": "structure",
  "members": {
    "GrantArn": {
      "target": "com.amazonaws.licensemanager#Arn",
      "traits": {
        "smithy.api#documentation": "<p>Grant ARN.</p>"
      }
    },
    "Status": {
      "target": "com.amazonaws.licensemanager#GrantStatus",
      "traits": {
        "smithy.api#documentation": "<p>Grant status.</p>"
      }
    },
    "Version": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Grant version.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#RenewType":

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```

{
  "type": "enum",
  "members": {
    "NONE": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "None"
      }
    },
    "WEEKLY": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "Weekly"
      }
    },
    "MONTHLY": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "Monthly"
      }
    }
  }
},
"com.amazonaws.licensemanager#ReportContext": {
  "type": "structure",
  "members": {
    "licenseConfigurationArns": {
      "target": "com.amazonaws.licensemanager#ArnList",
      "traits": {

        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration that this
generator reports on.</p>",
        "smithy.api#required": {}
      }
    },
    "traits": {
      "smithy.api#documentation": "<p>Details of the license configuration that this generator reports on.</p>"
    }
  },
"com.amazonaws.licensemanager#ReportFrequency": {
  "type": "structure",
  "members": {
    "value": {
      "target": "com.amazonaws.licensemanager#Integer",
      "traits": {
        "smithy.api#documentation": "<p>Number of times within the frequency period that a report is
generated. \n      The only supported value is <code>1</code>.</p>"
      }
    }
  }
}

```

```

    }
  },
  "period": {
    "target": "com.amazonaws.licensemanager#ReportFrequencyType",

    "traits": {
      "smithy.api#documentation": "<p>Time period between each report. The period can be daily, weekly,
or monthly.</p>"
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>Details about how frequently reports are generated.</p>"
  }
},
"com.amazonaws.licensemanager#ReportFrequencyType": {
  "type": "enum",
  "members": {
    "DAY": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "DAY"
      }
    },
    "WEEK": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "WEEK"
      }
    },
    "MONTH": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "MONTH"
      }
    }
  }
},
"com.amazonaws.licensemanager#ReportGenerator": {
  "type": "structure",
  "members": {
    "ReportGeneratorName": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Name of the report generator.</p>"
      }
    }
  },

```

```

"ReportType": {
  "target": "com.amazonaws.licensemanager#ReportTypeList",
  "traits": {
    "smithy.api#documentation": "<p>Type of reports that are generated.</p>"
  }
},
"ReportContext": {
  "target": "com.amazonaws.licensemanager#ReportContext",
  "traits": {
    "smithy.api#documentation": "<p>License
configuration type for this generator.</p>"
  }
},
"ReportFrequency": {
  "target": "com.amazonaws.licensemanager#ReportFrequency",
  "traits": {
    "smithy.api#documentation": "<p>Details about how frequently reports are generated.</p>"
  }
},
"LicenseManagerReportGeneratorArn": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator.</p>"
  }
},
"LastRunStatus": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>Status of the last report generation attempt.</p>"
  }
},
"LastRunFailureReason":
{
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>Failure message for the last report generation attempt.</p>"
  }
},
"LastReportGenerationTime": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>Time the last report was generated at.</p>"
  }
},
"ReportCreatorAccount": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>The Amazon Web Services account ID used to create the report

```



```

generator.</p>"
    }
  },
  "Description": {
    "target": "com.amazonaws.licensemanager#String",

    "traits": {
      "smithy.api#documentation": "<p>Description of the report generator.</p>"
    }
  },
  "S3Location": {
    "target": "com.amazonaws.licensemanager#S3Location",
    "traits": {
      "smithy.api#documentation": "<p>Details of the S3 bucket that report generator reports are published
to.</p>"
    }
  },
  "CreateTime": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Time the report was created.</p>"
    }
  },
  "Tags": {
    "target": "com.amazonaws.licensemanager#TagList",
    "traits": {
      "smithy.api#documentation": "<p>Tags associated with the report generator.</p>"
    }
  }
}
},
"traits": {
  "smithy.api#documentation": "<p>Describe the details of a report generator.</p>"
}
},
"com.amazonaws.licensemanager#ReportGeneratorList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanager#ReportGenerator"
  }
},
"com.amazonaws.licensemanager#ReportGeneratorName": {
  "type": "string",
  "traits": {
    "smithy.api#length": {
      "min": 1,
      "max": 100
    }
  }
}

```

```

    }
  },
  "com.amazonaws.licensemanager#ReportType": {
    "type": "enum",
    "members": {
      "LICENSE_CONFIGURATION_SUMMARY_REPORT": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "LicenseConfigurationSummaryReport"
        }
      }
    }
  },
  "LICENSE_CONFIGURATION_USAGE_REPORT": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "LicenseConfigurationUsageReport"
    }
  }
},
"com.amazonaws.licensemanager#ReportTypeList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanager#ReportType"
  }
},
"com.amazonaws.licensemanager#ResourceInventory": {
  "type": "structure",
  "members": {
    "ResourceId": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>ID of the resource.</p>"
      }
    },
    "ResourceType": {
      "target": "com.amazonaws.licensemanager#ResourceType",
      "traits": {
        "smithy.api#documentation": "<p>Type of resource.</p>"
      }
    },
    "ResourceArn": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
      }
    }
  }
},

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    "Platform": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Platform of the resource.</p>"
      }
    },
    "PlatformVersion": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Platform version of the resource in the inventory.</p>"
      }
    },
    "ResourceOwningAccountId":
  {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>ID of the account that owns the resource.</p>"
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>Details about a resource.</p>"
  },
  "com.amazonaws.licensemanager#ResourceInventoryList": {
    "type": "list",
    "member": {
      "target": "com.amazonaws.licensemanager#ResourceInventory"
    }
  },
  "com.amazonaws.licensemanager#ResourceLimitExceededException": {
    "type": "structure",
    "members": {
      "Message": {
        "target": "com.amazonaws.licensemanager#Message"
      }
    },
    "traits": {
      "aws.protocols#awsQueryError": {
        "code": "ResourceLimitExceeded",

        "httpResponseCode": 400
      },
      "smithy.api#documentation": "<p>Your resource limits have been exceeded.</p>",
      "smithy.api#error": "client",
      "smithy.api#httpError": 400
    }
  },
},

```

```

"com.amazonaws.licensemanager#ResourceNotFoundException": {
  "type": "structure",
  "members": {
    "Message": {
      "target": "com.amazonaws.licensemanager#Message"
    }
  },
  "traits": {
    "aws.protocols#awsQueryError": {
      "code": "InvalidResource.NotFound",
      "httpResponseCode": 400
    },
    "smithy.api#documentation": "<p>The resource cannot be found.</p>",
    "smithy.api#error": "client",
    "smithy.api#httpError": 400
  }
},
"com.amazonaws.licensemanager#ResourceType": {
  "type": "enum",
  "members": {
    "EC2_INSTANCE": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "EC2_INSTANCE"
      }
    },
    "EC2_HOST": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "EC2_HOST"
      }
    },
    "EC2_AMI": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "EC2_AMI"
      }
    },
    "RDS": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "RDS"
      }
    },
    "SYSTEMS_MANAGER_MANAGED_INSTANCE": {
      "target": "smithy.api#Unit",
      "traits": {

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        "smithy.api#enumValue": "SYSTEMS_MANAGER_MANAGED_INSTANCE"
    }
}
},
"com.amazonaws.licensemanager#S3Location": {
    "type": "structure",
    "members": {
        "bucket": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Name of the S3 bucket reports are published to.</p>"
            }
        },
        "keyPrefix": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Prefix of the S3 bucket reports are published to.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Details of the S3 bucket that report generator reports are published to.</p>"
    }
},
"com.amazonaws.licensemanager#ServerInternalException": {
    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "aws.protocols#awsQueryError": {
            "code": "InternalServerError",
            "httpResponseCode": 500
        },
        "smithy.api#documentation": "<p>The server experienced an internal error. Try again.</p>",
        "smithy.api#error": "server",
        "smithy.api#httpError": 500
    }
},
"com.amazonaws.licensemanager#SignedToken": {
    "type": "string",
    "traits": {
        "smithy.api#length": {
            "min": 4096
        }
    }
}

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    }
  }
},
"com.amazonaws.licensemanager#StatusReasonMessage": {
  "type": "string",
  "traits":
{
  "smithy.api#length": {
    "min": 0,
    "max": 400
  },
  "smithy.api#pattern": "^[\\s\\S]+$"
}
},
"com.amazonaws.licensemanager#String": {
  "type": "string"
},
"com.amazonaws.licensemanager#StringList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanager#String"
  }
},
"com.amazonaws.licensemanager#Tag": {
  "type": "structure",
  "members": {
    "Key": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Tag key.</p>"
      }
    },
    "Value": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation":
"<p>Tag value.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>Details about a tag for a license configuration.</p>"
  }
},
"com.amazonaws.licensemanager#TagKeyList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanager#String"
  }
}

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    }
  },
  "com.amazonaws.licensemanager#TagList": {
    "type": "list",
    "member": {
      "target": "com.amazonaws.licensemanager#Tag"
    }
  },
  "com.amazonaws.licensemanager#TagResource": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#TagResourceRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#TagResourceResponse"
    },
    "errors": [
      {
        "target":
"com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
      },
      {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ServerInternalException"
      }
    ],
    "traits": {
      "smithy.api#documentation": "<p>Adds the specified tags to the specified license configuration.</p>"
    }
  },
  "com.amazonaws.licensemanager#TagResourceRequest": {
    "type": "structure",
    "members": {
      "ResourceArn": {
        "target": "com.amazonaws.licensemanager#String",
        "traits":
{
          "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
          "smithy.api#required": {}
        }
      }
    }
  }
}

```

```

    }
  },
  "Tags": {
    "target": "com.amazonaws.licensemanager#TagList",
    "traits": {
      "smithy.api#documentation": "<p>One or more tags.</p>",
      "smithy.api#required": {}
    }
  }
},
"traits": {
  "smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#TagResourceResponse": {
  "type": "structure",
  "members": {},
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#TokenData": {
  "type": "structure",
  "members": {
    "TokenId": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Token ID.</p>"
      }
    },
    "TokenType": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Type of token generated. The supported value is
<code>REFRESH_TOKEN</code>.</p>"
      }
    },
    "LicenseArn": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
      }
    },
    "ExpirationTime": {
      "target": "com.amazonaws.licensemanager#ISO8601DateTime",
      "traits": {
        "smithy.api#documentation": "<p>Token expiration time, in ISO8601-UTC

```



```

format.</p>"
    }
  },
  "TokenProperties": {
    "target": "com.amazonaws.licensemanager#MaxSize3StringList",
    "traits": {
      "smithy.api#documentation": "<p>Data specified by the caller.</p>"
    }
  },
  "RoleArns": {
    "target": "com.amazonaws.licensemanager#ArnList",
    "traits": {
      "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the roles included in the
token.</p>"
    }
  },
  "Status": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Token status. The possible values are
<code>AVAILABLE</code> and <code>DELETED</code>.</p>"
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>Describes a token.</p>"
  }
},
"com.amazonaws.licensemanager#TokenList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanager#TokenData"
  }
},
"com.amazonaws.licensemanager#TokenString": {
  "type": "string",
  "traits": {
    "smithy.api#length": {
      "min": 0,
      "max": 4096
    },
    "smithy.api#pattern": "^\\S+$"
  }
},
"com.amazonaws.licensemanager#TokenType": {
  "type": "enum",
  "members": {

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```

    "REFRESH_TOKEN": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "REFRESH_TOKEN"
      }
    }
  },
  "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException":
{
  "type": "structure",
  "members": {
    "Message": {
      "target": "com.amazonaws.licensemanager#Message"
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>The digital signature method is unsupported. Try your request
again.</p>",
    "smithy.api#error": "client",
    "smithy.api#httpError": 400
  }
},
"com.amazonaws.licensemanager#UntagResource": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#UntagResourceRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#UntagResourceResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    }
  ],

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```

    "traits": {
      "smithy.api#documentation": "<p>Removes the specified tags from the specified license
configuration.</p>"
    }
  },
  "com.amazonaws.licensemanager#UntagResourceRequest": {
    "type": "structure",
    "members": {
      "ResourceArn": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
          "smithy.api#required": {}
        }
      },
      "TagKeys": {
        "target": "com.amazonaws.licensemanager#TagKeyList",
        "traits": {
          "smithy.api#documentation": "<p>Keys identifying the tags to remove.</p>",
          "smithy.api#required": {}
        }
      }
    },
    "traits": {
      "smithy.api#input": {}
    }
  },
  "com.amazonaws.licensemanager#UntagResourceResponse": {
    "type": "structure",
    "members": {},
    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanager#UpdateLicenseConfiguration": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      }
    ]
  }
}

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    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Modifies the attributes of an existing license configuration.</p>"
  }
},
"com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest": {
  "type": "structure",
  "members": {
    "LicenseConfigurationArn": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>",
        "smithy.api#required": {}
      }
    },
    "LicenseConfigurationStatus": {
      "target": "com.amazonaws.licensemanager#LicenseConfigurationStatus",
      "traits": {
        "smithy.api#documentation": "<p>New status of the license configuration.</p>"
      }
    },
    "LicenseRules": {
      "target": "com.amazonaws.licensemanager#StringList",
      "traits": {
        "smithy.api#documentation": "<p>New license rule. The only rule that you can add after you create a license\n configuration is licenseAffinityToHost.</p>"
      }
    },
    "LicenseCount": {
      "target": "com.amazonaws.licensemanager#BoxLong",
      "traits": {

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    "smithy.api#documentation": "<p>New number of licenses managed by the license
configuration.</p>"
  }
},
"LicenseCountHardLimit": {
  "target": "com.amazonaws.licensemanager#BoxBoolean",
  "traits": {
    "smithy.api#documentation": "<p>New hard limit of the number of available licenses.</p>"
  }
},
"Name": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>New name
of the license configuration.</p>"
  }
},
"Description": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>New description of the license configuration.</p>"
  }
},
"ProductInformationList": {
  "target": "com.amazonaws.licensemanager#ProductInformationList",
  "traits": {
    "smithy.api#documentation": "<p>New product information.</p>"
  }
},
"DisassociateWhenNotFound": {
  "target": "com.amazonaws.licensemanager#BoxBoolean",
  "traits": {
    "smithy.api#documentation": "<p>When true, disassociates a resource when software is
uninstalled.</p>"
  }
}
},
"traits":
{
  "smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse": {
  "type": "structure",
  "members": {},
  "traits": {
    "smithy.api#output": {}
  }
}

```

```

    },
    "com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
          "target": "com.amazonaws.licensemanager#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Updates a report generator.</p>\n    <p>After you make changes to a report generator, it starts generating new reports within 60 minutes of being updated.</p>"
      }
    },
    "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest":
  {
    "type": "structure",
    "members": {
      "LicenseManagerReportGeneratorArn": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator to

```

```

update.</p>",
    "smithy.api#required": {}
  }
},
"ReportGeneratorName": {
  "target": "com.amazonaws.licensemanager#ReportGeneratorName",
  "traits": {
    "smithy.api#documentation": "<p>Name of the report generator.</p>",
    "smithy.api#required": {}
  }
},
"Type": {
  "target": "com.amazonaws.licensemanager#ReportTypeList",
  "traits": {
    "smithy.api#documentation":
    "<p>Type of reports to generate. The following report types are supported:</p>\n    <ul>\n      <li>\n
    <p>License configuration report - Reports the number and details of consumed licenses for a license
    configuration.</p>\n      </li>\n      <li>\n      <p>Resource report - Reports the tracked licenses and
    resource consumption for a license configuration.</p>\n      </li>\n    </ul>",
    "smithy.api#required": {}
  }
},
"ReportContext": {
  "target": "com.amazonaws.licensemanager#ReportContext",
  "traits": {
    "smithy.api#documentation": "<p>The report context.</p>",
    "smithy.api#required": {}
  }
},
"ReportFrequency": {
  "target": "com.amazonaws.licensemanager#ReportFrequency",
  "traits":
  {
    "smithy.api#documentation": "<p>Frequency by which reports are generated.</p>",
    "smithy.api#required": {}
  }
},
"ClientToken": {
  "target": "com.amazonaws.licensemanager#ClientRequestToken",
  "traits": {
    "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the
    idempotency of the request.</p>",
    "smithy.api#required": {}
  }
},
"Description": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {

```

```

        "smithy.api#documentation": "<p>Description of the report generator.</p>"
    }
}
},
"traits": {
    "smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse":
{
    "type": "structure",
    "members": {},
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidResourceStateException"
        },
        {
            "target": "com.amazonaws.licensemanager#LicenseUsageException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
    ],
}

```



```

    "traits": {
      "smithy.api#documentation": "<p>Adds or removes the specified license configurations for the specified Amazon Web Services resource.</p>\n      <p>You can update the license specifications of AMIs, instances, and hosts.\n      You cannot update the license specifications for launch templates and CloudFormation templates, \n      as they send license configurations to the operation that creates the resource.</p>"
    }
  },

  "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest": {
    "type": "structure",
    "members": {
      "ResourceArn": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon Web Services resource.</p>",
          "smithy.api#required": {}
        }
      },
      "AddLicenseSpecifications": {
        "target": "com.amazonaws.licensemanager#LicenseSpecifications",
        "traits": {
          "smithy.api#documentation": "<p>ARNs of the license configurations to add.</p>"
        }
      },
      "RemoveLicenseSpecifications": {
        "target": "com.amazonaws.licensemanager#LicenseSpecifications",
        "traits": {
          "smithy.api#documentation":
            "<p>ARNs of the license configurations to remove.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#input": {}
    }
  },

  "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse": {
    "type": "structure",
    "members": {},
    "traits": {
      "smithy.api#output": {}
    }
  },

  "com.amazonaws.licensemanager#UpdateServiceSettings": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#UpdateServiceSettingsRequest"
    }
  }
}

```

```

    },
    "output": {
      "target": "com.amazonaws.licensemanager#UpdateServiceSettingsResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
      },
      {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ServerInternalException"
      }
    ],
    "traits": {
      "smithy.api#documentation": "<p>Updates License Manager settings for the current Region.</p>"
    }
  },
  "com.amazonaws.licensemanager#UpdateServiceSettingsRequest": {
    "type": "structure",
    "members": {
      "S3BucketArn": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon S3 bucket where
the License
Manager information is stored.</p>"
        }
      },
      "SnsTopicArn": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon SNS topic used
for License Manager alerts.</p>"
        }
      },
      "OrganizationConfiguration": {
        "target": "com.amazonaws.licensemanager#OrganizationConfiguration",
        "traits": {
          "smithy.api#documentation": "<p>Enables integration with Organizations for cross-account
discovery.</p>"
        }
      }
    }
  }
}

```

```

    }
  },
  "EnableCrossAccountsDiscovery": {
    "target": "com.amazonaws.licensemanager#BoxBoolean",
    "traits": {
      "smithy.api#documentation": "<p>Activates cross-account discovery.</p>"
    }
  }
},
"traits": {
  "smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateServiceSettingsResponse": {
  "type": "structure",
  "members": {},
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#UsageOperation": {
  "type": "string",
  "traits": {
    "smithy.api#length": {
      "min": 0,
      "max": 50
    }
  }
},
"com.amazonaws.licensemanager#ValidationException": {
  "type": "structure",
  "members": {
    "Message": {
      "target": "com.amazonaws.licensemanager#Message"
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>The provided input is not valid. Try your request again.</p>",
    "smithy.api#error": "client",
    "smithy.api#httpError": 400
  }
}
}
}
}

```

```
// Code generated by smithy-go-codegen DO NOT EDIT.
```

```

package licensemanager

import (
    "context"
    "fmt"
    awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
    "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
    "github.com/aws/smithy-go/middleware"
    smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Deletes the specified license.
func (c *Client) DeleteLicense(ctx context.Context, params *DeleteLicenseInput, optFns ...func(*Options))
(*DeleteLicenseOutput, error) {
    if params == nil {
        params = &DeleteLicenseInput{}
    }

    result, metadata, err := c.invokeOperation(ctx, "DeleteLicense", params, optFns,
c.addOperationDeleteLicenseMiddlewares)
    if err != nil {
        return nil, err
    }

    out := result.(*DeleteLicenseOutput)
    out.ResultMetadata = metadata
    return out, nil
}

type DeleteLicenseInput struct {

    // Amazon Resource Name (ARN) of the license.
    //
    // This member is required.
    LicenseArn *string

    // Current version of the license.
    //
    // This member is required.
    SourceVersion
    *string

    noSmithyDocumentSerde
}

type DeleteLicenseOutput struct {

    // Date when the license is deleted.

```

```

DeletionDate *string

// License status.
Status types.LicenseDeletionStatus

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationDeleteLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
    if err := stack.Serialize.Add(&setOperationInputMiddleware{ }, middleware.After); err != nil {
        return err
    }
    err = stack.Serialize.Add(&awsAwsjson11_serializeOpDeleteLicense{ }, middleware.After)
    if err != nil {
        return err
    }
    err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpDeleteLicense{ }, middleware.After)
    if err != nil {
        return err
    }
    if err := addProtocolFinalizerMiddlewares(stack, options, "DeleteLicense"); err != nil {
        return fmt.Errorf("add protocol finalizers: %v", err)
    }

    if err = addLegacyEndpointContextSetter(stack, options); err !=
    nil {
        return err
    }
    if err = addSetLoggerMiddleware(stack, options); err != nil {
        return err
    }
    if err = addClientRequestID(stack); err != nil {
        return err
    }
    if err = addComputeContentLength(stack); err != nil {
        return err
    }
    if err = addResolveEndpointMiddleware(stack, options); err != nil {
        return err
    }
    if err = addComputePayloadSHA256(stack); err != nil {
        return err
    }
    if err = addRetry(stack, options); err != nil {
        return err
    }
}

```

```

}
if err = addRawResponseToMetadata(stack); err != nil {
    return err
}
if err = addRecordResponseTiming(stack); err != nil {
    return err
}
if err = addClientUserAgent(stack, options); err != nil {
    return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
    return err
}
if err = addOpDeleteLicenseValidationMiddleware(stack);
err != nil {
    return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDeleteLicense(options.Region),
middleware.Before); err != nil {
    return err
}
if err = addRecursionDetection(stack); err != nil {
    return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
    return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
    return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
    return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
    return err
}
return nil
}

func newServiceMetadataMiddleware_opDeleteLicense(region string) *awsmiddleware.RegisterServiceMetadata {
return &awsmiddleware.RegisterServiceMetadata{
    Region:    region,

```

```
ServiceID: ServiceID,  
OperationName: "DeleteLicense",  
}  
}
```

## 1.74 aws-aws-sdk-go-v2-internal-v4a 1.0.23

### 1.74.1 Available under license :

name: License Scan

on: [pull\_request]

jobs:

licensescan:

name: License Scan

runs-on: ubuntu-latest

strategy:

matrix:

python-version: [3.9]

steps:

- name: Checkout target

uses: actions/checkout@v2

with:

path: sdkbase

ref: \${{ github.base\_ref }}

- name: Checkout this ref

uses: actions/checkout@v2

with:

path: new-ref

fetch-depth: 0

- name: Get Diff

run: git --git-dir ./new-ref/.git diff --name-only --diff-filter=ACMRT \${{ github.event.pull\_request.base.sha }}

\${{ github.sha }} > refDiffFiles.txt

- name: Get Target Files

run: git --git-dir ./sdkbase/.git ls-files | grep -xf refDiffFiles.txt - > targetFiles.txt

- name: Checkout scancode

uses: actions/checkout@v2

with:

repository: nexB/scancode-toolkit

path: scancode-toolkit

fetch-depth: 1

- name: Set up Python \${{ matrix.python-version }}

uses: actions/setup-python@v2

with:

python-version: \${{ matrix.python-version }}

# ScanCode

```

- name: Self-configure scancode
  working-directory: ./scancode-toolkit
  run: ./scancode --help
- name: Run Scan code on target
  run: cat targetFiles.txt | while read filename; do echo ./sdkbase/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> old-licenses.txt
- name: Run Scan code on pr ref
  run: cat refDiffFiles.txt | while read filename; do echo ./new-ref/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> new-licenses.txt
# compare
- name: License test
  run: if ! cmp old-licenses.txt new-licenses.txt; then echo "Licenses differ! Failing."; exit -1; else echo "Licenses
are the same. Success."; exit 0; fi
// Code generated by smithy-go-codegen DO NOT EDIT.

```

```
package licensemanager
```

```

import (
  "context"
  "fmt"
  awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
  "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
  "github.com/aws/smithy-go/middleware"
  smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license for offline use.
func (c *Client) CheckoutBorrowLicense(ctx context.Context, params *CheckoutBorrowLicenseInput, optFns
...func(*Options)) (*CheckoutBorrowLicenseOutput, error) {
  if params == nil {
    params = &CheckoutBorrowLicenseInput{}
  }

  result, metadata, err := c.invokeOperation(ctx, "CheckoutBorrowLicense", params, optFns,
c.addOperationCheckoutBorrowLicenseMiddlewares)
  if err != nil {
    return nil, err
  }

  out := result.(*CheckoutBorrowLicenseOutput)
  out.ResultMetadata = metadata
  return out, nil
}

type CheckoutBorrowLicenseInput struct {

  // Unique, case-sensitive identifier that you provide to ensure the idempotency of
  //

```



```

the request.
//
// This member is required.
ClientToken *string

// Digital signature method. The possible value is JSON Web Signature (JWS)
// algorithm PS384. For more information, see RFC 7518 Digital Signature with
// RSASSA-PSS (https://tools.ietf.org/html/rfc7518#section-3.5) .
//
// This member is required.
DigitalSignatureMethod types.DigitalSignatureMethod

// License entitlements. Partial checkouts are not supported.
//
// This member is required.
Entitlements []types.EntitlementData

// Amazon Resource Name (ARN) of the license. The license must use the borrow
// consumption configuration.
//
// This member is required.
LicenseArn *string

// Information about constraints.
CheckoutMetadata []types.Metadata

// Node ID.
NodeId *string

noSmithyDocumentSerde
}

type CheckoutBorrowLicenseOutput struct {

// Information about constraints.
CheckoutMetadata []types.Metadata

// Allowed license entitlements.
EntitlementsAllowed []types.EntitlementData

//
// Date and time at which the license checkout expires.
Expiration *string

// Date and time at which the license checkout is issued.
IssuedAt *string

// Amazon Resource Name (ARN) of the license.

```

```

LicenseArn *string

// License consumption token.
LicenseConsumptionToken *string

// Node ID.
NodeId *string

// Signed token.
SignedToken *string

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutBorrowLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
    if err := stack.Serialize.Add(&setOperationInputMiddleware{ }, middleware.After); err != nil {
        return err
    }
    err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutBorrowLicense{ }, middleware.After)
    if err != nil {
        return err
    }
    err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutBorrowLicense{ }, middleware.After)
    if err != nil {
        return err
    }
    if err := addProtocolFinalizerMiddlewares(stack,
options, "CheckoutBorrowLicense"); err != nil {
        return fmt.Errorf("add protocol finalizers: %v", err)
    }

    if err = addLegacyEndpointContextSetter(stack, options); err != nil {
        return err
    }
    if err = addSetLoggerMiddleware(stack, options); err != nil {
        return err
    }
    if err = addClientRequestID(stack); err != nil {
        return err
    }
    if err = addComputeContentLength(stack); err != nil {
        return err
    }
    if err = addResolveEndpointMiddleware(stack, options); err != nil {

```

```

return err
}
if err = addComputePayloadSHA256(stack); err != nil {
return err
}
if err = addRetry(stack, options); err != nil {
return err
}
if err = addRawResponseToMetadata(stack); err != nil {
return err
}
if err = addRecordResponseTiming(stack); err != nil {
return err
}
if err = addClientUserAgent(stack, options); err != nil {
return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack);
err != nil {
return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
return err
}
if err = addOpCheckoutBorrowLicenseValidationMiddleware(stack); err != nil {
return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutBorrowLicense(options.Region),
middleware.Before); err != nil {
return err
}
if err = addRecursionDetection(stack); err != nil {
return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
return err
}

```

```

}
return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
return &awsmiddleware.RegisterServiceMetadata{
Region:    region,
ServiceID: ServiceID,
OperationName:
"CheckoutBorrowLicense",
}
}
ListLicenses
Initialize stack step
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
Serialize stack step
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
RecursionDetection
Finalize stack step
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
Retry
RetryMetricsHeader
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
RecordResponseTiming
RequestResponseLogger
{
"smithy": "2.0",

```

```

"shapes": {
  "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger": {
    "type": "integer"
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong": {
    "type": "long"
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#Filter": {
    "type": "structure",
    "members": {
      "Name": {
        "target": "smithy.api#String",
        "traits": {
          "smithy.api#documentation": "<p>The type of name to filter by.</p>"
        }
      },
      "Values": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
        "traits": {
          "smithy.api#documentation": "<p>One or more values for the name to filter by.</p>"
        }
      },
      "Operator": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Operator",
        "traits": {
          "smithy.api#documentation": "<p>An operator for filtering results.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#documentation": "<p>A filter object that is used to return more specific results from a describe operation.\n  Filters can be used to match a set of resources by specific criteria.</p>"
    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList": {
    "type": "list",
    "member": {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Filter"
    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest"
    },
    "output": {

```

```

    "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerErrorException"
    },
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
    },
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Lists the Linux subscriptions service settings.</p>",
    "smithy.api#http": {
      "code": 200,
      "method": "POST",
      "uri": "/subscription/GetServiceSettings"
    },
    "smithy.api#idempotent": {}
  }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest":
{
  "type": "structure",
  "members": {}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse": {
  "type": "structure",
  "members": {
    "LinuxSubscriptionsDiscovery": {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
      "traits": {
        "smithy.api#documentation": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
      }
    },
    "LinuxSubscriptionsDiscoverySettings": {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
      "traits": {
        "smithy.api#documentation": "<p>Lists the settings defined for Linux subscriptions discovery. The settings include if\n Organizations integration has been enabled, and which Regions data will be aggregated from.</p>"
      }
    },
    "Status": {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
      "traits": {

```

```

        "smithy.api#documentation": "<p>Indicates the status of Linux subscriptions settings being
applied.</p>"
    }
},
"StatusMessage": {
    "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
    "traits": {
        "smithy.api#documentation": "<p>A message which details the Linux subscriptions service settings
current status.</p>"
    }
},
"HomeRegions": {
    "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
    "traits": {
        "smithy.api#documentation": "<p>The Region in which License Manager displays
the aggregated data for Linux\n    subscriptions.</p>"
    }
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Instance": {
    "type": "structure",
    "members": {
        "AmiId": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The AMI ID used to launch the instance.</p>"
            }
        },
        "InstanceID": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The instance ID of the resource.</p>"
            }
        },
        "InstanceType": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The instance type of the resource.</p>"
            }
        }
    },
    "AccountID": {
        "target": "smithy.api#String",
        "traits": {
            "smithy.api#documentation": "<p>The account ID which owns the instance.</p>"
        }
    },

```

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"Status": {
  "target": "smithy.api#String",
  "traits": {
    "smithy.api#documentation": "<p>The status of the instance.</p>"
  }
},
"Region": {
  "target": "smithy.api#String",
  "traits": {
    "smithy.api#documentation": "<p>The Region the instance is running in.</p>"
  }
},
"UsageOperation": {
  "target": "smithy.api#String",
  "traits": {
    "smithy.api#documentation": "<p>The usage operation of the instance. For more information, see For
more information, see\n    <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-
subscriptions-usage-operation.html\">Usage\n    operation values</a> in the <i>License Manager User
Guide</i>.</p>"
  }
},
"ProductCode": {
  "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList",
  "traits": {
    "smithy.api#documentation": "<p>The product code for the instance. For more information, see <a
href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-subscriptions-usage-
operation.html\">Usage\n    operation values</a> in the <i>License Manager User Guide</i> .</p>"
  }
},
"LastUpdatedTime": {
  "target": "smithy.api#String",
  "traits": {
    "smithy.api#documentation": "<p>The time in which the last discovery
updated the instance details.</p>"
  }
},
"SubscriptionName": {
  "target": "smithy.api#String",
  "traits": {
    "smithy.api#documentation": "<p>The name of the subscription being used by the instance.</p>"
  }
},
"traits": {
  "smithy.api#documentation": "<p>Details discovered information about a running instance using Linux
subscriptions.</p>"
}
},

```



```

"com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Instance"
  }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerError": {
  "type": "structure",
  "members": {
    "message": {
      "target": "smithy.api#String"
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>An exception occurred with the service.</p>",
    "smithy.api#error": "server"
  }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#LicenseManagerLinuxSubscriptions": {
  "type": "service",
  "version": "2018-05-10",
  "operations": [
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings"
    },
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances"
    },
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions"
    },
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings"
    }
  ],
  "traits": {
    "aws.api#service": {
      "sdkId": "License Manager Linux Subscriptions",
      "arnNamespace": "license-manager-linux-subscriptions",
      "cloudTrailEventSource": "license-manager-linux-subscriptions.amazonaws.com"
    },
    "aws.auth#sigv4": {
      "name": "license-manager-linux-subscriptions"
    },
    "aws.protocols#restJson1": {},
    "smithy.api#cors": {
      "additionalAllowedHeaders": [

```

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    "x-amz-content-sha256",
    "x-amz-user-agent",
    "x-amzn-platform-id",
    "x-amzn-trace-id",
    "content-length",
    "x-api-key",
    "authorization",
    "x-amz-date",

"x-amz-security-token",
    "Access-Control-Allow-Headers",
    "Access-Control-Allow-Methods",
    "Access-Control-Allow-Origin"
  ],
  "additionalExposedHeaders": [
    "x-amzn-errortype",
    "x-amzn-requestid",
    "x-amzn-trace-id"
  ]
},
"smithy.api#documentation": "<p>With License Manager, you can discover and track your commercial
Linux subscriptions on running Amazon EC2 instances.</p>",
"smithy.api#title": "AWS License Manager Linux Subscriptions",
"smithy.rules#endpointRuleSet": {
  "version": "1.0",
  "parameters": {
    "Region": {
      "builtIn": "AWS::Region",
      "required": false,
      "documentation": "The
AWS region used to dispatch the request.",
      "type": "String"
    },
    "UseDualStack": {
      "builtIn": "AWS::UseDualStack",
      "required": true,
      "default": false,
      "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not
support dual-stack, dispatching the request MAY return an error.",
      "type": "Boolean"
    },
    "UseFIPS": {
      "builtIn": "AWS::UseFIPS",
      "required": true,
      "default": false,
      "documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the

```

configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",

```
"type": "Boolean"
},
"Endpoint": {
  "builtIn": "SDK::Endpoint",
  "required": false,
  "documentation": "Override the endpoint used to send this request",
  "type": "String"
}
},
"rules": [
  {
    "conditions": [
      {
        "fn": "isSet",
        "argv": [
          {
            "ref": "Endpoint"
          }
        ]
      }
    ]
  }
],
"type": "tree",
"rules": [
  {
    "conditions": [
      {
        "fn": "booleanEquals",
        "argv": [
          {
            "ref": "UseFIPS"
          },
          true
        ]
      }
    ]
  },
  {
    "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
    "type": "error"
  },
  {
    "conditions": [],
    "type": "tree",
    "rules": [
      {
```

```

"conditions": [
  {
    "fn": "booleanEquals",
    "argv": [
      {
        "ref": "UseDualStack"
      },
      true
    ]
  }
],
"error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
"type": "error"
},
{
  "conditions": [],

"endpoint": {
  "url": {
    "ref": "Endpoint"
  },
  "properties": {},
  "headers": {}
},
"type": "endpoint"
}
]
}
],
{
  "conditions": [],
"type": "tree",
"rules": [
  {
    "conditions": [
      {
        "fn": "isSet",

"argv": [
      {
        "ref": "Region"
      }
    ]
  }
],
"type": "tree",
"rules": [

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```

    {
      "conditions": [
        {
          "fn": "aws.partition",
          "argv": [
            {
              "ref": "Region"
            }
          ]
        }
      ],
      "assign": "PartitionResult"
    }
  ],
  "type": "tree",
  "rules": [
    {
      "conditions": [
        {
          "fn": "booleanEquals",
          "argv": [
            {
              "ref": "UseFIPS"
            },
            true
          ]
        }
      ],
      {
        "fn": "booleanEquals",
        "argv": [
          {
            "ref": "UseDualStack"
          },
          true
        ]
      }
    ]
  ],
  "type": "tree",
  "rules": [
    {
      "conditions": [
        {
          "fn": "booleanEquals",
          "argv": [
            true,
            {
              "fn": "getAttr",

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        "argv": [
            {
                "ref": "PartitionResult"
            },
            "supportsFIPS"
        ]
    }

    ]
},
{
    "fn": "booleanEquals",
    "argv": [
        true,
        {
            "fn": "getAttr",
            "argv": [
                {
                    "ref": "PartitionResult"
                },
                "supportsDualStack"
            ]
        }
    ]
}
],
"type": "tree",
"rules": [
    {
        "conditions": [],
        "type": "tree",
        "rules": [
            {
                "conditions": [],
                "endpoint": {
                    "url": "https://license-manager-linux-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                    "properties": {},
                    "headers": {}
                },
                "type": "endpoint"
            }
        ]
    }
]
]

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    },
    {
      "conditions": [],
      "error": "FIPS and DualStack are enabled, but this partition does not support
one or both",
      "type": "error"
    }
  ]
},
{
  "conditions": [
    {
      "fn": "booleanEquals",
      "argv": [
        {
          "ref": "UseFIPS"
        },
        true
      ]
    }
  ],
  "type": "tree",
  "rules": [
    {
      "conditions": [
        {
          "fn": "booleanEquals",
          "argv": [
            true,
            {
              "fn": "getAttr",
              "argv": [
                {
                  "ref": "PartitionResult"
                },
                "supportsFIPS"
              ]
            }
          ]
        }
      ]
    }
  ],
  "type": "tree",
  "rules": [
    {
      "conditions": [],

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```

        "type": "tree",
        "rules": [
            {
                "conditions": [],
                "endpoint": {
                    "url": "https://license-manager-linux-subscriptions-
fips.{Region}.{PartitionResult#dnsSuffix}",
                    "properties": {},
                    "headers": {}
                },
                "type": "endpoint"
            }
        ]
    },
    {
        "conditions": [],
        "error": "FIPS is enabled but this partition does not support FIPS",
        "type": "error"
    }
]

```

},

```

{
    "conditions": [
        {
            "fn": "booleanEquals",
            "argv": [
                {
                    "ref": "UseDualStack"
                },
                true
            ]
        }
    ],
    "type": "tree",
    "rules": [
        {
            "conditions": [
                {
                    "fn": "booleanEquals",
                    "argv": [
                        true,
                        {
                            "fn": "getAttr",

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        "argv": [
            {
                "ref": "PartitionResult"
            },
            "supportsDualStack"
        ]
    }
]
},
"type": "tree",
"rules": [
    {
        "conditions": [],
        "type": "tree",
        "rules": [
            {
                "conditions": [],
                "endpoint": {
                    "url": "https://license-manager-linux-
subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                    "properties": {},
                    "headers": {}
                },
                "type": "endpoint"
            }
        ]
    }
],
{
    "conditions": [],
    "error": "DualStack is enabled but this partition does not support DualStack",
    "type": "error"
}
],
{
    "conditions": [],
    "type": "tree",
    "rules": [
        {
            "conditions": [],
            "endpoint": {
                "url":

```

```

"https://license-manager-linux-subscriptions.{Region}.{PartitionResult#dnsSuffix}",
    "properties": {},
    "headers": {}
  },
  "type": "endpoint"
}
]
}
]
}
]
},
{
  "conditions": [],
  "error": "Invalid Configuration: Missing Region",
  "type": "error"
}
]
}
]
},
"smithy.rules#endpointTests": {
  "testCases": [
    {
      "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions-fips.us-east-1.api.aws"
        }
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": true,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions-fips.us-east-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    }
  ]
}

```

```

    }
  },
  {
    "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-linux-subscriptions.us-east-1.api.aws"
      }
    },
    "params": {
      "Region": "us-east-1",
      "UseFIPS": false,
      "UseDualStack": true
    }
  },
  {
    "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-linux-subscriptions.us-east-1.amazonaws.com"
      }
    },
    "params": {
      "Region": "us-east-1",
      "UseFIPS": false,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-linux-subscriptions-fips.cn-north-1.api.amazonwebservices.com.cn"
      }
    },
    "params": {
      "Region": "cn-north-1",
      "UseFIPS": true,
      "UseDualStack": true
    }
  },
  {
    "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-linux-subscriptions-fips.cn-north-1.amazonaws.com.cn"
      }
    }
  }
}

```

```

    },
    "params": {
      "Region": "cn-north-1",
      "UseFIPS": true,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-linux-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
      }
    },
    "params": {
      "Region": "cn-north-1",
      "UseFIPS": false,
      "UseDualStack": true
    }
  },
  {
    "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
    "expect": {
      "endpoint":
    {
      "url": "https://license-manager-linux-subscriptions.cn-north-1.amazonaws.com.cn"
    }
    },
    "params": {
      "Region": "cn-north-1",
      "UseFIPS": false,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.api.aws"
      }
    },
    "params": {
      "Region": "us-gov-east-1",
      "UseFIPS": true,
      "UseDualStack": true
    }
  },
  {

```

```

    "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.amazonaws.com"
      }
    },
    "params": {
      "Region": "us-gov-east-1",
      "UseFIPS": true,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-linux-subscriptions.us-gov-east-1.api.aws"
      }
    },
    "params": {
      "Region": "us-gov-east-1",
      "UseFIPS": false,
      "UseDualStack": true
    }
  },
  {
    "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-linux-subscriptions.us-gov-east-1.amazonaws.com"
      }
    },
    "params": {
      "Region": "us-gov-east-1",
      "UseFIPS": false,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
    "expect": {
      "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
    },
    "params": {
      "Region": "us-iso-east-1",
      "UseFIPS": true,
      "UseDualStack": true
    }
  }
}

```

```

    }
  },
  {
    "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-linux-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
      }
    },
    "params": {
      "Region": "us-iso-east-1",
      "UseFIPS": true,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
    "expect": {
      "error": "DualStack is enabled but this partition does not support DualStack"
    },
    "params": {
      "Region": "us-iso-east-1",
      "UseFIPS": false,
      "UseDualStack": true
    }
  }
}

```

```

"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager-linux-subscriptions.us-iso-east-1.c2s.ic.gov"
    }
  },
  "params": {
    "Region": "us-iso-east-1",
    "UseFIPS": false,
    "UseDualStack": false
  }
},
{
  "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
  "expect": {
    "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
  },
  "params": {

```

```

"Region": "us-isob-east-1",
  "UseFIPS": true,
  "UseDualStack": true
}
},
{
  "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager-linux-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
    }
  },
  "params": {
    "Region": "us-isob-east-1",
    "UseFIPS": true,
    "UseDualStack": false
  }
},
{
  "documentation": "For region us-isob-east-1 with FIPS disabled
and DualStack enabled",
  "expect": {
    "error": "DualStack is enabled but this partition does not support DualStack"
  },
  "params": {
    "Region": "us-isob-east-1",
    "UseFIPS": false,
    "UseDualStack": true
  }
},
{
  "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager-linux-subscriptions.us-isob-east-1.sc2s.sgov.gov"
    }
  },
  "params": {
    "Region": "us-isob-east-1",

"UseFIPS": false,
    "UseDualStack": false
  }
},
{
  "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
  "expect": {
    "endpoint": {

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        "url": "https://example.com"
    }
},
"params": {
    "Region": "us-east-1",
    "UseFIPS": false,
    "UseDualStack": false,
    "Endpoint": "https://example.com"
}
},
{
    "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",

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```

"expect": {
    "endpoint": {
        "url": "https://example.com"
    }
},
"params": {
    "UseFIPS": false,
    "UseDualStack": false,
    "Endpoint": "https://example.com"
}
},
{
    "documentation": "For custom endpoint with fips enabled and dualstack disabled",
    "expect": {
        "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
    },
    "params": {
        "Region": "us-east-1",
        "UseFIPS": true,
        "UseDualStack": false,

"Endpoint": "https://example.com"
    }
},
{
    "documentation": "For custom endpoint with fips disabled and dualstack enabled",
    "expect": {
        "error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
    },
    "params": {
        "Region": "us-east-1",
        "UseFIPS": false,
        "UseDualStack": true,
        "Endpoint": "https://example.com"

```



```

    }
  },
  {
    "documentation": "Missing region",
    "expect": {
      "error": "Invalid Configuration: Missing Region"
    }
  }
],
"version": "1.0"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery": {
  "type": "string",
  "traits": {
    "smithy.api#enum": [
      {
        "name": "Enabled",
        "value": "Enabled",
        "documentation": "Enabled LinuxSubscriptionsDiscovery"
      },
      {
        "name": "Disabled",
        "value": "Disabled",
        "documentation": "Disabled LinuxSubscriptionsDiscovery"
      }
    ]
  }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings": {
  "type": "structure",
  "members": {
    "SourceRegions": {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
      "traits": {
        "smithy.api#documentation": "<p>The Regions in which to discover data for Linux
subscriptions.</p>",
        "smithy.api#required": {}
      }
    },
    "OrganizationIntegration": {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration",
      "traits": {
        "smithy.api#documentation": "<p>Details if you have enabled resource discovery across your
accounts in Organizations.</p>",
        "smithy.api#required": {}
      }
    }
  }
}

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    }
  },
  "traits": {
    "smithy.api#documentation": "<p>Lists the settings defined for discovering Linux subscriptions.</p>"
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances": {
    "type":
"operation",
    "input": {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerErrorException"
      },
      {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
      },
      {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
      }
    ],
    "traits": {
      "smithy.api#documentation": "<p>Lists the running Amazon EC2 instances that were discovered with
commercial Linux\n  subscriptions.</p>",
      "smithy.api#http": {

"code": 200,
      "method": "POST",
      "uri": "/subscription/ListLinuxSubscriptionInstances"
    },
    "smithy.api#idempotent": {},
    "smithy.api#paginated": {
      "inputToken": "NextToken",
      "outputToken": "NextToken",
      "pageSize": "MaxResults",
      "items": "Instances"
    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest": {
    "type": "structure",
    "members": {

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"Filters": {
  "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
  "traits": {
    "smithy.api#documentation": "<p>An array of structures that you can use to filter the results to those
that match one or\n    more sets of key-value pairs that you specify. For example, you can filter by
the name of\n    <code>AmiID</code> with an optional operator to see subscriptions that match, partially\n
match, or don't match a certain Amazon Machine Image (AMI) ID.</p>\n    <p>The valid names for this filter
are:</p>\n    <ul>\n    <li>\n    <p>\n    <code>AmiID</code>\n    </p>\n
</li>\n    <li>\n    <p>\n    <code>InstanceID</code>\n    </p>\n    </li>\n
<li>\n    <p>\n    <code>AccountID</code>\n    </p>\n    </li>\n    <li>\n
<p>\n    <code>Status</code>\n    </p>\n    </li>\n    <li>\n    <p>\n
<code>Region</code>\n    </p>\n    </li>\n    <li>\n    <p>\n
<code>UsageOperation</code>\n    </p>\n    </li>\n    <li>\n
<p>\n    <code>ProductCode</code>\n    </p>\n    </li>\n    <li>\n    <p>\n
<code>InstanceType</code>\n    </p>\n    </li>\n    </ul>\n    <p>The valid Operators for this
filter are:</p>\n    <ul>\n    <li>\n    <p>\n    <code>contains</code>\n    </p>\n
</li>\n    <li>\n    <p>\n    <code>equals</code>\n    </p>\n    </li>\n    <li>\n
<p>\n    <code>NotEqual</code>\n    </p>\n    </li>\n    </ul>"
  }
},
"MaxResults": {
  "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
  "traits": {
    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
  }
}
},
"NextToken": {
  "target": "smithy.api#String",
  "traits": {
    "smithy.api#documentation": "<p>Token for the next set of results.</p>",
    "smithy.api#length": {
      "min": 1,
      "max": 16384
    }
  }
}
},
"traits": {
  "smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if
parameters in request increases."
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse": {
  "type": "structure",
  "members": {
    "Instances": {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList",

```

```

    "traits": {
      "smithy.api#documentation":
"<p>An array that contains instance objects.</p>"
    }
  },
  "NextToken": {
    "target": "smithy.api#String",
    "traits": {
      "smithy.api#documentation": "<p>Token for the next set of results.</p>"
    }
  }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerError"
    },
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
    },
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Lists the Linux subscriptions that have been discovered. If you have
linked your\n  organization, the returned results will include data aggregated across your accounts in\n
Organizations.</p>",
    "smithy.api#http": {
      "code": 200,
      "method": "POST",
      "uri": "/subscription/ListLinuxSubscriptions"
    },
    "smithy.api#idempotent": {},
    "smithy.api#paginated": {
      "inputToken": "NextToken",
      "outputToken": "NextToken",
      "pageSize": "MaxResults",
      "items": "Subscriptions"
    }
  }
}

```

```

    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest": {
    "type": "structure",
    "members": {
      "Filters": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
        "traits": {
          "smithy.api#documentation": "<p>An array of structures that you can use to filter the results to those
that match one or
more sets of key-value pairs that you specify. For example, you can filter by the name of
<code>Subscription</code> with an optional operator to see subscriptions that match,
partially match, or don't
match a certain subscription's name.</p>
<p>The valid names for this filter are:</p>
<ul>
<li>
<p>
<code>Subscription</code>
</p>
</li>
</ul>
<p>The valid Operators for this filter are:</p>
<ul>
<li>
<p>
<code>contains</code>
</p>
</li>
<li>
<p>
<code>equals</code>
</p>
</li>
<li>
<p>
<code>NotEqual</code>
</p>
</li>
</ul>"
        }
      },
      "MaxResults": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
        "traits": {
          "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
        }
      },
      "NextToken": {
        "target": "smithy.api#String",
        "traits": {
          "smithy.api#documentation": "<p>Token for the next set of results.</p>",
          "smithy.api#length": {
            "min": 1,
            "max": 16384
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if
parameters in request increases."
      }
    },
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse": {
    "type": "structure",
    "members": {
      "Subscriptions": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList",

```

```

    "traits": {
      "smithy.api#documentation": "<p>An array that contains subscription objects.</p>"
    }
  },
  "NextToken": {
    "target": "smithy.api#String",
    "traits": {
      "smithy.api#documentation": "<p>Token for
the next set of results.</p>"
    }
  }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Operator": {
  "type": "string",
  "traits": {
    "smithy.api#enum": [
      {
        "name": "EQUAL",
        "value": "Equal",
        "documentation": "Equal operator"
      },
      {
        "name": "NOT_EQUAL",
        "value": "NotEqual",
        "documentation": "Not equal operator"
      },
      {
        "name": "CONTAINS",
        "value": "Contains",
        "documentation": "Contains operator"
      }
    ],
    "smithy.api#length": {
      "min": 1,
      "max": 20
    }
  }
},

"com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration": {
  "type": "string",
  "traits": {
    "smithy.api#enum": [
      {
        "name": "Enabled",
        "value": "Enabled",
        "documentation": "Enabled OrganizationIntegration"
      }
    ]
  }
}

```

```

    },
    {
      "name": "Disabled",
      "value": "Disabled",
      "documentation": "Disabled OrganizationIntegration"
    }
  ]
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList": {
  "type": "list",
  "member": {
    "target": "smithy.api#String"
  }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Status": {
  "type": "string",
  "traits": {
    "smithy.api#enum": [
{
      "name": "InProgress",
      "value": "InProgress",
      "documentation": "InProgress status"
    },
    {
      "name": "Completed",
      "value": "Completed",
      "documentation": "Completed status"
    },
    {
      "name": "Successful",
      "value": "Successful",
      "documentation": "Successful status"
    },
    {
      "name": "Failed",
      "value": "Failed",
      "documentation": "Failed status"
    }
  ]
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#StringList": {
  "type": "list",
  "member": {
    "target": "smithy.api#String",
    "traits":

```

```

{
    "smithy.api#length": {
        "min": 1,
        "max": 100
    }
},
"traits": {
    "smithy.api#length": {
        "min": 1,
        "max": 100
    },
    "smithy.api#uniqueItems": {}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#StringMap": {
    "type": "map",
    "key": {
        "target": "smithy.api#String"
    },
    "value": {
        "target": "smithy.api#String"
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Subscription": {
    "type": "structure",
    "members": {
        "Name": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The name of the subscription.</p>"
            }
        },
        "Type": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The type of subscription. The type can be subscription-included with Amazon EC2, Bring Your Own\n    Subscription model (BYOS), or from the Amazon Web Services Marketplace. Certain subscriptions may use licensing from the\n    Amazon Web Services Marketplace as well as OS licensing from Amazon EC2 or BYOS.</p>"
            }
        },
        "InstanceCount": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong",
            "traits": {
                "smithy.api#documentation": "<p>The total amount of running instances using this subscription.</p>"
            }
        }
    }
}

```



```

    }
  },
  "traits": {
    "smithy.api#documentation": "<p>An object which details a discovered Linux
subscription.</p>"
  }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription"
  }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException": {
  "type": "structure",
  "members": {
    "message": {
      "target": "smithy.api#String"
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>The request was denied due to request throttling.</p>",
    "smithy.api#error": "client"
  }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerError"
    },
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
    },
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Updates the service settings for Linux subscriptions.</p>",
    "smithy.api#http": {

```

```

        "code": 200,
        "method": "POST",
        "uri": "/subscription/UpdateServiceSettings"
    },
    "smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest":
{
    "type": "structure",
    "members": {
        "LinuxSubscriptionsDiscovery": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
            "traits": {
                "smithy.api#documentation": "<p>Describes if the discovery of Linux subscriptions is enabled.</p>",
                "smithy.api#required": {}
            }
        },
        "LinuxSubscriptionsDiscoverySettings": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
            "traits": {
                "smithy.api#documentation": "<p>The settings defined for Linux subscriptions discovery. The settings include if Organizations\n    integration has been enabled, and which Regions data will be aggregated from.</p>",
                "smithy.api#required": {}
            }
        },
        "AllowUpdate": {
            "target": "smithy.api#Boolean",
            "traits": {
                "smithy.api#documentation": "<p>Describes if updates are allowed to the service settings for Linux subscriptions. If you\n    allow updates, you can aggregate Linux subscription data in more than one home Region.</p>"
            }
        }
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse": {
    "type": "structure",
    "members": {
        "LinuxSubscriptionsDiscovery": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
            "traits": {
                "smithy.api#documentation": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
            }
        }
    }
},

```

```

"LinuxSubscriptionsDiscoverySettings": {
  "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
  "traits": {
    "smithy.api#documentation": "<p>The settings defined for Linux subscriptions discovery. The
settings include if Organizations\n  integration has been enabled, and which Regions data will be aggregated
from.</p>"
  }
},
"Status": {
  "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
  "traits": {
    "smithy.api#documentation": "<p>Indicates the status of Linux subscriptions settings being
applied.</p>"
  }
},
"StatusMessage": {
  "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
  "traits": {
    "smithy.api#documentation":
"<p>A message which details the Linux subscriptions service settings current status.</p>"
  }
},
"HomeRegions": {
  "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
  "traits": {
    "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated
data for Linux\n  subscriptions.</p>"
  }
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException": {
  "type": "structure",
  "members": {
    "message": {
      "target": "smithy.api#String"
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>The provided input is not valid. Try your request again.</p>",
    "smithy.api#error": "client"
  }
}
}
}

```

// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

```

import (
    "context"
    "fmt"
    awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
    "github.com/aws/smithy-go/middleware"
    smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks in the specified license. Check in a license when it is no longer in use.
func (c *Client) CheckInLicense(ctx context.Context, params *CheckInLicenseInput, optFns ...func(*Options))
(*CheckInLicenseOutput, error) {
    if params == nil {
        params = &CheckInLicenseInput{}
    }

    result, metadata, err := c.invokeOperation(ctx, "CheckInLicense", params, optFns,
c.addOperationCheckInLicenseMiddlewares)
    if err != nil {
        return nil, err
    }

    out := result.(*CheckInLicenseOutput)
    out.ResultMetadata = metadata
    return out, nil
}

type CheckInLicenseInput struct {

    // License consumption token.
    //
    // This member is required.
    LicenseConsumptionToken *string

    // License beneficiary.
    Beneficiary *string

    noSmithyDocumentSerde
}

type
CheckInLicenseOutput struct {
    // Metadata pertaining to the operation's result.
    ResultMetadata middleware.Metadata

    noSmithyDocumentSerde
}

```

```

func (c *Client) addOperationCheckInLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
    if err := stack.Serialize.Add(&setOperationInputMiddleware{ }, middleware.After); err != nil {
        return err
    }
    err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckInLicense{ }, middleware.After)
    if err != nil {
        return err
    }
    err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckInLicense{ }, middleware.After)
    if err != nil {
        return err
    }
    if err := addProtocolFinalizerMiddlewares(stack, options, "CheckInLicense"); err != nil {
        return fmt.Errorf("add protocol finalizers: %v", err)
    }

    if err = addLegacyEndpointContextSetter(stack, options); err != nil {
        return err
    }
    if err = addSetLoggerMiddleware(stack, options); err != nil {
        return err
    }
    if err = addClientRequestID(stack); err != nil {
        return err
    }
    if
    err = addComputeContentLength(stack); err != nil {
        return err
    }
    if err = addResolveEndpointMiddleware(stack, options); err != nil {
        return err
    }
    if err = addComputePayloadSHA256(stack); err != nil {
        return err
    }
    if err = addRetry(stack, options); err != nil {
        return err
    }
    if err = addRawResponseToMetadata(stack); err != nil {
        return err
    }
    if err = addRecordResponseTiming(stack); err != nil {
        return err
    }
    if err = addClientUserAgent(stack, options); err != nil {
        return err
    }
    if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {

```

```

return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
return err
}
if err = addOpCheckInLicenseValidationMiddleware(stack); err != nil {
return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckInLicense(options.Region),
middleware.Before); err != nil {
return
err
}
if err = addRecursionDetection(stack); err != nil {
return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
return err
}
return nil
}

```

```

func newServiceMetadataMiddleware_opCheckInLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
return &awsmiddleware.RegisterServiceMetadata{
Region:    region,
ServiceID: ServiceID,
OperationName: "CheckInLicense",
}
}
CheckoutBorrowLicense
Initialize stack step
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation

```

```

Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
Build stack step
  ClientRequestID
  ComputeContentLength
  UserAgent
  RecursionDetection
Finalize stack step
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  Retry
  RetryMetricsHeader
  setLegacyContextSigningOptions
  Signing
Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  RecordResponseTiming
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
  "context"
  "fmt"
  awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
  "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
  "github.com/aws/smithy-go/middleware"
  smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists received licenses.
func (c *Client) ListReceivedLicenses(ctx context.Context, params *ListReceivedLicensesInput, optFns
...func(*Options)) (*ListReceivedLicensesOutput, error) {
  if params == nil {
    params = &ListReceivedLicensesInput{}
  }
}

```

```

    result, metadata, err := c.invokeOperation(ctx, "ListReceivedLicenses", params, optFns,
c.addOperationListReceivedLicensesMiddlewares)
    if err != nil {
        return nil, err
    }

    out := result.(*ListReceivedLicensesOutput)
    out.ResultMetadata = metadata
    return out, nil
}

type ListReceivedLicensesInput struct {

    // Filters to scope the results. The following filters are supported:
    // - ProductSKU
    // - Status
    // - Fingerprint
    //
    // - IssuerName
    // - Beneficiary
    Filters []types.Filter

    // Amazon Resource Names (ARNs) of the licenses.
    LicenseArns []string

    // Maximum number of results to return in a single call.
    MaxResults *int32

    // Token for the next set of results.
    NextToken *string

    noSmithyDocumentSerde
}

type ListReceivedLicensesOutput struct {

    // Received license details.
    Licenses []types.GrantedLicense

    // Token for the next set of results.
    NextToken *string

    // Metadata pertaining to the operation's result.
    ResultMetadata middleware.Metadata

    noSmithyDocumentSerde
}

```



```

func (c *Client) addOperationListReceivedLicensesMiddlewares(stack *middleware.Stack, options Options) (err
error) {
    if err := stack.Serialize.Add(&setOperationInputMiddleware{ }, middleware.After); err != nil {
        return err
    }
    err = stack.Serialize.Add(&awsAwsjson11_serializeOpListReceivedLicenses{ }, middleware.After)
    if err != nil {
        return err
    }
    err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListReceivedLicenses{ },
middleware.After)
    if err != nil {
        return err
    }
    if err := addProtocolFinalizerMiddlewares(stack, options, "ListReceivedLicenses"); err != nil {
        return fmt.Errorf("add protocol finalizers: %v", err)
    }

    if err = addLegacyEndpointContextSetter(stack, options); err != nil {
        return err
    }
    if err = addSetLoggerMiddleware(stack, options); err != nil {
        return err
    }
    if err = addClientRequestID(stack); err != nil {
        return err
    }
    if err = addComputeContentLength(stack); err != nil {
        return err
    }
    if err = addResolveEndpointMiddleware(stack, options); err != nil {
        return err
    }
    if err = addComputePayloadSHA256(stack); err != nil {
        return err
    }
    if err = addRetry(stack, options); err != nil {
        return err
    }
    if err = addRawResponseToMetadata(stack); err != nil {
        return err
    }
    if err = addRecordResponseTiming(stack); err != nil {
        return err
    }
    if err = addClientUserAgent(stack, options); err != nil {
        return err
    }
}

```

```

if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
err != nil {
    return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
    return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListReceivedLicenses(options.Region),
middleware.Before); err != nil {
    return err
}
if err = addRecursionDetection(stack); err != nil {
    return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
    return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
    return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
    return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
    return err
}
return nil
}

```

```

func newServiceMetadataMiddleware_opListReceivedLicenses(region string)
*awsmiddleware.RegisterServiceMetadata {
return &awsmiddleware.RegisterServiceMetadata{
    Region:    region,
    ServiceID:
ServiceID,
    OperationName: "ListReceivedLicenses",
}
}

```

// Code generated by smithy-go-codegen DO NOT EDIT.

```
package licensemanager
```

```
import (
    "context"
    "fmt"

```

```

awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
"github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
"github.com/aws/smithy-go/middleware"
smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license. If the account that created the license is
// the same that is performing the check out, you must specify the account as the
// beneficiary.
func (c *Client) CheckoutLicense(ctx context.Context, params *CheckoutLicenseInput, optFns ...func(*Options))
(*CheckoutLicenseOutput, error) {
    if params == nil {
        params = &CheckoutLicenseInput{}
    }

    result, metadata, err := c.invokeOperation(ctx, "CheckoutLicense", params, optFns,
c.addOperationCheckoutLicenseMiddlewares)
    if err != nil {
        return nil, err
    }

    out := result.(*CheckoutLicenseOutput)
    out.ResultMetadata = metadata
    return out, nil
}

type CheckoutLicenseInput struct {

    // Checkout
    type.
    //
    // This member is required.
    CheckoutType types.CheckoutType

    // Unique, case-sensitive identifier that you provide to ensure the idempotency of
    // the request.
    //
    // This member is required.
    ClientToken *string

    // License entitlements.
    //
    // This member is required.
    Entitlements []types.EntitlementData

    // Key fingerprint identifying the license.
    //
    // This member is required.

```

```

KeyFingerprint *string

// Product SKU.
//
// This member is required.
ProductSKU *string

// License beneficiary.
Beneficiary *string

// Node ID.
NodeId *string

noSmithyDocumentSerde
}

type CheckoutLicenseOutput struct {

// Checkout type.
CheckoutType types.CheckoutType

// Allowed license entitlements.
EntitlementsAllowed []types.EntitlementData

// Date and time at which the license checkout expires.
Expiration *string

// Date and time at which the license checkout is issued.
IssuedAt *string

// Amazon Resource Name (ARN) of the checkout license.
LicenseArn
*string

// License consumption token.
LicenseConsumptionToken *string

// Node ID.
NodeId *string

// Signed token.
SignedToken *string

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

```

```

func (c *Client) addOperationCheckoutLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
    if err := stack.Serialize.Add(&setOperationInputMiddleware{ }, middleware.After); err != nil {
        return err
    }
    err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutLicense{ }, middleware.After)
    if err != nil {
        return err
    }
    err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutLicense{ }, middleware.After)
    if err != nil {
        return err
    }
    if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutLicense"); err != nil {
        return fmt.Errorf("add protocol finalizers: %v", err)
    }

    if err = addLegacyEndpointContextSetter(stack, options); err != nil {
        return err
    }
    if err = addSetLoggerMiddleware(stack,
options); err != nil {
        return err
    }
    if err = addClientRequestID(stack); err != nil {
        return err
    }
    if err = addComputeContentLength(stack); err != nil {
        return err
    }
    if err = addResolveEndpointMiddleware(stack, options); err != nil {
        return err
    }
    if err = addComputePayloadSHA256(stack); err != nil {
        return err
    }
    if err = addRetry(stack, options); err != nil {
        return err
    }
    if err = addRawResponseToMetadata(stack); err != nil {
        return err
    }
    if err = addRecordResponseTiming(stack); err != nil {
        return err
    }
    if err = addClientUserAgent(stack, options); err != nil {
        return err
    }
}

```

```

if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
    return err
}
if err = addOpCheckoutLicenseValidationMiddleware(stack); err != nil {
    return err
}
if err =
stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutLicense(options.Region), middleware.Before);
err != nil {
    return err
}
if err = addRecursionDetection(stack); err != nil {
    return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
    return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
    return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
    return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
    return err
}
return nil
}

func newServiceMetadataMiddleware_opCheckoutLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
    return &awsmiddleware.RegisterServiceMetadata{
        Region:    region,
        ServiceID: ServiceID,
        OperationName: "CheckoutLicense",
    }
}
DisassociateLicense
Initialize stack step
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger

```

OperationInputValidation  
Serialize stack step  
setOperationInput  
ResolveEndpoint  
OperationSerializer  
Build stack step  
ClientRequestID  
ComputeContentLength  
UserAgent  
RecursionDetection  
Finalize stack step  
ResolveAuthScheme  
GetIdentity  
ResolveEndpointV2  
disableHTTPS  
ComputePayloadHash  
Retry  
RetryMetricsHeader  
setLegacyContextSigningOptions  
Signing  
Deserialize stack step  
AddRawResponseToMetadata  
ErrorCloseResponseBody  
CloseResponseBody  
ResponseErrorWrapper  
RequestIDRetriever  
OperationDeserializer  
RecordResponseTiming  
RequestResponseLogger  
CheckoutLicense  
Initialize stack step  
RegisterServiceMetadata  
legacyEndpointContextSetter  
SetLogger  
OperationInputValidation  
Serialize stack step  
setOperationInput  
ResolveEndpoint  
OperationSerializer  
Build stack step  
ClientRequestID  
ComputeContentLength  
UserAgent  
RecursionDetection  
Finalize stack step  
ResolveAuthScheme  
GetIdentity  
ResolveEndpointV2

disableHTTPS  
ComputePayloadHash  
Retry  
RetryMetricsHeader  
setLegacyContextSigningOptions  
Signing  
Deserialize stack step  
AddRawResponseToMetadata  
ErrorCloseResponseBody  
CloseResponseBody  
ResponseErrorWrapper  
RequestIDRetriever  
OperationDeserializer  
RecordResponseTiming  
RequestResponseLogger  
AssociateLicense  
Initialize stack step  
RegisterServiceMetadata  
legacyEndpointContextSetter  
SetLogger  
OperationInputValidation  
Serialize stack step  
setOperationInput  
ResolveEndpoint  
OperationSerializer  
Build stack step  
ClientRequestID  
ComputeContentLength  
UserAgent  
RecursionDetection  
Finalize stack step  
ResolveAuthScheme  
GetIdentity  
ResolveEndpointV2  
disableHTTPS  
ComputePayloadHash  
Retry  
RetryMetricsHeader  
setLegacyContextSigningOptions  
Signing  
Deserialize stack step  
AddRawResponseToMetadata  
ErrorCloseResponseBody  
CloseResponseBody  
ResponseErrorWrapper  
RequestIDRetriever  
OperationDeserializer  
RecordResponseTiming



RequestResponseLogger  
CheckInLicense  
Initialize stack step  
RegisterServiceMetadata  
legacyEndpointContextSetter  
SetLogger  
OperationInputValidation  
Serialize stack step  
setOperationInput  
ResolveEndpoint  
OperationSerializer  
Build stack step  
ClientRequestID  
ComputeContentLength  
UserAgent  
RecursionDetection  
Finalize stack step  
ResolveAuthScheme  
GetIdentity  
ResolveEndpointV2  
disableHTTPS  
ComputePayloadHash  
Retry  
RetryMetricsHeader  
setLegacyContextSigningOptions  
Signing  
Deserialize stack step  
AddRawResponseToMetadata  
ErrorCloseResponseBody  
CloseResponseBody  
ResponseErrorWrapper  
RequestIDRetriever  
OperationDeserializer  
RecordResponseTiming  
RequestResponseLogger

AWS SDK for Go

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CreateLicense

Initialize stack step  
RegisterServiceMetadata  
legacyEndpointContextSetter  
SetLogger  
OperationInputValidation  
Serialize stack step  
setOperationInput  
ResolveEndpoint  
OperationSerializer

Build stack step  
ClientRequestID  
ComputeContentLength  
UserAgent  
RecursionDetection  
Finalize stack step  
ResolveAuthScheme  
GetIdentity  
ResolveEndpointV2  
disableHTTPS  
ComputePayloadHash  
Retry  
RetryMetricsHeader  
setLegacyContextSigningOptions  
Signing  
Deserialize stack step  
AddRawResponseToMetadata  
ErrorCloseResponseBody  
CloseResponseBody  
ResponseErrorWrapper  
RequestIDRetriever  
OperationDeserializer  
RecordResponseTiming  
RequestResponseLogger  
GetLicense  
Initialize stack step  
RegisterServiceMetadata  
legacyEndpointContextSetter  
SetLogger  
OperationInputValidation  
Serialize stack step  
setOperationInput  
ResolveEndpoint  
OperationSerializer  
Build stack step  
ClientRequestID  
ComputeContentLength  
UserAgent  
RecursionDetection  
Finalize stack step  
ResolveAuthScheme  
GetIdentity  
ResolveEndpointV2  
disableHTTPS  
ComputePayloadHash  
Retry  
RetryMetricsHeader  
setLegacyContextSigningOptions

Signing  
Deserialize stack step  
AddRawResponseToMetadata  
ErrorCloseResponseBody  
CloseResponseBody  
ResponseErrorWrapper  
RequestIDRetriever  
OperationDeserializer  
RecordResponseTiming  
RequestResponseLogger  
// Code generated by smithy-go-codegen DO NOT EDIT.

```
package licensemanager
```

```
import (  
    "context"  
    "fmt"  
    awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"  
    "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"  
    "github.com/aws/smithy-go/middleware"  
    smithyhttp "github.com/aws/smithy-go/transport/http"  
)  
  
// Creates a license.  
func (c *Client) CreateLicense(ctx context.Context, params *CreateLicenseInput, optFns ...func(*Options))  
(*CreateLicenseOutput, error) {  
    if params == nil {  
        params = &CreateLicenseInput{}  
    }  
  
    result, metadata, err := c.invokeOperation(ctx, "CreateLicense", params, optFns,  
c.addOperationCreateLicenseMiddlewares)  
    if err != nil {  
        return nil, err  
    }  
  
    out := result.(*CreateLicenseOutput)  
    out.ResultMetadata = metadata  
    return out, nil  
}  
  
type CreateLicenseInput struct {  
  
    // License beneficiary.  
    //  
    // This member is required.  
    Beneficiary *string
```

```
// Unique, case-sensitive identifier that you provide to ensure the idempotency of
// the request.
//
//
This member is required.
ClientToken *string

// Configuration for consumption of the license. Choose a provisional
// configuration for workloads running with continuous connectivity. Choose a
// borrow configuration for workloads with offline usage.
//
// This member is required.
ConsumptionConfiguration *types.ConsumptionConfiguration

// License entitlements.
//
// This member is required.
Entitlements []types.Entitlement

// Home Region for the license.
//
// This member is required.
HomeRegion *string

// License issuer.
//
// This member is required.
Issuer *types.Issuer

// License name.
//
// This member is required.
LicenseName *string

// Product name.
//
// This member is required.
ProductName *string

// Product SKU.
//
// This member is required.
ProductSKU *string

// Date and time range during which the license is valid, in ISO8601-UTC format.
//
// This member is required.
Validity *types.DatetimeRange
```

```

// Information about
the license.
LicenseMetadata []types.Metadata

noSmithyDocumentSerde
}

type CreateLicenseOutput struct {

// Amazon Resource Name (ARN) of the license.
LicenseArn *string

// License status.
Status types.LicenseStatus

// License version.
Version *string

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationCreateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
if err := stack.Serialize.Add(&setOperationInputMiddleware{ }, middleware.After); err != nil {
return err
}
err = stack.Serialize.Add(&awsAwsjson11_serializeOpCreateLicense{ }, middleware.After)
if err != nil {
return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCreateLicense{ }, middleware.After)
if err != nil {
return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "CreateLicense"); err != nil {
return fmt.Errorf("add protocol finalizers: %v", err)
}

if
err = addLegacyEndpointContextSetter(stack, options); err != nil {
return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
return err
}
}

```

```

if err = addClientRequestID(stack); err != nil {
    return err
}
if err = addComputeContentLength(stack); err != nil {
    return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
    return err
}
if err = addComputePayloadSHA256(stack); err != nil {
    return err
}
if err = addRetry(stack, options); err != nil {
    return err
}
if err = addRawResponseToMetadata(stack); err != nil {
    return err
}
if err = addRecordResponseTiming(stack); err != nil {
    return err
}
if err = addClientUserAgent(stack, options); err != nil {
    return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
    return
err
}
if err = addOpCreateLicenseValidationMiddleware(stack); err != nil {
    return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCreateLicense(options.Region),
middleware.Before); err != nil {
    return err
}
if err = addRecursionDetection(stack); err != nil {
    return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
    return err
}
if err = addResponseErrorMiddleware(stack); err != nil {

```

```

    return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
    return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
    return err
}
return nil
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
return &awsmiddleware.RegisterServiceMetadata{
    Region:    region,
    ServiceID: ServiceID,
    OperationName: "CreateLicense",
}
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
    "context"
    "fmt"
    awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
    "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
    "github.com/aws/smithy-go/middleware"
    smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Gets detailed information about the specified license.
func (c *Client) GetLicense(ctx context.Context, params *GetLicenseInput, optFns ...func(*Options))
(*GetLicenseOutput, error) {
    if params == nil {
        params = &GetLicenseInput{}
    }

    result, metadata, err := c.invokeOperation(ctx, "GetLicense", params, optFns,
c.addOperationGetLicenseMiddlewares)
    if err != nil {
        return nil, err
    }

    out := result.(*GetLicenseOutput)
    out.ResultMetadata = metadata
    return out, nil
}

```

```

type GetLicenseInput struct {

    // Amazon Resource Name (ARN) of the license.
    //
    // This member is required.
    LicenseArn *string

    // License version.
    Version *string

    noSmithyDocumentSerde
}

type
GetLicenseOutput struct {

    // License details.
    License *types.License

    // Metadata pertaining to the operation's result.
    ResultMetadata middleware.Metadata

    noSmithyDocumentSerde
}

func (c *Client) addOperationGetLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
    if err := stack.Serialize.Add(&setOperationInputMiddleware{ }, middleware.After); err != nil {
        return err
    }
    err = stack.Serialize.Add(&awsAwsjson11_serializeOpGetLicense{ }, middleware.After)
    if err != nil {
        return err
    }
    err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpGetLicense{ }, middleware.After)
    if err != nil {
        return err
    }
    if err := addProtocolFinalizerMiddlewares(stack, options, "GetLicense"); err != nil {
        return fmt.Errorf("add protocol finalizers: %v", err)
    }

    if err = addLegacyEndpointContextSetter(stack, options); err != nil {
        return err
    }
    if err = addSetLoggerMiddleware(stack, options); err != nil {
        return err
    }
}

```



```

if err = addClientRequestID(stack); err
!= nil {
    return err
}
if err = addComputeContentLength(stack); err != nil {
    return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
    return err
}
if err = addComputePayloadSHA256(stack); err != nil {
    return err
}
if err = addRetry(stack, options); err != nil {
    return err
}
if err = addRawResponseToMetadata(stack); err != nil {
    return err
}
if err = addRecordResponseTiming(stack); err != nil {
    return err
}
if err = addClientUserAgent(stack, options); err != nil {
    return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
    return err
}
if err = addOpGetLicenseValidationMiddleware(stack); err != nil {
    return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opGetLicense(options.Region), middleware.Before);
err != nil {
    return err
}
if err = addRecursionDetection(stack); err != nil {
    return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
    return err
}
if err = addResponseErrorMiddleware(stack); err != nil {

```

```

return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
return err
}
return nil
}

func newServiceMetadataMiddleware_opGetLicense(region string) *awsmiddleware.RegisterServiceMetadata {
return &awsmiddleware.RegisterServiceMetadata{
Region:    region,
ServiceID: ServiceID,
OperationName: "GetLicense",
}
}
DeleteLicense
Initialize stack step
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
Serialize stack step
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
RecursionDetection
Finalize stack step
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
Retry
RetryMetricsHeader
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper

```

```

RequestIDRetriever
OperationDeserializer
RecordResponseTiming
RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
    "context"
    "fmt"
    awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
    "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
    "github.com/aws/smithy-go/middleware"
    smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists the licenses for your account.
func (c *Client) ListLicenses(ctx context.Context, params *ListLicensesInput, optFns ...func(*Options))
(*ListLicensesOutput, error) {
    if params == nil {
        params = &ListLicensesInput{}
    }

    result, metadata, err := c.invokeOperation(ctx, "ListLicenses", params, optFns,
c.addOperationListLicensesMiddlewares)
    if err != nil {
        return nil, err
    }

    out := result.(*ListLicensesOutput)
    out.ResultMetadata = metadata
    return out, nil
}

type ListLicensesInput struct {

    // Filters to scope the results. The following filters are supported:
    // - Beneficiary
    // - ProductSKU
    // - Fingerprint
    // - Status
    Filters []types.Filter

    //
    Amazon Resource Names (ARNs) of the licenses.
    LicenseArns []string

```

```

// Maximum number of results to return in a single call.
MaxResults *int32

// Token for the next set of results.
NextToken *string

noSmithyDocumentSerde
}

type ListLicensesOutput struct {

// License details.
Licenses []types.License

// Token for the next set of results.
NextToken *string

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationListLicensesMiddlewares(stack *middleware.Stack, options Options) (err error) {
if err := stack.Serialize.Add(&setOperationInputMiddleware{ }, middleware.After); err != nil {
return err
}
err = stack.Serialize.Add(&awsAwsjson11_serializeOpListLicenses{ }, middleware.After)
if err != nil {
return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListLicenses{ }, middleware.After)
if err != nil {
return err
}
if err := addProtocolFinalizerMiddlewares(stack,
options, "ListLicenses"); err != nil {
return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addLegacyEndpointContextSetter(stack, options); err != nil {
return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
return err
}
if err = addClientRequestID(stack); err != nil {
return err
}
}

```

```

}
if err = addComputeContentLength(stack); err != nil {
    return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
    return err
}
if err = addComputePayloadSHA256(stack); err != nil {
    return err
}
if err = addRetry(stack, options); err != nil {
    return err
}
if err = addRawResponseToMetadata(stack); err != nil {
    return err
}
if err = addRecordResponseTiming(stack); err != nil {
    return err
}
if err = addClientUserAgent(stack, options); err != nil {
    return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack);
err != nil {
    return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
    return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListLicenses(options.Region), middleware.Before);
err != nil {
    return err
}
if err = addRecursionDetection(stack); err != nil {
    return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
    return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
    return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
    return err
}
}

```

```
if err = addDisableHTTPSMiddleware(stack, options); err != nil {  
    return err  
}  
return nil  
}
```

```
func newServiceMetadataMiddleware_opListLicenses(region string) *awsmiddleware.RegisterServiceMetadata {  
    return &awsmiddleware.RegisterServiceMetadata{  
        Region:    region,  
        ServiceID: ServiceID,  
        OperationName: "ListLicenses",  
    }  
}
```

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ListReceivedLicenses

Initialize stack step

RegisterServiceMetadata

legacyEndpointContextSetter

SetLogger

Serialize stack step

setOperationInput

ResolveEndpoint  
OperationSerializer  
Build stack step  
ClientRequestID  
ComputeContentLength  
UserAgent  
RecursionDetection  
Finalize stack step  
ResolveAuthScheme  
GetIdentity  
ResolveEndpointV2  
disableHTTPS  
ComputePayloadHash  
Retry  
RetryMetricsHeader  
setLegacyContextSigningOptions  
Signing  
Deserialize stack step  
AddRawResponseToMetadata  
ErrorCloseResponseBody  
CloseResponseBody  
ResponseErrorWrapper  
RequestIDRetriever  
OperationDeserializer  
RecordResponseTiming  
RequestResponseLogger

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// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

```

import (
    "context"
    "fmt"
    awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
    "github.com/aws/aws-sdk-go-v2/service/grafana/types"
    "github.com/aws/smithy-go/middleware"
    smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Removes the Grafana Enterprise license from a workspace.
func (c *Client) DisassociateLicense(ctx context.Context, params *DisassociateLicenseInput, optFns
    ..func(*Options)) (*DisassociateLicenseOutput, error) {
    if params == nil {
        params = &DisassociateLicenseInput{}
    }

    result, metadata, err := c.invokeOperation(ctx, "DisassociateLicense", params, optFns,
    c.addOperationDisassociateLicenseMiddlewares)
    if err != nil {
        return nil, err
    }

    out := result.(*DisassociateLicenseOutput)
    out.ResultMetadata = metadata
    return out, nil
}

type DisassociateLicenseInput struct {

    // The type of license to remove from the workspace.
    //
    // This member is required.
    LicenseType types.LicenseType

    //
    // The ID of the workspace to remove the Grafana Enterprise license from.
    //
    // This member is required.
    WorkspaceId *string

    noSmithyDocumentSerde
}

type DisassociateLicenseOutput struct {

    // A structure containing information about the workspace.
    //

```

```

// This member is required.
Workspace *types.WorkspaceDescription

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationDisassociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
if err := stack.Serialize.Add(&setOperationInputMiddleware{ }, middleware.After); err != nil {
return err
}
err = stack.Serialize.Add(&awsRestjson1_serializeOpDisassociateLicense{ }, middleware.After)
if err != nil {
return err
}
err = stack.Deserialize.Add(&awsRestjson1_deserializeOpDisassociateLicense{ }, middleware.After)
if err != nil {
return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "DisassociateLicense");
err != nil {
return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addLegacyEndpointContextSetter(stack, options); err != nil {
return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
return err
}
if err = addClientRequestID(stack); err != nil {
return err
}
if err = addComputeContentLength(stack); err != nil {
return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
return err
}
if err = addComputePayloadSHA256(stack); err != nil {
return err
}
if err = addRetry(stack, options); err != nil {
return err
}
}

```

```

if err = addRawResponseToMetadata(stack); err != nil {
    return err
}
if err = addRecordResponseTiming(stack); err != nil {
    return err
}
if err = addClientUserAgent(stack, options); err != nil {
    return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil
{
    return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
    return err
}
if err = addOpDisassociateLicenseValidationMiddleware(stack); err != nil {
    return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDisassociateLicense(options.Region),
middleware.Before); err != nil {
    return err
}
if err = addRecursionDetection(stack); err != nil {
    return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
    return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
    return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
    return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
    return err
}
return nil
}

```

```

func newServiceMetadataMiddleware_opDisassociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
return &awsmiddleware.RegisterServiceMetadata{
    Region:    region,
}
}

```

```

ServiceID: ServiceID,
OperationName: "DisassociateLicense",
}
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
"context"
"fmt"
awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
"github.com/aws/aws-sdk-go-v2/service/grafana/types"
"github.com/aws/smithy-go/middleware"
smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Assigns a Grafana Enterprise license to a workspace. Upgrading to Grafana
// Enterprise incurs additional fees. For more information, see Upgrade a
// workspace to Grafana Enterprise (https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-Grafana-Enterprise.html)
// .
func (c *Client) AssociateLicense(ctx context.Context, params *AssociateLicenseInput, optFns ...func(*Options))
(*AssociateLicenseOutput, error) {
if params == nil {
params = &AssociateLicenseInput{}
}

result, metadata, err := c.invokeOperation(ctx, "AssociateLicense", params, optFns,
c.addOperationAssociateLicenseMiddlewares)
if err != nil {
return nil, err
}

out := result.(*AssociateLicenseOutput)
out.ResultMetadata
= metadata
return out, nil
}

type AssociateLicenseInput struct {

// The type of license to associate with the workspace.
//
// This member is required.
LicenseType types.LicenseType

// The ID of the workspace to associate the license with.

```

```

//
// This member is required.
WorkspaceId *string

noSmithyDocumentSerde
}

type AssociateLicenseOutput struct {

// A structure containing data about the workspace.
//
// This member is required.
Workspace *types.WorkspaceDescription

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationAssociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
if err := stack.Serialize.Add(&setOperationInputMiddleware{ }, middleware.After); err != nil {
return err
}
err = stack.Serialize.Add(&awsRestjson1_serializeOpAssociateLicense{ }, middleware.After)
if err != nil {
return err
}
err = stack.Deserialize.Add(&awsRestjson1_deserializeOpAssociateLicense{ },
middleware.After)
if err != nil {
return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "AssociateLicense"); err != nil {
return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addLegacyEndpointContextSetter(stack, options); err != nil {
return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
return err
}
if err = addClientRequestID(stack); err != nil {
return err
}
if err = addComputeContentLength(stack); err != nil {
return err
}

```



```

}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
    return err
}
if err = addComputePayloadSHA256(stack); err != nil {
    return err
}
if err = addRetry(stack, options); err != nil {
    return err
}
if err = addRawResponseToMetadata(stack); err != nil {
    return err
}
if err = addRecordResponseTiming(stack); err != nil {
    return err
}
if err = addClientUserAgent(stack, options); err != nil {
    return err
}
if
err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
    return err
}
if err = addOpAssociateLicenseValidationMiddleware(stack); err != nil {
    return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opAssociateLicense(options.Region),
middleware.Before); err != nil {
    return err
}
if err = addRecursionDetection(stack); err != nil {
    return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
    return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
    return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
    return err
}
}

```

```

if err = addDisableHTTPSMiddleware(stack, options); err != nil {
    return err
}
return nil
}

func newServiceMetadataMiddleware_opAssociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata
{
return &awsmiddleware.RegisterServiceMetadata{
    Region:    region,
    ServiceID: ServiceID,
    OperationName: "AssociateLicense",
}
}
{
    "smithy": "2.0",
    "shapes": {
        "com.amazonaws.licenseanagerusersubscriptions#AccessDeniedException": {
            "type": "structure",
            "members": {
                "message": {
                    "target": "smithy.api#String"
                }
            },
            "traits": {
                "smithy.api#documentation": "<p>You don't have sufficient access to perform this action.</p>",
                "smithy.api#error": "client"
            }
        },
        "com.amazonaws.licenseanagerusersubscriptions#ActiveDirectoryIdentityProvider": {
            "type": "structure",
            "members": {
                "DirectoryId": {
                    "target": "smithy.api#String",
                    "traits": {
                        "smithy.api#documentation": "<p>The directory ID for an Active Directory identity provider.</p>"
                    }
                }
            },
            "traits": {
                "smithy.api#documentation":
                "<p>Details about an Active Directory identity provider.</p>"
            }
        },
        "com.amazonaws.licenseanagerusersubscriptions#AssociateUser": {
            "type": "operation",
            "input": {

```

```

    "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerErrorException"
    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Associates the user to an EC2 instance to utilize user-based
subscriptions.</p>\n    <note>\n      <p>Your estimated bill for charges on the number of users and related
costs will take 48\n      hours to appear for billing periods that haven't closed (marked as <b>Pending</b> billing
status) in Amazon Web Services Billing. For more information, see <a
href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your\n
monthly charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p>\n    </note>",
    "smithy.api#http": {
      "code": 200,
      "method": "POST",
      "uri": "/user/AssociateUser"
    },
    "smithy.api#idempotent": {}
  }
},
"com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest": {
  "type": "structure",
  "members": {
    "Username": {
      "target": "smithy.api#String",

```

```

    "traits": {
      "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>",
      "smithy.api#required": {}
    }
  },
  "InstanceId": {
    "target": "smithy.api#String",
    "traits": {
      "smithy.api#documentation": "<p>The ID of the
EC2 instance, which provides user-based subscriptions.</p>",
      "smithy.api#required": {}
    }
  },
  "IdentityProvider": {
    "target": "com.amazonaws.licenseanagerusersubscriptions#IdentityProvider",
    "traits": {
      "smithy.api#documentation": "<p>The identity provider of the user.</p>",
      "smithy.api#required": {}
    }
  },
  "Domain": {
    "target": "smithy.api#String",
    "traits": {
      "smithy.api#documentation": "<p>The domain name of the user.</p>"
    }
  }
},
"com.amazonaws.licenseanagerusersubscriptions#AssociateUserResponse": {
  "type": "structure",
  "members": {
    "InstanceUserSummary": {
      "target": "com.amazonaws.licenseanagerusersubscriptions#InstanceUserSummary",
      "traits": {
        "smithy.api#documentation": "<p>Metadata that describes the associate user operation.</p>",
        "smithy.api#required": {}
      }
    }
  }
},
"com.amazonaws.licenseanagerusersubscriptions#BoxInteger": {
  "type": "integer"
},
"com.amazonaws.licenseanagerusersubscriptions#ConflictException": {
  "type": "structure",
  "members": {
    "message": {
      "target": "smithy.api#String"
    }
  }
}

```

```

    }
  },
  "traits": {
    "smithy.api#documentation": "<p>The request couldn't be completed because it conflicted with the current
state of the\n    resource.</p>",
    "smithy.api#error": "server"
  }
},
"com.amazonaws.licenseanagerusersubscriptions#DeregisterIdentityProvider":
{
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licenseanagerusersubscriptions#DeregisterIdentityProviderRequest"
  },
  "output": {
    "target": "com.amazonaws.licenseanagerusersubscriptions#DeregisterIdentityProviderResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ConflictException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#InternalServerError"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ResourceNotFoundException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ServiceQuotaExceededException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ThrottlingException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Deregisters the identity provider from providing user-based
subscriptions.</p>",
    "smithy.api#http": {
      "code": 200,
      "method": "POST",
      "uri": "/identity-provider/DeregisterIdentityProvider"
    },
  },

```

```

    "smithy.api#idempotent": {}
  }
},
"com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest": {
  "type": "structure",
  "members": {
    "IdentityProvider": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
      "traits": {
        "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
        "smithy.api#required": {}
      }
    }
  },
  "Product": {
    "target": "smithy.api#String",
    "traits": {
      "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
      "smithy.api#required": {}
    }
  }
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse": {
  "type": "structure",
  "members": {
    "IdentityProviderSummary": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
      "traits": {
        "smithy.api#documentation":
"<p>Metadata that describes the results of an identity provider operation.</p>",
        "smithy.api#required": {}
      }
    }
  }
},
"com.amazonaws.licensemanagerusersubscriptions#DisassociateUser": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
    },
    {

```

```

    "target": "com.amazonaws.licenseanagerusersubscriptions#ConflictException"
  },
  {
    "target": "com.amazonaws.licenseanagerusersubscriptions#InternalServerError"
  },
  {
    "target": "com.amazonaws.licenseanagerusersubscriptions#ResourceNotFoundException"
  },
  {
    "target": "com.amazonaws.licenseanagerusersubscriptions#ServiceQuotaExceededException"
  },
  {
    "target": "com.amazonaws.licenseanagerusersubscriptions#ThrottlingException"
  },
  {
    "target": "com.amazonaws.licenseanagerusersubscriptions#ValidationException"
  }
],
"traits": {
  "smithy.api#documentation": "<p>Disassociates the user from an EC2 instance providing user-based
subscriptions.</p>",
  "smithy.api#http": {
    "code": 200,
    "method": "POST",
    "uri": "/user/DisassociateUser"
  },
  "smithy.api#idempotent": {}
}
},
"com.amazonaws.licenseanagerusersubscriptions#DisassociateUserRequest": {
  "type": "structure",
  "members": {
    "Username": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>",
        "smithy.api#required": {}
      }
    },
    "InstanceId": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
        "smithy.api#required": {}
      }
    }
  },
}

```

```

    "IdentityProvider": {
      "target": "com.amazonaws.licenseanagerusersubscriptions#IdentityProvider",
      "traits": {
        "smithy.api#documentation":
"<p>An object that specifies details for the identity provider.</p>",
        "smithy.api#required": {}
      }
    },
    "Domain": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>The domain name of the user.</p>"
      }
    }
  }
},
"com.amazonaws.licenseanagerusersubscriptions#DisassociateUserResponse": {
  "type": "structure",
  "members": {
    "InstanceUserSummary": {
      "target": "com.amazonaws.licenseanagerusersubscriptions#InstanceUserSummary",
      "traits": {
        "smithy.api#documentation": "<p>Metadata that describes the associate user operation.</p>",
        "smithy.api#required": {}
      }
    }
  }
},

"com.amazonaws.licenseanagerusersubscriptions#Filter": {
  "type": "structure",
  "members": {
    "Attribute": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>The name of an attribute to use as a filter.</p>"
      }
    },
    "Operation": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>The type of search (For example, eq, geq, leq)</p>"
      }
    },
    "Value": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>Value of the filter.</p>"
      }
    }
  }
}

```



```

    }
  },
  "traits": {
    "smithy.api#documentation": "<p>A filter name and value pair that is used
to return more specific results from a describe\n    operation. Filters can be used to match a set of resources by
specific criteria, such as tags,\n    attributes, or IDs.</p>"
  }
},
"com.amazonaws.licenseanagerusersubscriptions#FilterList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licenseanagerusersubscriptions#Filter"
  }
},
"com.amazonaws.licenseanagerusersubscriptions#IdentityProvider": {
  "type": "union",
  "members": {
    "ActiveDirectoryIdentityProvider": {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ActiveDirectoryIdentityProvider",
      "traits": {
        "smithy.api#documentation": "<p>An object that details an Active Directory identity provider.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#documentation":
"<p>Details about an identity provider.</p>"
  }
},
"com.amazonaws.licenseanagerusersubscriptions#IdentityProviderSummary": {
  "type": "structure",
  "members": {
    "IdentityProvider": {
      "target": "com.amazonaws.licenseanagerusersubscriptions#IdentityProvider",
      "traits": {
        "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
        "smithy.api#required": {}
      }
    }
  },
  "Settings": {
    "target": "com.amazonaws.licenseanagerusersubscriptions#Settings",
    "traits": {
      "smithy.api#documentation": "<p>An object that details the registered identity providers product
related configuration\n    settings such as the subnets to provision VPC endpoints.</p>",
      "smithy.api#required":
{}
    }
  }
}

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    },
    "Product": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
        "smithy.api#required": {}
      }
    },
    "Status": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>The status of an identity provider.</p>",
        "smithy.api#required": {}
      }
    },
    "FailureMessage": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>The failure message associated with an identity provider.</p>"
      }
    },
    "traits": {
      "smithy.api#documentation":
"<p>Describes an identity provider.</p>"
    },
    "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary": {
      "type": "structure",
      "members": {
        "InstanceId": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
            "smithy.api#required": {}
          }
        }
      }
    },
    "Status": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>The status

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of an EC2 instance resource.</p>",
    "smithy.api#required": {}
  }
},
"Products": {
  "target": "com.amazonaws.licensemanagerusersubscriptions#StringList",
  "traits": {
    "smithy.api#documentation": "<p>A list of provided user-based subscription products.</p>",
    "smithy.api#required": {}
  }
},
"LastStatusCheckDate": {
  "target": "smithy.api#String",
  "traits": {
    "smithy.api#documentation": "<p>The date of the last status check.</p>"
  }
},
"StatusMessage": {
  "target": "smithy.api#String",
  "traits": {
    "smithy.api#documentation": "<p>The status message for an EC2 instance.</p>"
  }
}
},
"traits": {
  "smithy.api#documentation": "<p>Describes an EC2 instance providing user-based subscriptions.</p>"
}
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary"
  }
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary": {
  "type": "structure",
  "members": {
    "Username": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>",
        "smithy.api#required": {}
      }
    }
  },
  "InstanceId": {
    "target": "smithy.api#String",
    "traits":

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{
    "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
    "smithy.api#required": {}
}
},
"IdentityProvider": {
    "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
    "traits": {
        "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
        "smithy.api#required": {}
    }
},
"Status": {
    "target": "smithy.api#String",
    "traits": {
        "smithy.api#documentation": "<p>The status of a user associated with an EC2 instance.</p>",
        "smithy.api#required": {}
    }
},
"StatusMessage": {
    "target": "smithy.api#String",
    "traits": {
        "smithy.api#documentation": "<p>The status message for users of an EC2 instance.</p>"
    }
},
"Domain": {
    "target": "smithy.api#String",
    "traits": {
        "smithy.api#documentation": "<p>The domain name of the user.</p>"
    }
},
"AssociationDate": {
    "target": "smithy.api#String",
    "traits": {
        "smithy.api#documentation": "<p>The date a user was associated with an EC2 instance.</p>"
    }
},
"DisassociationDate": {
    "target": "smithy.api#String",
    "traits": {
        "smithy.api#documentation": "<p>The date a user was disassociated from an EC2 instance.</p>"
    }
}
},
"traits": {
    "smithy.api#documentation": "<p>Describes users of an EC2 instance providing user-based

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subscriptions.</p>"
  }
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary"
  }
},
"com.amazonaws.licensemanagerusersubscriptions#InternalServerError": {
  "type": "structure",
  "members": {
    "message": {
      "target": "smithy.api#String"
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>An exception occurred with the service.</p>",
    "smithy.api#error": "server"
  }
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseManagerUserSubscriptions": {
  "type": "service",

"version": "2018-05-10",
"operations": [
  {
    "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUser"
  },
  {
    "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider"
  },
  {
    "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser"
  },
  {
    "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders"
  },
  {
    "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstances"
  },
  {
    "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions"
  },
  {
    "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations"

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    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider"
    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription"
    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription"
    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings"
    }
  ],
  "traits": {
    "aws.api#service": {
      "sdkId": "License Manager User Subscriptions",
      "arnNamespace": "license-manager-user-subscriptions",
      "cloudTrailEventSource": "license-manager-user-subscriptions.amazonaws.com"
    },
    "aws.auth#sigv4": {
      "name": "license-manager-user-subscriptions"
    },
    "aws.protocols#restJson1": {},
    "smithy.api#cors": {
      "additionalAllowedHeaders": [
        "*",
        "content-type",
        "x-amz-content-sha256",
        "x-amz-user-agent",
        "x-amzn-platform-id",
        "x-amzn-trace-id",
        "content-length",
        "x-api-key",
        "authorization",
        "x-amz-date",
        "x-amz-security-token",
        "Access-Control-Allow-Headers",
        "Access-Control-Allow-Methods",
        "Access-Control-Allow-Origin"
      ],
      "additionalExposedHeaders": [
        "x-amzn-errortype",
        "x-amzn-requestid",
        "x-amzn-trace-id"
      ]
    }
  }
]
},

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"smithy.api#documentation": "<p>With License Manager, you can create user-based subscriptions to
utilize licensed software with\n    a per user subscription fee on Amazon EC2 instances.</p>",
"smithy.api#title": "AWS License Manager User Subscriptions",
"smithy.rules#endpointRuleSet": {
  "version": "1.0",
  "parameters": {
    "Region": {
      "builtIn": "AWS::Region",
      "required": false,
      "documentation": "The AWS region used to dispatch the request.",
      "type": "String"
    },
    "UseDualStack": {
      "builtIn": "AWS::UseDualStack",
      "required": true,
      "default": false,
      "documentation": "When true, use the dual-stack
endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
      "type": "Boolean"
    },
    "UseFIPS": {
      "builtIn": "AWS::UseFIPS",
      "required": true,
      "default": false,
      "documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the
configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
      "type": "Boolean"
    },
    "Endpoint": {
      "builtIn": "SDK::Endpoint",
      "required": false,
      "documentation": "Override the endpoint used to send this request",
      "type": "String"
    }
  },
  "rules": [
    {
      "conditions": [
        {
          "fn": "isSet",
          "argv": [
            {
              "ref": "Endpoint"
            }
          ]
        }
      ]
    }
  ],

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```

"type": "tree",
"rules": [
  {
    "conditions": [
      {
        "fn": "booleanEquals",
        "argv": [
          {
            "ref": "UseFIPS"
          },
          true
        ]
      }
    ],
    "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
    "type": "error"
  },
  {
    "conditions": [
      {
        "fn": "booleanEquals",
        "argv": [
          {
            "ref": "UseDualStack"
          },
          true
        ]
      }
    ],
    "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
    "type": "error"
  },
  {
    "conditions": [],
    "endpoint": {
      "url": {
        "ref": "Endpoint"
      },
      "properties": {},
      "headers": {}
    },
    "type": "endpoint"
  }
],
{

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```

"conditions": [
  {
    "fn": "isSet",
    "argv": [
      {
        "ref": "Region"
      }
    ]
  }
],
"type": "tree",
"rules": [
  {
    "conditions": [
      {
        "fn": "aws.partition",
        "argv": [
          {
            "ref": "Region"
          }
        ],
        "assign": "PartitionResult"
      }
    ],
    "type": "tree",
  }
]
"rules": [
  {
    "conditions": [
      {
        "fn": "booleanEquals",
        "argv": [
          {
            "ref": "UseFIPS"
          },
          true
        ]
      },
      {
        "fn": "booleanEquals",
        "argv": [
          {
            "ref": "UseDualStack"
          },
          true
        ]
      }
    ]
  }
]

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```

    }
  ],
  "type": "tree",
  "rules": [
    {
      "conditions": [
        {
          "fn": "booleanEquals",
          "argv": [
            true,
            {
              "fn": "getAttr",
              "argv": [
                {
                  "ref": "PartitionResult"
                },
                "supportsFIPS"
              ]
            }
          ]
        },
        {
          "fn": "booleanEquals",
          "argv": [
            true,
            {
              "fn": "getAttr",
              "argv": [
                {
                  "ref": "PartitionResult"
                },
                "supportsDualStack"
              ]
            }
          ]
        }
      ],
      "type": "tree",
      "rules": [
        {
          "conditions": [],
          "endpoint": {
            "url": "https://license-manager-user-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
            "properties": {},

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        "headers": {}
      },
      "type": "endpoint"
    }
  ]
},
{
  "conditions": [],
  "error": "FIPS and DualStack are enabled, but this partition does not support one or
both",
  "type": "error"
}
],
},
{
  "conditions": [
    {
      "fn": "booleanEquals",
      "argv": [
        {
          "ref": "UseFIPS"
        },
        true
      ]
    }
  ]
},
],
"type": "tree",

"rules": [
  {
    "conditions": [
      {
        "fn": "booleanEquals",
        "argv": [
          true,
          {
            "fn": "getAttr",
            "argv": [
              {
                "ref": "PartitionResult"
              },
              "supportsFIPS"
            ]
          }
        ]
      }
    ]
  }
],

```

```

        "type": "tree",
        "rules": [
            {
                "conditions": [],
                "endpoint": {
                    "url": "https://license-manager-user-subscriptions-
fips.{Region}.{PartitionResult#dnsSuffix}",
                    "properties": {},
                    "headers": {}
                }
            },
            {
                "type": "endpoint"
            }
        ]
    },
    {
        "conditions": [],
        "error": "FIPS is enabled but this partition does not support FIPS",
        "type": "error"
    }
]
},
{
    "conditions": [
        {
            "fn": "booleanEquals",
            "argv": [
                {
                    "ref": "UseDualStack"
                },
                true
            ]
        }
    ],
    "type": "tree",
    "rules": [
        {
            "conditions": [
                {
                    "fn": "booleanEquals",
                    "argv": [
                        true,
                        {
                            "fn": "getAttr",
                            "argv": [
                                {
                                    "ref": "PartitionResult"
                                }
                            ]
                        }
                    ]
                }
            ]
        }
    ]
}

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        },
        "supportsDualStack"
    ]
}
]
},
"type": "tree",
"rules": [
{
    "conditions": [],
    "endpoint": {
        "url": "https://license-manager-user-
subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
        "properties": {},
        "headers": {}
    },
    "type": "endpoint"
}
],
{
    "conditions": [],
    "error": "DualStack is enabled but this partition does
not support DualStack",
    "type": "error"
}
],
{
    "conditions": [],
    "endpoint": {
        "url": "https://license-manager-user-
subscriptions.{Region}.{PartitionResult#dnsSuffix}",
        "properties": {},
        "headers": {}
    },
    "type": "endpoint"
}
]
},
{
    "conditions":
[],
    "error": "Invalid Configuration: Missing Region",

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        "type": "error"
      }
    ]
  },
  "smithy.rules#endpointTests": {
    "testCases": [
      {
        "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager-user-subscriptions-fips.us-east-1.api.aws"
          }
        },
        "params": {
          "Region": "us-east-1",
          "UseFIPS": true,
          "UseDualStack": true
        }
      },
      {
        "documentation":
"\"For region us-east-1 with FIPS enabled and DualStack disabled\",
        "expect": {
          "endpoint": {
            "url": "https://license-manager-user-subscriptions-fips.us-east-1.amazonaws.com"
          }
        },
        "params": {
          "Region": "us-east-1",
          "UseFIPS": true,
          "UseDualStack": false
        }
      },
      {
        "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager-user-subscriptions.us-east-1.api.aws"
          }
        },
        "params": {
          "Region": "us-east-1",
          "UseFIPS": false,
          "UseDualStack": true
        }
      }
    ]
  }
}

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    "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-user-subscriptions.us-east-1.amazonaws.com"
      }
    },
    "params": {
      "Region": "us-east-1",
      "UseFIPS": false,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For region cn-north-1 with
FIPS enabled and DualStack enabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-user-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
      }
    },
    "params": {
      "Region": "cn-north-1",
      "UseFIPS": true,
      "UseDualStack": true
    }
  },
  {
    "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-user-subscriptions-fips.cn-north-1.amazonaws.com.cn"
      }
    },
    "params": {
      "Region": "cn-north-1",
      "UseFIPS": true,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-user-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
      }
    },
  },

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```

    "params": {
      "Region": "cn-north-1",
      "UseFIPS": false,
      "UseDualStack": true
    }
  },
  {
    "documentation": "For region cn-north-1
with FIPS disabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-user-subscriptions.cn-north-1.amazonaws.com.cn"
      }
    },
    "params": {
      "Region": "cn-north-1",
      "UseFIPS": false,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.api.aws"
      }
    },
    "params": {
      "Region": "us-gov-east-1",
      "UseFIPS": true,
      "UseDualStack": true
    }
  },
  {
    "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.amazonaws.com"
      }
    },
    "params": {
      "Region": "us-gov-east-1",
      "UseFIPS": true,
      "UseDualStack": false
    }
  },
  {

```



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        "documentation": "For region us-gov-east-1
with FIPS disabled and DualStack enabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager-user-subscriptions.us-gov-east-1.api.aws"
            }
        },
        "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": false,
            "UseDualStack": true
        }
    },
    {
        "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager-user-subscriptions.us-gov-east-1.amazonaws.com"
            }
        },
        "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": false,
            "UseDualStack": false
        }
    },
    {
        "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
        "expect": {
            "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
        },
        "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": true,
            "UseDualStack": true
        }
    },
    {
        "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
        "expect":
    {
        "endpoint": {
            "url": "https://license-manager-user-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
        }
    },
        "params": {
            "Region": "us-iso-east-1",

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        "UseFIPS": true,
        "UseDualStack": false
    }
},
{
    "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
    "expect": {
        "error": "DualStack is enabled but this partition does not support DualStack"
    },
    "params": {
        "Region": "us-iso-east-1",
        "UseFIPS": false,
        "UseDualStack":
true
    }
},
{
    "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager-user-subscriptions.us-iso-east-1.c2s.ic.gov"
        }
    },
    "params": {
        "Region": "us-iso-east-1",
        "UseFIPS": false,
        "UseDualStack": false
    }
},
{
    "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
    "expect": {
        "error": "FIPS and DualStack are enabled, but
this partition does not support one or both"
    },
    "params": {
        "Region": "us-isob-east-1",
        "UseFIPS": true,
        "UseDualStack": true
    }
},
{
    "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager-user-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
        }
    },
},

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```

    "params": {
      "Region": "us-isob-east-1",
      "UseFIPS": true,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
    "expect": {
      "error": "DualStack is enabled but this partition does not support DualStack"
    },
    "params": {
      "Region": "us-isob-east-1",
      "UseFIPS": false,
      "UseDualStack": true
    }
  },
  {
    "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-user-subscriptions.us-isob-east-1.sc2s.sgov.gov"
      }
    },
    "params": {
      "Region": "us-isob-east-1",
      "UseFIPS": false,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
    "expect": {
      "endpoint": {
        "url": "https://example.com"
      }
    },
    "params": {
      "Region": "us-east-1",
      "UseFIPS": false,
      "UseDualStack": false,
      "Endpoint": "https://example.com"
    }
  },
  {

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"documentation": "For custom endpoint with region not set and fips disabled and dualstack disabled",
  "expect": {
    "endpoint": {
      "url": "https://example.com"
    }
  },
  "params": {
    "UseFIPS": false,
    "UseDualStack": false,
    "Endpoint": "https://example.com"
  }
},
{
  "documentation": "For custom endpoint with fips enabled and dualstack disabled",
  "expect": {
    "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
  },
  "params": {
    "Region": "us-east-1",
    "UseFIPS": true,
    "UseDualStack": false,
    "Endpoint": "https://example.com"
  }
},
{
  "documentation": "For custom endpoint with fips disabled and dualstack enabled",
  "expect": {
    "error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
  },
  "params": {
    "Region": "us-east-1",
    "UseFIPS": false,
    "UseDualStack": true,
    "Endpoint": "https://example.com"
  }
},
{
  "documentation": "Missing region",
  "expect": {
    "error": "Invalid Configuration: Missing Region"
  }
}
],
"version": "1.0"
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders": {

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```

"type": "operation",
"input": {
  "target": "com.amazonaws.licenseanagerusersubscriptions#ListIdentityProvidersRequest"
},
"output": {
  "target": "com.amazonaws.licenseanagerusersubscriptions#ListIdentityProvidersResponse"
},
"errors": [
  {
    "target": "com.amazonaws.licenseanagerusersubscriptions#AccessDeniedException"
  },
  {
    "target": "com.amazonaws.licenseanagerusersubscriptions#ConflictException"
  },
  {
    "target": "com.amazonaws.licenseanagerusersubscriptions#InternalServerErrorException"
  },
  {
    "target": "com.amazonaws.licenseanagerusersubscriptions#ResourceNotFoundException"
  },
  {
    "target": "com.amazonaws.licenseanagerusersubscriptions#ServiceQuotaExceededException"
  },
  {
    "target": "com.amazonaws.licenseanagerusersubscriptions#ThrottlingException"
  },
  {
    "target": "com.amazonaws.licenseanagerusersubscriptions#ValidationException"
  }
],
"traits": {
  "smithy.api#documentation": "<p>Lists the identity providers for user-based subscriptions.</p>",
  "smithy.api#http": {
    "code": 200,
    "method": "POST",
    "uri": "/identity-provider/ListIdentityProviders"
  },
  "smithy.api#paginated":
{
  "inputToken": "NextToken",
  "outputToken": "NextToken",
  "pageSize": "MaxResults",
  "items": "IdentityProviderSummaries"
}
},
"com.amazonaws.licenseanagerusersubscriptions#ListIdentityProvidersRequest": {
  "type": "structure",

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"members": {
  "MaxResults": {
    "target": "com.amazonaws.licenseanagerusersubscriptions#BoxInteger",
    "traits": {
      "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
    }
  },
  "NextToken": {
    "target": "smithy.api#String",
    "traits": {
      "smithy.api#documentation": "<p>Token for the next set of results.</p>"
    }
  }
},
"com.amazonaws.licenseanagerusersubscriptions#ListIdentityProvidersResponse":
{
  "type": "structure",
  "members": {
    "IdentityProviderSummaries": {
      "target": "com.amazonaws.licenseanagerusersubscriptions#IdentityProviderSummaryList",
      "traits": {
        "smithy.api#documentation": "<p>Metadata that describes the list identity providers operation.</p>",
        "smithy.api#required": {}
      }
    },
    "NextToken": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>Token for the next set of results.</p>"
      }
    }
  }
},
"com.amazonaws.licenseanagerusersubscriptions#ListInstances": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licenseanagerusersubscriptions#ListInstancesRequest"
  },
  "output": {
    "target": "com.amazonaws.licenseanagerusersubscriptions#ListInstancesResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ConflictException"
    }
  ]
}

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    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#InternalServerError"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ResourceNotFoundException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ServiceQuotaExceededException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ThrottlingException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Lists the EC2 instances providing user-based subscriptions.</p>",
    "smithy.api#http": {
      "code": 200,
      "method": "POST",
      "uri": "/instance/ListInstances"
    },
    "smithy.api#paginated": {
      "inputToken": "NextToken",
      "outputToken": "NextToken",
      "pageSize": "MaxResults",
      "items": "InstanceSummaries"
    }
  }
},
"com.amazonaws.licenseanagerusersubscriptions#ListInstancesRequest": {
  "type": "structure",
  "members": {
    "MaxResults": {
      "target": "com.amazonaws.licenseanagerusersubscriptions#BoxInteger",
      "traits": {
        "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
      }
    },
    "NextToken": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>Token for the next set of results.</p>"
      }
    }
  },
  "Filters": {

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        "target": "com.amazonaws.licenseanagerusersubscriptions#FilterList",
        "traits": {
            "smithy.api#documentation": "<p>An array of structures that you can use to filter the results to those
that match one or\n    more sets of key-value pairs that you specify.</p>"
        }
    }
},
"com.amazonaws.licenseanagerusersubscriptions#ListInstancesResponse": {
    "type":
"structure",
    "members": {
        "InstanceSummaries": {
            "target": "com.amazonaws.licenseanagerusersubscriptions#InstanceSummaryList",
            "traits": {
                "smithy.api#documentation": "<p>Metadata that describes the list instances operation.</p>"
            }
        },
        "NextToken": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    }
},
"com.amazonaws.licenseanagerusersubscriptions#ListProductSubscriptions": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licenseanagerusersubscriptions#ListProductSubscriptionsRequest"
    },
    "output": {
        "target": "com.amazonaws.licenseanagerusersubscriptions#ListProductSubscriptionsResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licenseanagerusersubscriptions#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licenseanagerusersubscriptions#ConflictException"
        },
        {
            "target": "com.amazonaws.licenseanagerusersubscriptions#InternalServerErrorException"
        },
        {
            "target": "com.amazonaws.licenseanagerusersubscriptions#ResourceNotFoundException"
        },
        {

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        "target": "com.amazonaws.licenseanagerusersubscriptions#ServiceQuotaExceededException"
    },
    {
        "target": "com.amazonaws.licenseanagerusersubscriptions#ThrottlingException"
    },
    {
        "target": "com.amazonaws.licenseanagerusersubscriptions#ValidationException"
    }
],
"traits": {
    "smithy.api#documentation": "<p>Lists the user-based subscription products available from an identity
provider.</p>",
    "smithy.api#http": {
        "code": 200,
        "method": "POST",
        "uri": "/user/ListProductSubscriptions"
    },
    "smithy.api#paginated": {
        "inputToken": "NextToken",
        "outputToken": "NextToken",
        "pageSize": "MaxResults",
        "items": "ProductUserSummaries"
    }
}
},
"com.amazonaws.licenseanagerusersubscriptions#ListProductSubscriptionsRequest": {
    "type": "structure",
    "members": {
        "Product": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The name
of the user-based subscription product.</p>",
                "smithy.api#required": {}
            }
        },
        "IdentityProvider": {
            "target": "com.amazonaws.licenseanagerusersubscriptions#IdentityProvider",
            "traits": {
                "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "MaxResults": {
        "target": "com.amazonaws.licenseanagerusersubscriptions#BoxInteger",
        "traits": {
            "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
        }
    }
}

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    },
    "Filters": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
      "traits": {
        "smithy.api#documentation": "<p>An array of structures that you can use to filter the results to those that match one or\n more sets of key-value pairs that you specify.</p>"
      }
    },
    "NextToken": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>Token for the next set of results.</p>"
      }
    }
  },
  "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse": {
    "type": "structure",
    "members": {
      "ProductUserSummaries": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList",
        "traits": {
          "smithy.api#documentation": "<p>Metadata that describes the list product subscriptions operation.</p>"
        }
      }
    },
    "NextToken": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>Token for the next set of results.</p>"
      }
    }
  },
  "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
      }
    ]
  }
}

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    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ConflictException"
    },
    {
      "target":
"com.amazonaws.licenseanagerusersubscriptions#InternalServerError"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ResourceNotFoundException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ServiceQuotaExceededException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ThrottlingException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Lists user associations for an identity provider.</p>",
    "smithy.api#http": {
      "code": 200,
      "method": "POST",
      "uri": "/user/ListUserAssociations"
    },
    "smithy.api#paginated":
  {
    "inputToken": "NextToken",
    "outputToken": "NextToken",
    "pageSize": "MaxResults",
    "items": "InstanceUserSummaries"
  }
  },
  "com.amazonaws.licenseanagerusersubscriptions#ListUserAssociationsRequest": {
    "type": "structure",
    "members": {
      "InstanceId": {
        "target": "smithy.api#String",
        "traits": {
          "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
          "smithy.api#required": {}
        }
      },
      "IdentityProvider": {

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    "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
    "traits": {
      "smithy.api#documentation": "<p>An object that specifies details for the identity
provider.</p>",
      "smithy.api#required": {}
    }
  },
  "MaxResults": {
    "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
    "traits": {
      "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
    }
  },
  "Filters": {
    "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
    "traits": {
      "smithy.api#documentation": "<p>An array of structures that you can use to filter the results to those
that match one or\n more sets of key-value pairs that you specify.</p>"
    }
  },
  "NextToken": {
    "target": "smithy.api#String",
    "traits": {
      "smithy.api#documentation": "<p>Token for
the next set of results.</p>"
    }
  }
},
"com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse": {
  "type": "structure",
  "members": {
    "InstanceUserSummaries": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList",
      "traits": {
        "smithy.api#documentation": "<p>Metadata that describes the list user association operation.</p>"
      }
    },
    "NextToken": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>Token for the next set of results.</p>"
      }
    }
  }
},
"com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary": {
  "type": "structure",

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"members": {

"Username": {
  "target": "smithy.api#String",
  "traits": {
    "smithy.api#documentation": "<p>The user name from the identity provider of the user.</p>",
    "smithy.api#required": {}
  }
},
"Product": {
  "target": "smithy.api#String",
  "traits": {
    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
    "smithy.api#required": {}
  }
},
"IdentityProvider": {
  "target": "com.amazonaws.licenseanagerusersubscriptions#IdentityProvider",
  "traits": {
    "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
    "smithy.api#required": {}
  }
},

"Status": {
  "target": "smithy.api#String",
  "traits": {
    "smithy.api#documentation": "<p>The status of a product for a user.</p>",
    "smithy.api#required": {}
  }
},
"StatusMessage": {
  "target": "smithy.api#String",
  "traits": {
    "smithy.api#documentation": "<p>The status message for a product for a user.</p>"
  }
},
"Domain": {
  "target": "smithy.api#String",
  "traits": {
    "smithy.api#documentation": "<p>The domain name of the user.</p>"
  }
},
"SubscriptionStartDate": {
  "target": "smithy.api#String",
  "traits": {
    "smithy.api#documentation": "<p>The

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start date of a subscription.</p>"
    }
  },
  "SubscriptionEndDate": {
    "target": "smithy.api#String",
    "traits": {
      "smithy.api#documentation": "<p>The end date of a subscription.</p>"
    }
  }
},
"traits": {
  "smithy.api#documentation": "<p>The summary of the user-based subscription products for a user.</p>"
}
},
"com.amazonaws.licenseanagerusersubscriptions#ProductUserSummaryList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licenseanagerusersubscriptions#ProductUserSummary"
  }
},
"com.amazonaws.licenseanagerusersubscriptions#RegisterIdentityProvider": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licenseanagerusersubscriptions#RegisterIdentityProviderRequest"
  },
  "output": {
    "target": "com.amazonaws.licenseanagerusersubscriptions#RegisterIdentityProviderResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ConflictException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#InternalServerErrorException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ResourceNotFoundException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ServiceQuotaExceededException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ThrottlingException"
    },
    {

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        "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
    }
},
"traits": {
    "smithy.api#documentation": "<p>Registers an identity provider for user-based subscriptions.</p>",
    "smithy.api#http": {
        "code": 200,
        "method": "POST",
        "uri": "/identity-provider/RegisterIdentityProvider"
    },
    "smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest": {
    "type": "structure",
    "members": {
        "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
                "smithy.api#documentation": "<p>An object that specifies details for the identity
provider.</p>",
                "smithy.api#required": {}
            }
        },
        "Product": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
                "smithy.api#required": {}
            }
        },
        "Settings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
            "traits": {
                "smithy.api#documentation": "<p>The registered identity providers product related configuration
settings such as the\n    subnets to provision VPC endpoints.</p>"
            }
        }
    }
},
"com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse": {
    "type": "structure",
    "members": {
        "IdentityProviderSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
            "traits": {
                "smithy.api#documentation": "<p>Metadata that describes the results of an identity provider

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operation.</p>",
    "smithy.api#required": {}
  }
}
},
"com.amazonaws.licenseanagerusersubscriptions#ResourceNotFoundException": {
  "type": "structure",
  "members": {
    "message": {
      "target": "smithy.api#String"
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>The resource couldn't be found.</p>",
    "smithy.api#error": "client",
    "smithy.api#httpError": 404
  }
},
"com.amazonaws.licenseanagerusersubscriptions#SecurityGroup": {
  "type": "string",

"traits": {
  "smithy.api#length": {
    "min": 5,
    "max": 200
  },
  "smithy.api#pattern": "^sg-([0-9a-z]{8})([0-9a-z]{17})$"
}
},
"com.amazonaws.licenseanagerusersubscriptions#ServiceQuotaExceededException": {
  "type": "structure",
  "members": {
    "message": {
      "target": "smithy.api#String"
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>The request failed because a service quota is exceeded.</p>",
    "smithy.api#error": "client"
  }
},
"com.amazonaws.licenseanagerusersubscriptions#Settings": {
  "type": "structure",
  "members": {
    "Subnets": {
      "target": "com.amazonaws.licenseanagerusersubscriptions#Subnets",
      "traits": {

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    "smithy.api#documentation":
"<p>The subnets defined for the registered identity provider.</p>",
    "smithy.api#length": {
        "min": 1
    },
    "smithy.api#required": {}
}
},
"SecurityGroupId": {
    "target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
    "traits": {
        "smithy.api#documentation": "<p>A security group ID that allows inbound TCP port 1688
communication between resources in\n    your VPC and the VPC endpoint for activation servers.</p>",
        "smithy.api#required": {}
    }
}
},
"traits": {
    "smithy.api#documentation": "<p>The registered identity providers product related configuration settings
such as the\n    subnets to provision VPC endpoints, and the security group ID that
is associated with the VPC\n    endpoints. The security group should permit inbound TCP port 1688
communication from resources\n    in the VPC.</p>"
}
},
"com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerErrorException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
        }
    ]
}

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    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ThrottlingException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Starts a product subscription for a user with the specified identity provider.</p>\n    <note>\n      <p>Your estimated bill for charges on the number of users and related costs will take 48\n      hours to appear for billing periods that haven't closed (marked as <b>Pending</b> billing status) in Amazon Web Services Billing.\n      For more information, see <a href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your\n      monthly charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p>\n    </note>",
    "smithy.api#http": {
      "code": 200,
      "method": "POST",
      "uri": "/user/StartProductSubscription"
    }
  }
},
"com.amazonaws.licenseanagerusersubscriptions#StartProductSubscriptionRequest": {
  "type": "structure",
  "members": {
    "Username": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>The user name from the identity provider of the user.</p>",
        "smithy.api#required": {}
      }
    },
    "IdentityProvider": {
      "target": "com.amazonaws.licenseanagerusersubscriptions#IdentityProvider",
      "traits": {
        "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
        "smithy.api#required": {}
      }
    },
    "Product": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
        "smithy.api#required": {}
      }
    },
    "Domain": {
      "target": "smithy.api#String",

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        "traits": {
          "smithy.api#documentation": "<p>The domain name of the user.</p>"
        }
      }
    },
    "com.amazonaws.licenseanagerusersubscriptions#StartProductSubscriptionResponse": {
      "type": "structure",
      "members": {
        "ProductUserSummary": {
          "target": "com.amazonaws.licenseanagerusersubscriptions#ProductUserSummary",
          "traits": {
            "smithy.api#documentation": "<p>Metadata that describes the start product subscription
operation.</p>",
            "smithy.api#required": {}
          }
        }
      }
    },
    "com.amazonaws.licenseanagerusersubscriptions#StopProductSubscription": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licenseanagerusersubscriptions#StopProductSubscriptionRequest"
      },
      "output": {
        "target": "com.amazonaws.licenseanagerusersubscriptions#StopProductSubscriptionResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licenseanagerusersubscriptions#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licenseanagerusersubscriptions#ConflictException"
        },
        {
          "target": "com.amazonaws.licenseanagerusersubscriptions#InternalServerErrorException"
        },
        {
          "target": "com.amazonaws.licenseanagerusersubscriptions#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licenseanagerusersubscriptions#ServiceQuotaExceededException"
        },
        {
          "target": "com.amazonaws.licenseanagerusersubscriptions#ThrottlingException"
        },
        {

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        "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
    }
],
"traits": {
    "smithy.api#documentation": "<p>Stops a product subscription for a user with the specified identity
provider.</p>",
    "smithy.api#http": {
        "code": 200,
        "method": "POST",
        "uri": "/user/StopProductSubscription"
    }
}
},
"com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest": {
    "type": "structure",
    "members": {
        "Username": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>",
                "smithy.api#required": {}
            }
        },
        "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
                "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                "smithy.api#required":
            }
        }
    },
    "Product": {
        "target": "smithy.api#String",
        "traits": {
            "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
            "smithy.api#required": {}
        }
    },
    "Domain": {
        "target": "smithy.api#String",
        "traits": {
            "smithy.api#documentation": "<p>The domain name of the user.</p>"
        }
    }
}
},
"com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse": {
    "type": "structure",

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"members": {
  "ProductUserSummary": {
    "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
    "traits": {
      "smithy.api#documentation":
"<p>Metadata that describes the start product subscription operation.</p>",
      "smithy.api#required": {}
    }
  }
},
"com.amazonaws.licensemanagerusersubscriptions#StringList": {
  "type": "list",
  "member": {
    "target": "smithy.api#String"
  }
},
"com.amazonaws.licensemanagerusersubscriptions#Subnet": {
  "type": "string",
  "traits": {
    "smithy.api#pattern": "subnet-[a-z0-9]{8,17}"
  }
},
"com.amazonaws.licensemanagerusersubscriptions#Subnets": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanagerusersubscriptions#Subnet"
  }
},
"com.amazonaws.licensemanagerusersubscriptions#ThrottlingException": {
  "type": "structure",
  "members": {
    "message": {
      "target": "smithy.api#String"
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>The request was denied because of request throttling. Retry the
request.</p>",
    "smithy.api#error": "client"
  }
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest"
  },

```

```

"output": {
  "target": "com.amazonaws.licenseanagerusersubscriptions#UpdateIdentityProviderSettingsResponse"
},
"errors": [
  {
    "target": "com.amazonaws.licenseanagerusersubscriptions#AccessDeniedException"
  },
  {
    "target": "com.amazonaws.licenseanagerusersubscriptions#InternalServerErrorException"
  },
  {
    "target": "com.amazonaws.licenseanagerusersubscriptions#ThrottlingException"
  },
  {
    "target": "com.amazonaws.licenseanagerusersubscriptions#ValidationException"
  }
],
"traits": {
  "smithy.api#documentation": "<p>Updates additional product configuration settings for the registered
identity\n  provider.</p>",
  "smithy.api#http": {
    "code": 200,
    "method": "POST",
    "uri": "/identity-provider/UpdateIdentityProviderSettings"
  },
  "smithy.api#idempotent": {}
}
},
"com.amazonaws.licenseanagerusersubscriptions#UpdateIdentityProviderSettingsRequest": {
  "type": "structure",
  "members": {
    "IdentityProvider": {
      "target": "com.amazonaws.licenseanagerusersubscriptions#IdentityProvider",
      "traits": {
        "smithy.api#required": {}
      }
    },
    "Product": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
        "smithy.api#required": {}
      }
    },
    "UpdateSettings": {
      "target": "com.amazonaws.licenseanagerusersubscriptions#UpdateSettings",
      "traits": {
        "smithy.api#documentation": "<p>Updates the registered identity providers product related

```

configuration settings. You can update any combination of settings in a single operation such as the:

- Subnets which you want to add to provision VPC endpoints.
- Subnets which you want to remove the VPC endpoints from.
- Security group ID which permits traffic to the VPC endpoints.

```

    "smithy.api#required": {}
  }
}
},
"com.amazonaws.licenseanagerusersubscriptions#UpdateIdentityProviderSettingsResponse": {
  "type": "structure",
  "members": {
    "IdentityProviderSummary": {
      "target": "com.amazonaws.licenseanagerusersubscriptions#IdentityProviderSummary",
      "traits": {
        "smithy.api#required": {}
      }
    }
  }
},
"com.amazonaws.licenseanagerusersubscriptions#UpdateSettings": {
  "type": "structure",
  "members": {
    "AddSubnets": {
      "target": "com.amazonaws.licenseanagerusersubscriptions#Subnets",
      "traits": {
        "smithy.api#documentation": "<p>The ID of one or more subnets in which License Manager will
create a VPC endpoint for products that require connectivity to activation servers.</p>",
        "smithy.api#required": {}
      }
    },
    "RemoveSubnets": {
      "target": "com.amazonaws.licenseanagerusersubscriptions#Subnets",
      "traits": {
        "smithy.api#documentation": "<p>The ID of one or more subnets to remove.</p>",
        "smithy.api#required": {}
      }
    },
    "SecurityGroupId": {
      "target": "com.amazonaws.licenseanagerusersubscriptions#SecurityGroup",
      "traits": {
        "smithy.api#documentation": "<p>A security group ID
that allows inbound TCP port 1688 communication between resources in your VPC and the VPC endpoints for
activation servers.</p>"
      }
    }
  }
},

```

```

    "traits": {
      "smithy.api#documentation": "<p>Updates the registered identity providers product related configuration
settings such as\n    the subnets to provision VPC endpoints.</p>"
    }
  },
  "com.amazonaws.licensemanagerusersubscriptions#ValidationException": {
    "type": "structure",
    "members": {
      "message": {
        "target": "smithy.api#String"
      }
    },
    "traits": {
      "smithy.api#documentation": "<p>A parameter is not valid.</p>",
      "smithy.api#error": "client"
    }
  }
}
}
{
  "smithy": "2.0",
  "metadata": {
    "suppressions": [
      {
        "id": "HttpMethodSemantics",
        "namespace": "*"
      },
      {
        "id": "HttpStatusCodeSemantics",
        "namespace": "*"
      },
      {
        "id": "PaginatedTrait",
        "namespace": "*"
      },
      {
        "id": "HttpHeaderTrait",
        "namespace": "*"
      },
      {
        "id": "HttpUriConflict",
        "namespace": "*"
      },
      {
        "id": "Service",
        "namespace": "*"
      }
    ]
  }
}

```



```

},
"shapes": {
  "com.amazonaws.licensemanager#AWSLicenseManager": {
    "type": "service",
    "version": "2018-08-01",
    "operations": [
      {
        "target": "com.amazonaws.licensemanager#AcceptGrant"
      },
      {
        "target": "com.amazonaws.licensemanager#CheckInLicense"
      },
      {
        "target": "com.amazonaws.licensemanager#CheckoutBorrowLicense"
      },
      {
        "target": "com.amazonaws.licensemanager#CheckoutLicense"
      },
      {
        "target": "com.amazonaws.licensemanager#CreateGrant"
      },
      {
        "target": "com.amazonaws.licensemanager#CreateGrantVersion"
      },
      {
        "target": "com.amazonaws.licensemanager#CreateLicense"
      },
      {
        "target": "com.amazonaws.licensemanager#CreateLicenseConfiguration"
      },
      {
        "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource"
      },
      {
        "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator"
      },
      {
        "target": "com.amazonaws.licensemanager#CreateLicenseVersion"
      },
      {
        "target": "com.amazonaws.licensemanager#CreateToken"
      },
      {
        "target": "com.amazonaws.licensemanager#DeleteGrant"
      },
      {
        "target": "com.amazonaws.licensemanager#DeleteLicense"
      }
    ]
  }
}

```

```

    },
    {
      "target": "com.amazonaws.licensemanager#DeleteLicenseConfiguration"
    },
    {
      "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator"
    },
    {
      "target": "com.amazonaws.licensemanager#DeleteToken"
    },
    {
      "target": "com.amazonaws.licensemanager#ExtendLicenseConsumption"
    }
  },
  {
    "target": "com.amazonaws.licensemanager#GetAccessToken"
  },
  {
    "target": "com.amazonaws.licensemanager#GetGrant"
  },
  {
    "target": "com.amazonaws.licensemanager#GetLicense"
  },
  {
    "target": "com.amazonaws.licensemanager#GetLicenseConfiguration"
  },
  {
    "target": "com.amazonaws.licensemanager#GetLicenseConversionTask"
  },
  {
    "target": "com.amazonaws.licensemanager#GetLicenseManagerReportGenerator"
  },
  {
    "target": "com.amazonaws.licensemanager#GetLicenseUsage"
  },
  {
    "target": "com.amazonaws.licensemanager#GetServiceSettings"
  },
  {
    "target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration"
  },
  {
    "target": "com.amazonaws.licensemanager#ListDistributedGrants"
  },
  {
    "target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations"
  },
  {

```

```

    "target": "com.amazonaws.licensemanager#ListLicenseConfigurations"
  },
  {
    "target": "com.amazonaws.licensemanager#ListLicenseConversionTasks"
  },
  {
    "target": "com.amazonaws.licensemanager#ListLicenseManagerReportGenerators"
  },
  {
    "target": "com.amazonaws.licensemanager#ListLicenses"
  },
  {
    "target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResource"
  },
  {
    "target": "com.amazonaws.licensemanager#ListLicenseVersions"
  },
  {
    "target": "com.amazonaws.licensemanager#ListReceivedGrants"
  },
  {
    "target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganization"
  },
  {
    "target": "com.amazonaws.licensemanager#ListReceivedLicenses"
  },
  {
    "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganization"
  },
  {
    "target": "com.amazonaws.licensemanager#ListResourceInventory"
  },
  {
    "target": "com.amazonaws.licensemanager#ListTagsForResource"
  },
  {
    "target": "com.amazonaws.licensemanager#ListTokens"
  },
  {
    "target": "com.amazonaws.licensemanager#ListUsageForLicenseConfiguration"
  },
  {
    "target": "com.amazonaws.licensemanager#RejectGrant"
  },
  {
    "target": "com.amazonaws.licensemanager#TagResource"
  },
}

```

```

    {
      "target": "com.amazonaws.licensemanager#UntagResource"
    },
    {
      "target": "com.amazonaws.licensemanager#UpdateLicenseConfiguration"
    },
    {
      "target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator"
    },
    {
      "target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource"
    },
    {
      "target": "com.amazonaws.licensemanager#UpdateServiceSettings"
    }
  ],
  "traits": {
    "aws.api#service": {
      "sdkId": "License Manager",
      "arnNamespace": "license-manager",
      "cloudFormationName": "LicenseManager",
      "cloudTrailEventSource": "licensemanager.amazonaws.com",
      "endpointPrefix": "license-manager"
    },
    "aws.auth#sigv4": {
      "name": "license-manager"
    },
    "aws.protocols#awsJson1_1": {},
    "smithy.api#documentation": "<p>License Manager makes it easier to manage licenses from software vendors across multiple \n      Amazon Web Services accounts and on-premises servers.</p>",
    "smithy.api#title": "AWS License Manager",
    "smithy.api#xmlNamespace": {
      "uri": "https://license-manager.amazonaws.com/doc/2018_08_01"
    },
    "smithy.rules#endpointRuleSet": {
      "version": "1.0",
      "parameters": {
        "Region": {
          "builtIn": "AWS::Region",
          "required": false,
          "documentation": "The AWS region used to dispatch the request.",
          "type": "String"
        }
      },
      "UseDualStack": {
        "builtIn": "AWS::UseDualStack",
        "required": true,
        "default": false,
        "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not

```

```

support dual-stack, dispatching the request MAY return an error.",
  "type": "Boolean"
},
"UseFIPS": {
  "builtIn": "AWS::UseFIPS",
  "required": true,
  "default": false,
  "documentation": "When true, send
this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant
endpoint, dispatching the request will return an error.",
  "type": "Boolean"
},
"Endpoint": {
  "builtIn": "SDK::Endpoint",
  "required": false,
  "documentation": "Override the endpoint used to send this request",
  "type": "String"
}
},
"rules": [
  {
    "conditions": [
      {
        "fn": "isSet",
        "argv": [
          {
            "ref": "Endpoint"
          }
        ]
      }
    ]
  }
]
},
"rules": [
  {
    "conditions": [
      {
        "fn": "booleanEquals",
        "argv": [
          {
            "ref": "UseFIPS"
          },
          true
        ]
      }
    ]
  }
],
"error": "Invalid Configuration: FIPS and custom endpoint are not supported",
"type": "error"

```

```

    },
    {
"conditions": [
    {
        "fn": "booleanEquals",
        "argv": [
            {
                "ref": "UseDualStack"
            },
            true
        ]
    }
],
"error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
"type": "error"
},
{
"conditions": [],
"endpoint": {
    "url": {
        "ref": "Endpoint"
    },
    "properties": {},
    "headers": {}
},
"type": "endpoint"
}
],
},
{
"conditions": [
    {
        "fn": "isSet",
        "argv": [
            {
                "ref": "Region"
            }
        ]
    }
],
"type": "tree",
"rules": [
    {
        "conditions": [
            {
                "fn": "aws.partition",
                "argv": [

```

```

        {
            "ref": "Region"
        }
    ],
    "assign": "PartitionResult"
}
],
"type": "tree",
"rules": [
    {
        "conditions": [
            {
                "fn": "booleanEquals",
                "argv": [
                    {
                        "ref": "UseFIPS"
                    },
                    true
                ]
            },
            {
                "fn": "booleanEquals",
                "argv": [
                    {
                        "ref": "UseDualStack"
                    },
                    true
                ]
            }
        ],
        "type": "tree",
        "rules": [
            {
                "conditions": [
                    {
                        "fn": "booleanEquals",
                        "argv": [
                            true,
                            {
                                "fn": "getAttr",
                                "argv": [
                                    {
                                        "ref": "PartitionResult"
                                    },
                                    "supportsFIPS"
                                ]
                            }
                        ]
                    }
                ]
            }
        ]
    }
]

```

```

    }
    ],
    {
      "fn": "booleanEquals",
      "argv": [
        true,
        {
          "fn": "getAttr",
          "argv": [
            {
              "ref": "PartitionResult"
            }
          ],
        }
      ],
    },
    "supportsDualStack"
  ],
  "type": "tree",
  "rules": [
    {
      "conditions": [],
      "endpoint": {
        "url": "https://license-manager-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
        "properties": {},
        "headers": {}
      },
      "type": "endpoint"
    }
  ],
  {
    "conditions": [],
    "error": "FIPS and DualStack are enabled, but this partition does not support one or
both",
    "type": "error"
  }
],
},
{
  "conditions": [
    {
      "fn": "booleanEquals",

```



```

"argv": [
  {
    "ref": "UseFIPS"
  },
  true
]
},
"type": "tree",
"rules": [
  {
    "conditions": [
      {
        "fn": "booleanEquals",
        "argv": [
          true,

          {
            "fn": "getAttr",
            "argv": [
              {
                "ref": "PartitionResult"
              },
              "supportsFIPS"
            ]
          }
        ]
      }
    ],
    "type": "tree",
    "rules": [

      {
        "conditions": [],
        "endpoint": {
          "url": "https://license-manager-fips.{Region}.{PartitionResult#dnsSuffix}",
          "properties": {},
          "headers": {}
        },
        "type": "endpoint"
      }
    ]
  },
  {
    "conditions": [],
    "error": "FIPS is enabled but this
partition does not support FIPS",
    "type": "error"
  }
]

```

```

    }
  ]
},
{
  "conditions": [
    {
      "fn": "booleanEquals",
      "argv": [
        {
          "ref": "UseDualStack"
        },
        true
      ]
    }
  ],
  "type": "tree",
  "rules": [
    {
      "conditions": [
        {
          "fn": "booleanEquals",
          "argv": [
            true,
            {
              "fn": "getAttr",
              "argv": [
                {
                  "ref": "PartitionResult"
                },
                ],
            }
          ]
        }
      ],
      "supportsDualStack"
    }
  ]
},
{
  "type": "tree",
  "rules": [
    {
      "conditions": [],
      "endpoint": {
        "url": "https://license-
manager.{Region}.{PartitionResult#dualStackDnsSuffix}",
        "properties": {},
        "headers": {}
      }
    }
  ],
  "type": "endpoint"
}

```

```

        }
      ]
    },
    {
      "conditions": [],
      "error": "DualStack is enabled but this partition does not support DualStack",
      "type": "error"
    }
  ]
},
{
  "conditions": [],
  "endpoint": {
    "url": "https://license-manager.{Region}.{PartitionResult#dnsSuffix}",
    "properties": {},
    "headers": {}
  },
  "type": "endpoint"
}
]
}
]
},
{
  "conditions": [],
  "error": "Invalid Configuration: Missing Region",
  "type": "error"
}
]
},
"smithy.rules#endpointTests": {
  "testCases": [
    {
      "documentation": "For region af-south-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint":
{
          "url": "https://license-manager.af-south-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "af-south-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region ap-east-1 with FIPS disabled and DualStack disabled",

```

```

"expect": {
  "endpoint": {
    "url": "https://license-manager.ap-east-1.amazonaws.com"
  }
},
"params": {
  "Region": "ap-east-1",
  "UseFIPS": false,
  "UseDualStack": false
}
},
{
  "documentation": "For region ap-northeast-1 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager.ap-northeast-1.amazonaws.com"
    }
  },
  "params": {
    "Region": "ap-northeast-1",
    "UseFIPS": false,
    "UseDualStack": false
  }
},
{
  "documentation": "For region ap-northeast-2 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager.ap-northeast-2.amazonaws.com"
    }
  },
  "params": {
    "Region": "ap-northeast-2",
    "UseFIPS": false,
    "UseDualStack": false
  }
},
{
  "documentation": "For region ap-northeast-3 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager.ap-northeast-3.amazonaws.com"
    }
  },
  "params": {
    "Region": "ap-northeast-3",
    "UseFIPS": false,
    "UseDualStack": false
  }
}

```

```

    }
  },
  {
    "documentation": "For region ap-south-1 with FIPS disabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager.ap-south-1.amazonaws.com"
      }
    },
    "params": {
      "Region": "ap-south-1",
      "UseFIPS": false,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For region ap-southeast-1 with FIPS disabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager.ap-southeast-1.amazonaws.com"
      }
    }
  },
  {
    "params": {
      "Region": "ap-southeast-1",
      "UseFIPS": false,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For region ap-southeast-2 with FIPS disabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager.ap-southeast-2.amazonaws.com"
      }
    },
    "params": {
      "Region": "ap-southeast-2",
      "UseFIPS": false,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For region ap-southeast-3 with FIPS disabled and DualStack disabled",
    "expect": {
      "endpoint": {

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```

        "url": "https://license-manager.ap-southeast-3.amazonaws.com"
    }
},
"params": {
    "Region": "ap-southeast-3",
    "UseFIPS": false,
    "UseDualStack": false
}
},
{
    "documentation": "For region ca-central-1 with FIPS disabled and DualStack disabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager.ca-central-1.amazonaws.com"
        }
    },
    "params": {
        "Region": "ca-central-1",
        "UseFIPS": false,
        "UseDualStack": false
    }
},
{
    "documentation": "For region eu-central-1 with FIPS disabled and DualStack disabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager.eu-central-1.amazonaws.com"
        }
    },
    "params": {
        "Region": "eu-central-1",
        "UseFIPS": false,
        "UseDualStack": false
    }
},
{
    "documentation": "For region eu-north-1 with FIPS
disabled and DualStack disabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager.eu-north-1.amazonaws.com"
        }
    },
    "params": {
        "Region": "eu-north-1",
        "UseFIPS": false,
        "UseDualStack": false
    }
}

```

```

    }
  },
  {
    "documentation": "For region eu-south-1 with FIPS disabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager.eu-south-1.amazonaws.com"
      }
    },
    "params": {
      "Region":
"eu-south-1",
      "UseFIPS": false,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For region eu-west-1 with FIPS disabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager.eu-west-1.amazonaws.com"
      }
    },
    "params": {
      "Region": "eu-west-1",
      "UseFIPS": false,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For region eu-west-2 with FIPS disabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager.eu-west-2.amazonaws.com"
      }
    },
    "params": {
      "Region": "eu-west-2",
      "UseFIPS": false,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For region eu-west-3 with FIPS disabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager.eu-west-3.amazonaws.com"

```

```

    }
  },
  "params": {
    "Region": "eu-west-3",
    "UseFIPS": false,
    "UseDualStack": false
  }
},
{
  "documentation": "For region me-south-1 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager.me-south-1.amazonaws.com"
    }
  },
  "params": {
    "Region": "me-south-1",
    "UseFIPS": false,
    "UseDualStack": false
  }
},
{
  "documentation": "For region sa-east-1 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager.sa-east-1.amazonaws.com"
    }
  },
  "params": {
    "Region": "sa-east-1",
    "UseFIPS": false,
    "UseDualStack": false
  }
},
{
  "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager.us-east-1.amazonaws.com"
    }
  },
  "params": {
    "Region": "us-east-1",
    "UseFIPS": false,
    "UseDualStack": false
  }
}

```



```

},
{
  "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager-fips.us-east-1.amazonaws.com"
    }
  },
  "params": {
    "Region": "us-east-1",
    "UseFIPS": true,
    "UseDualStack": false
  }
},
{
  "documentation": "For region us-east-2 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager.us-east-2.amazonaws.com"
    }
  },
  "params": {
    "Region": "us-east-2",
    "UseFIPS": false,
    "UseDualStack": false
  }
},
{
  "documentation": "For region us-east-2 with FIPS enabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager-fips.us-east-2.amazonaws.com"
    }
  },
  "params": {
    "Region": "us-east-2",
    "UseFIPS": true,
    "UseDualStack": false
  }
},
{
  "documentation": "For region
us-west-1 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager.us-west-1.amazonaws.com"
    }
  }
}

```

```

    },
    "params": {
      "Region": "us-west-1",
      "UseFIPS": false,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For region us-west-1 with FIPS enabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-fips.us-west-1.amazonaws.com"
      }
    },
    "params": {
      "Region": "us-west-1",
      "UseFIPS": true,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For region us-west-2 with FIPS disabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager.us-west-2.amazonaws.com"
      }
    },
    "params": {
      "Region": "us-west-2",
      "UseFIPS": false,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For region us-west-2 with FIPS enabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-fips.us-west-2.amazonaws.com"
      }
    },
    "params": {
      "Region": "us-west-2",
      "UseFIPS": true,
      "UseDualStack": false
    }
  },

```

```

{
  "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager-fips.us-east-1.api.aws"
    }
  },
  "params": {
    "Region": "us-east-1",
    "UseFIPS": true,

    "UseDualStack": true
  }
},
{
  "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager.us-east-1.api.aws"
    }
  },
  "params": {
    "Region": "us-east-1",
    "UseFIPS": false,
    "UseDualStack": true
  }
},
{
  "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url":
"https://license-manager.cn-north-1.amazonaws.com.cn"
    }
  },
  "params": {
    "Region": "cn-north-1",
    "UseFIPS": false,
    "UseDualStack": false
  }
},
{
  "documentation": "For region cn-northwest-1 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager.cn-northwest-1.amazonaws.com.cn"
    }
  },
},

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```

    "params": {
      "Region": "cn-northwest-1",
      "UseFIPS": false,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-fips.cn-north-1.api.amazonwebservices.com.cn"
      }
    },
    "params": {
      "Region": "cn-north-1",
      "UseFIPS": true,
      "UseDualStack": true
    }
  },
  {
    "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-fips.cn-north-1.amazonaws.com.cn"
      }
    },
    "params": {
      "Region": "cn-north-1",
      "UseFIPS": true,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager.cn-north-1.api.amazonwebservices.com.cn"
      }
    },
    "params": {
      "Region": "cn-north-1",
      "UseFIPS": false,
      "UseDualStack": true
    }
  }
},

```

```

{
  "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager.us-gov-east-1.amazonaws.com"
    }
  },
  "params": {
    "Region": "us-gov-east-1",
    "UseFIPS": false,
    "UseDualStack": false
  }
},
{
  "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager-fips.us-gov-east-1.amazonaws.com"
    }
  },
  "params": {
    "Region": "us-gov-east-1",
    "UseFIPS": true,
    "UseDualStack": false
  }
},
{
  "documentation": "For region us-gov-west-1 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager.us-gov-west-1.amazonaws.com"
    }
  },
  "params": {
    "Region": "us-gov-west-1",
    "UseFIPS": false,
    "UseDualStack": false
  }
},
{
  "documentation":
"\"For region us-gov-west-1 with FIPS enabled and DualStack disabled\",
  "expect": {
    "endpoint": {
      "url": "https://license-manager-fips.us-gov-west-1.amazonaws.com"
    }
  },
  "params": {

```

```

        "Region": "us-gov-west-1",
        "UseFIPS": true,
        "UseDualStack": false
    }
},
{
    "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager-fips.us-gov-east-1.api.aws"
        }
    },
    "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": true,
        "UseDualStack": true
    }
},
{
    "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager.us-gov-east-1.api.aws"
        }
    },
    "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": false,
        "UseDualStack": true
    }
},
{
    "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack
disabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager.us-iso-east-1.c2s.ic.gov"
        }
    },
    "params": {
        "Region": "us-iso-east-1",
        "UseFIPS": false,
        "UseDualStack": false
    }
},
{
    "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",

```

```

"expect": {
  "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
},
"params": {
  "Region": "us-iso-east-1",
  "UseFIPS": true,
  "UseDualStack": true
}
},
{
  "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager-fips.us-iso-east-1.c2s.ic.gov"
    }
  },
  "params": {
    "Region": "us-iso-east-1",
    "UseFIPS": true,
    "UseDualStack": false
  }
},
{
  "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
  "expect": {
    "error": "DualStack is enabled
but this partition does not support DualStack"
  },
  "params": {
    "Region": "us-iso-east-1",
    "UseFIPS": false,
    "UseDualStack": true
  }
},
{
  "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager.us-isob-east-1.sc2s.sgov.gov"
    }
  },
  "params": {
    "Region": "us-isob-east-1",
    "UseFIPS": false,
    "UseDualStack": false
  }
},

```

```

    {
      "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
      "expect": {
        "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
      },
      "params": {
        "Region": "us-isob-east-1",
        "UseFIPS": true,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-fips.us-isob-east-1.sc2s.sgov.gov"
        }
      },
      "params": {
        "Region": "us-isob-east-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
      "expect": {
        "error": "DualStack is enabled but this partition does not support DualStack"
      },
      "params": {
        "Region": "us-isob-east-1",
        "UseFIPS": false,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
      "expect": {
        "endpoint": {
          "url": "https://example.com"
        }
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": false,
        "UseDualStack": false,

```



```

        "Endpoint": "https://example.com"
    }
},
{
    "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
    "expect": {
        "endpoint": {
            "url": "https://example.com"
        }
    },
    "params": {
        "UseFIPS": false,

"UseDualStack": false,
        "Endpoint": "https://example.com"
    }
},
{
    "documentation": "For custom endpoint with fips enabled and dualstack disabled",
    "expect": {
        "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
    },
    "params": {
        "Region": "us-east-1",
        "UseFIPS": true,
        "UseDualStack": false,
        "Endpoint": "https://example.com"
    }
},
{
    "documentation": "For custom endpoint with fips disabled and dualstack enabled",
    "expect": {
        "error":
"Invalid Configuration: Dualstack and custom endpoint are not supported"
    },
    "params": {
        "Region": "us-east-1",
        "UseFIPS": false,
        "UseDualStack": true,
        "Endpoint": "https://example.com"
    }
},
{
    "documentation": "Missing region",
    "expect": {
        "error": "Invalid Configuration: Missing Region"
    }
}

```

```

        }
      ],
      "version": "1.0"
    }
  },
  "com.amazonaws.licensemanager#AcceptGrant": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#AcceptGrantRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#AcceptGrantResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
      },
      {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ServerInternalException"
      },
      {
        "target": "com.amazonaws.licensemanager#ValidationException"
      }
    ]
  },
  "traits": {
    "smithy.api#documentation": "<p>Accepts the specified grant.</p>"
  },
  "com.amazonaws.licensemanager#AcceptGrantRequest": {
    "type": "structure",
    "members": {
      "GrantArn": {
        "target": "com.amazonaws.licensemanager#Arn",

```

```

    "traits": {
      "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
      "smithy.api#required": {}
    }
  },
  "traits": {
    "smithy.api#input": {}
  }
},
"com.amazonaws.licensemanager#AcceptGrantResponse": {
  "type": "structure",
  "members": {
    "GrantArn": {
      "target": "com.amazonaws.licensemanager#Arn",
      "traits": {
        "smithy.api#documentation": "<p>Grant
ARN.</p>"
      }
    },
    "Status": {
      "target": "com.amazonaws.licensemanager#GrantStatus",
      "traits": {
        "smithy.api#documentation": "<p>Grant status.</p>"
      }
    },
    "Version": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Grant version.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#AccessDeniedException": {
  "type": "structure",
  "members": {
    "Message": {
      "target": "com.amazonaws.licensemanager#Message"
    }
  },
  "traits": {
    "aws.protocols#awsQueryError": {}
  }
}

```

```

"code": "ServiceAccessDenied",
  "httpResponseCode": 401
},
"smithy.api#documentation": "<p>Access to resource denied.</p>",
"smithy.api#error": "client",
"smithy.api#httpError": 401
}
},
"com.amazonaws.licensemanager#ActivationOverrideBehavior": {
  "type": "enum",
  "members": {
    "DISTRIBUTED_GRANTS_ONLY": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "DISTRIBUTED_GRANTS_ONLY"
      }
    },
    "ALL_GRANTS_PERMITTED_BY_ISSUER": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "ALL_GRANTS_PERMITTED_BY_ISSUER"
      }
    }
  }
},
"com.amazonaws.licensemanager#AllowedOperation": {
  "type": "enum",
  "members": {
    "CREATE_GRANT": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "CreateGrant"
      }
    },
    "CHECKOUT_LICENSE": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "CheckoutLicense"
      }
    },
    "CHECKOUT_BORROW_LICENSE": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "CheckoutBorrowLicense"
      }
    },
    "CHECK_IN_LICENSE": {

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```

        "target": "smithy.api#Unit",
        "traits": {
            "smithy.api#enumValue": "CheckInLicense"
        }
    },
    "EXTEND_CONSUMPTION_LICENSE": {
        "target": "smithy.api#Unit",
        "traits": {
            "smithy.api#enumValue": "ExtendConsumptionLicense"
        }
    },
    "LIST_PURCHASED_LICENSES": {
        "target": "smithy.api#Unit",
        "traits": {
            "smithy.api#enumValue": "ListPurchasedLicenses"
        }
    },
    "CREATE_TOKEN": {
        "target": "smithy.api#Unit",
        "traits": {
            "smithy.api#enumValue": "CreateToken"
        }
    }
},
"com.amazonaws.licensemanager#AllowedOperationList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#AllowedOperation"
    },
    "traits": {
        "smithy.api#length": {
            "min": 1,
            "max":
7
        }
    }
},
"com.amazonaws.licensemanager#Arn": {
    "type": "string",
    "traits": {
        "smithy.api#length": {
            "min": 0,
            "max": 2048
        },
        "smithy.api#pattern": "^arn:aws(-(cn|us-gov|iso-b|iso-c|iso-d))?:[A-Za-z0-9][A-Za-z0-9_/.-]{0,62}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9][A-Za-z0-9:/_+=,@.-]{0,1023}$"
    }
}

```

```

    }
  },
  "com.amazonaws.licensemanager#ArnList": {
    "type": "list",
    "member": {
      "target": "com.amazonaws.licensemanager#Arn"
    }
  },
  "com.amazonaws.licensemanager#AuthorizationException": {
    "type": "structure",
    "members": {
      "Message": {
        "target": "com.amazonaws.licensemanager#Message"
      }
    },
    "traits": {
      "aws.protocols#awsQueryError": {
        "code": "AuthorizationFailure",
        "httpResponseCode": 403
      },
      "smithy.api#documentation": "<p>The Amazon Web Services user account does not have permission to perform the action. Check the IAM\n      policy associated with this account.</p>",
      "smithy.api#error": "client",
      "smithy.api#httpError": 403
    }
  },
  "com.amazonaws.licensemanager#AutomatedDiscoveryInformation": {
    "type": "structure",
    "members": {
      "LastRunTime": {
        "target": "com.amazonaws.licensemanager#DateTime",
        "traits": {
          "smithy.api#documentation": "<p>Time that automated discovery last ran.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#documentation": "<p>Describes automated discovery.</p>"
    }
  },
  "com.amazonaws.licensemanager#Boolean": {
    "type": "boolean",
    "traits": {
      "smithy.api#default": false
    }
  },

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```

"com.amazonaws.licensemanager#BorrowConfiguration": {
  "type": "structure",
  "members": {
    "AllowEarlyCheckIn": {
      "target": "com.amazonaws.licensemanager#BoxBoolean",
      "traits": {
        "smithy.api#documentation": "<p>Indicates whether early check-ins are allowed.</p>",
        "smithy.api#required": {}
      }
    },
    "MaxTimeToLiveInMinutes": {
      "target": "com.amazonaws.licensemanager#BoxInteger",
      "traits": {
        "smithy.api#documentation": "<p>Maximum time for the borrow configuration, in minutes.</p>",
        "smithy.api#required": {}
      }
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>Details about a borrow configuration.</p>"
  }
},
"com.amazonaws.licensemanager#BoxBoolean": {
  "type": "boolean"
},
"com.amazonaws.licensemanager#BoxInteger": {
  "type": "integer"
},
"com.amazonaws.licensemanager#BoxLong": {
  "type": "long"
},
"com.amazonaws.licensemanager#CheckInLicense": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#CheckInLicenseRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#CheckInLicenseResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    }
  ]
}

```

```

    },
    {
      "target": "com.amazonaws.licensemanager#ConflictException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    },
    {
      "target": "com.amazonaws.licensemanager#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Checks in the specified license. Check in a license when it is no longer
in use.</p>"
  }
},
"com.amazonaws.licensemanager#CheckInLicenseRequest":
{
  "type": "structure",
  "members": {
    "LicenseConsumptionToken": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>License consumption token.</p>",
        "smithy.api#required": {}
      }
    },
    "Beneficiary": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>License beneficiary.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#input": {}
  }
},
"com.amazonaws.licensemanager#CheckInLicenseResponse": {

```



```

    "type": "structure",
    "members": {},
    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanager#CheckoutBorrowLicense":
  {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#EntitlementNotAllowedException"
      },
      {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
      },
      {
        "target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
      },
      {
        "target":
"com.amazonaws.licensemanager#RateLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#RedirectException"
      },
      {
        "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
      },
      {
        "target": "com.amazonaws.licensemanager#ServerInternalException"
      },
      {
        "target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
      },
      {

```

```

        "target": "com.amazonaws.licensemanager#ValidationException"
    }
],
"traits": {
    "smithy.api#documentation": "<p>Checks out the specified license for offline use.</p>"
}
},
"com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest": {
    "type": "structure",
    "members":
    {
        "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license. The license must use the borrow consumption configuration.</p>",
                "smithy.api#required": {}
            }
        },
        "Entitlements": {
            "target": "com.amazonaws.licensemanager#EntitlementDataList",
            "traits": {
                "smithy.api#documentation": "<p>License entitlements. Partial checkouts are not supported.</p>",
                "smithy.api#required": {}
            }
        },
        "DigitalSignatureMethod": {
            "target": "com.amazonaws.licensemanager#DigitalSignatureMethod",
            "traits": {
                "smithy.api#documentation": "<p>Digital signature method. The possible value is JSON Web Signature (JWS) algorithm PS384.\n    For more information, see <a href='\"https://tools.ietf.org/html/rfc7518#section-3.5\"'>RFC 7518 Digital Signature with RSASSA-PSS</a>.</p>",
                "smithy.api#required": {}
            }
        },
        "NodeId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Node ID.</p>"
            }
        },
        "CheckoutMetadata": {
            "target": "com.amazonaws.licensemanager#MetadataList",
            "traits": {
                "smithy.api#documentation": "<p>Information about constraints.</p>"
            }
        },
        "ClientToken": {

```

```

        "target": "com.amazonaws.licensemanager#ClientToken",
        "traits": {
            "smithy.api#documentation":
"<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
            "smithy.api#required": {}
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse": {
    "type": "structure",
    "members": {
        "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
            }
        },
        "LicenseConsumptionToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>License consumption token.</p>"
            }
        },
        "EntitlementsAllowed":
{
            "target": "com.amazonaws.licensemanager#EntitlementDataList",
            "traits": {
                "smithy.api#documentation": "<p>Allowed license entitlements.</p>"
            }
        },
        "NodeId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Node ID.</p>"
            }
        },
        "SignedToken": {
            "target": "com.amazonaws.licensemanager#SignedToken",
            "traits": {
                "smithy.api#documentation": "<p>Signed token.</p>"
            }
        },
        "IssuedAt": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",

```

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    "traits": {
      "smithy.api#documentation": "<p>Date and time at which the license checkout
is issued.</p>"
    }
  },
  "Expiration": {
    "target": "com.amazonaws.licensemanager#ISO8601DateTime",
    "traits": {
      "smithy.api#documentation": "<p>Date and time at which the license checkout expires.</p>"
    }
  },
  "CheckoutMetadata": {
    "target": "com.amazonaws.licensemanager#MetadataList",
    "traits": {
      "smithy.api#documentation": "<p>Information about constraints.</p>"
    }
  }
},
"traits": {
  "smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CheckoutLicense": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#CheckoutLicenseRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#CheckoutLicenseResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#RedirectException"
    }
  ]
}

```

```

    },
    {
      "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
    },
    {
      "target":
"com.amazonaws.licensemanager#ServerInternalException"
    },
    {
      "target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
    },
    {
      "target": "com.amazonaws.licensemanager#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Checks out the specified license.</p>\n      <note>\n      <p>If the
account that created the license is the same that is performing the check out, you must\n      specify the account
as the beneficiary.</p>\n      </note>"
  }
},
"com.amazonaws.licensemanager#CheckoutLicenseRequest": {
  "type": "structure",
  "members": {
    "ProductSKU": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Product
SKU.</p>",
        "smithy.api#required": {}
      }
    },
    "CheckoutType": {
      "target": "com.amazonaws.licensemanager#CheckoutType",
      "traits": {
        "smithy.api#documentation": "<p>Checkout type.</p>",
        "smithy.api#required": {}
      }
    }
  },
  "KeyFingerprint": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Key fingerprint identifying the license.</p>",
      "smithy.api#required": {}
    }
  },
  "Entitlements": {
    "target": "com.amazonaws.licensemanager#EntitlementDataList",

```

```

    "traits": {
      "smithy.api#documentation": "<p>License entitlements.</p>",
    }
  "smithy.api#required": {}
},
"ClientToken": {
  "target": "com.amazonaws.licensemanager#ClientToken",
  "traits": {
    "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
    "smithy.api#required": {}
  }
},
"Beneficiary": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>License beneficiary.</p>"
  }
},
"NodeId": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>Node ID.</p>"
  }
},
"traits": {
  "smithy.api#input": {}
},
},
"com.amazonaws.licensemanager#CheckoutLicenseResponse": {
  "type": "structure",
  "members": {
    "CheckoutType": {
      "target": "com.amazonaws.licensemanager#CheckoutType",
      "traits": {
        "smithy.api#documentation": "<p>Checkout type.</p>"
      }
    },
    "LicenseConsumptionToken": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>License consumption token.</p>"
      }
    },
    "EntitlementsAllowed": {

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```

    "target": "com.amazonaws.licensemanager#EntitlementDataList",
    "traits": {
      "smithy.api#documentation": "<p>Allowed license entitlements.</p>"
    }
  },
  "SignedToken": {
    "target": "com.amazonaws.licensemanager#SignedToken",
    "traits": {
      "smithy.api#documentation": "<p>Signed token.</p>"
    }
  },
  "NodeId": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Node ID.</p>"
    }
  },
  "IssuedAt": {
    "target": "com.amazonaws.licensemanager#ISO8601DateTime",
    "traits": {
      "smithy.api#documentation": "<p>Date and time at which the license checkout is issued.</p>"
    }
  },
  "Expiration": {
    "target": "com.amazonaws.licensemanager#ISO8601DateTime",
    "traits": {
      "smithy.api#documentation": "<p>Date and
time at which the license checkout expires.</p>"
    }
  },
  "LicenseArn": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the checkout license.</p>"
    }
  }
},
"traits": {
  "smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CheckoutType": {
  "type": "enum",
  "members": {
    "PROVISIONAL": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "PROVISIONAL"
      }
    }
  }
}

```

```

    }
  },
  "PERPETUAL": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "PERPETUAL"
    }
  }
},
"com.amazonaws.licensemanager#ClientRequestToken": {
  "type": "string",
  "traits": {
    "smithy.api#length": {
      "min": 1,
      "max": 36
    }
  }
},
"com.amazonaws.licensemanager#ClientToken": {
  "type": "string",
  "traits": {
    "smithy.api#length": {
      "min": 0,
      "max": 2048
    },
    "smithy.api#pattern": "^\\S+$"
  }
},
"com.amazonaws.licensemanager#ConflictException": {
  "type": "structure",
  "members": {
    "Message": {
      "target": "com.amazonaws.licensemanager#Message"
    }
  },
  "traits": {
    "aws.protocols#awsQueryError": {
      "code": "ConflictException",
      "httpResponseCode":
409
    },
    "smithy.api#documentation": "<p>There was a conflict processing the request. Try your request
again.</p>",
    "smithy.api#error": "client",
    "smithy.api#httpError": 409
  }
},

```



```

"com.amazonaws.licensemanager#ConsumedLicenseSummary": {
  "type": "structure",
  "members": {
    "ResourceType": {
      "target": "com.amazonaws.licensemanager#ResourceType",
      "traits": {
        "smithy.api#documentation": "<p>Resource type of the resource consuming a license.</p>"
      }
    },
    "ConsumedLicenses": {
      "target": "com.amazonaws.licensemanager#BoxLong",
      "traits": {
        "smithy.api#documentation": "<p>Number of licenses consumed by the resource.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>Details about license consumption.</p>"
  }
},
"com.amazonaws.licensemanager#ConsumedLicenseSummaryList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanager#ConsumedLicenseSummary"
  }
},
"com.amazonaws.licensemanager#ConsumptionConfiguration": {
  "type": "structure",
  "members": {
    "RenewType": {
      "target": "com.amazonaws.licensemanager#RenewType",
      "traits": {
        "smithy.api#documentation": "<p>Renewal frequency.</p>"
      }
    },
    "ProvisionalConfiguration": {
      "target": "com.amazonaws.licensemanager#ProvisionalConfiguration",
      "traits": {
        "smithy.api#documentation": "<p>Details about a provisional configuration.</p>"
      }
    },
    "BorrowConfiguration": {
      "target": "com.amazonaws.licensemanager#BorrowConfiguration",
      "traits": {
        "smithy.api#documentation": "<p>Details about a borrow configuration.</p>"
      }
    }
  }
}

```

```

    },
    "traits": {
      "smithy.api#documentation": "<p>Details about a consumption configuration.</p>"
    }
  },
  "com.amazonaws.licensemanager#CreateGrant": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#CreateGrantRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#CreateGrantResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target":
"com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
      },
      {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ServerInternalException"
      },
      {
        "target": "com.amazonaws.licensemanager#ValidationException"
      }
    ]
  },
  "traits": {
    "smithy.api#documentation": "<p>Creates a grant for the specified license. A grant shares the use of
license\n entitlements with a specific Amazon Web Services account, an organization, or an\n
organizational unit (OU). For more
information, see <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/granted-
licenses.html\">Granted licenses in License Manager</a> in the <i>License Manager User Guide</i>.</p>"
  }
},
"com.amazonaws.licensemanager#CreateGrantRequest": {
  "type": "structure",
  "members": {

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"ClientToken": {
  "target": "com.amazonaws.licensemanager#ClientToken",
  "traits": {
    "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the
idempotency of the request.</p>",
    "smithy.api#required": {}
  }
},
"GrantName": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>Grant name.</p>",
    "smithy.api#required": {}
  }
}
},
"LicenseArn": {
  "target": "com.amazonaws.licensemanager#Arn",
  "traits": {
    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
    "smithy.api#required": {}
  }
},
"Principals": {
  "target": "com.amazonaws.licensemanager#PrincipalArnList",
  "traits": {
    "smithy.api#documentation": "<p>The grant principals. You can specify one of the following as an
Amazon Resource Name (ARN):</p>
<ul>
<li><p>An Amazon Web Services
account, which includes only the account specified.</p>
</li>
<li><p>An organizational unit (OU), which includes all accounts in the OU.</p>
</li>
<li><p>An organization, which will include all accounts across your organization.</p>
</li>
</ul>",
    "smithy.api#required": {}
  }
},
"HomeRegion": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>Home Region of the grant.</p>",
    "smithy.api#required": {}
  }
},
"AllowedOperations": {
  "target": "com.amazonaws.licensemanager#AllowedOperationList",
  "traits": {
    "smithy.api#documentation": "<p>Allowed operations for the grant.</p>",
    "smithy.api#required": {}
  }
}

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    }
  },
  "traits": {
    "smithy.api#input": {}
  }
},

"com.amazonaws.licensemanager#CreateGrantResponse": {
  "type": "structure",
  "members": {
    "GrantArn": {
      "target": "com.amazonaws.licensemanager#Arn",
      "traits": {
        "smithy.api#documentation": "<p>Grant ARN.</p>"
      }
    },
    "Status": {
      "target": "com.amazonaws.licensemanager#GrantStatus",
      "traits": {
        "smithy.api#documentation": "<p>Grant status.</p>"
      }
    },
    "Version": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Grant version.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#output": {}
  }
},

"com.amazonaws.licensemanager#CreateGrantVersion":
{
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#CreateGrantVersionRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#CreateGrantVersionResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {

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    "target": "com.amazonaws.licensemanager#AuthorizationException"
  },
  {
    "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
  },
  {
    "target": "com.amazonaws.licensemanager#RateLimitExceededException"
  },
  {
    "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
  },
  {
    "target": "com.amazonaws.licensemanager#ServerInternalException"
  },
  {
    "target": "com.amazonaws.licensemanager#ValidationException"
  }
],
"traits": {
  "smithy.api#documentation": "<p>Creates a new version of the specified grant. For more information, see\n    <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/granted-licenses.html\">Granted licenses in License Manager</a> in the <i>License Manager User Guide</i>.</p>"
}
},
"com.amazonaws.licensemanager#CreateGrantVersionRequest": {
  "type": "structure",
  "members": {
    "ClientToken": {
      "target": "com.amazonaws.licensemanager#ClientToken",
      "traits": {
        "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
      }
    }
  }
},
"GrantArn": {
  "target": "com.amazonaws.licensemanager#Arn",
  "traits": {
    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
    "smithy.api#required": {}
  }
},
"GrantName": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>Grant name.</p>"
  }
}

```

```

    },
    "AllowedOperations": {
      "target": "com.amazonaws.licensemanager#AllowedOperationList",
      "traits": {
        "smithy.api#documentation": "<p>Allowed operations for the grant.</p>"
      }
    },
    "Status": {
      "target": "com.amazonaws.licensemanager#GrantStatus",
      "traits": {
        "smithy.api#documentation": "<p>Grant status.</p>"
      }
    },
    "StatusReason": {
      "target": "com.amazonaws.licensemanager#StatusReasonMessage",
      "traits": {
        "smithy.api#documentation": "<p>Grant status reason.</p>"
      }
    },
    "SourceVersion": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Current version of the grant.</p>"
      }
    },
    "Options": {
      "target": "com.amazonaws.licensemanager#Options",
      "traits": {
        "smithy.api#documentation": "<p>The options specified for the grant.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#input": {}
  }
},
"com.amazonaws.licensemanager#CreateGrantVersionResponse": {
  "type": "structure",
  "members": {
    "GrantArn": {
      "target": "com.amazonaws.licensemanager#Arn",
      "traits": {
        "smithy.api#documentation": "<p>Grant ARN.</p>"
      }
    },
    "Status": {
      "target": "com.amazonaws.licensemanager#GrantStatus",
      "traits": {

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        "smithy.api#documentation": "<p>Grant status.</p>"
    }
},
"Version": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
        "smithy.api#documentation": "<p>New version of the grant.</p>"
    }
}
},
"traits":
{
    "smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CreateLicense": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#CreateLicenseRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#CreateLicenseResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#RedirectException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Creates a license.</p>"
    }
}
}

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```

    }
  },
  "com.amazonaws.licensemanager#CreateLicenseConfiguration": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#CreateLicenseConfigurationRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#CreateLicenseConfigurationResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
      },
      {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ServerInternalException"
      }
    ],
    "traits": {
      "smithy.api#documentation": "<p>Creates a license configuration.</p>\n    <p>A license configuration is an abstraction of a customer license agreement that can be\n    consumed and enforced by License Manager. Components include specifications for the license\n    type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n    Dedicated Instance, Dedicated Host, or all of these), license affinity to host (how long a \n    license must be associated with a host), and the number of licenses purchased and used.</p>"
    }
  },
  "com.amazonaws.licensemanager#CreateLicenseConfigurationRequest": {
    "type": "structure",
    "members": {
      "Name": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Name of the license configuration.</p>",
          "smithy.api#required": {}
        }
      }
    }
  }
}

```



```

},
"Description": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>Description of the license configuration.</p>"
  }
},
"LicenseCountingType": {
  "target": "com.amazonaws.licensemanager#LicenseCountingType",
  "traits": {
    "smithy.api#documentation": "<p>Dimension used to track the license inventory.</p>",
    "smithy.api#required": {}
  }
},
"LicenseCount": {
  "target": "com.amazonaws.licensemanager#BoxLong",
  "traits": {
    "smithy.api#documentation": "<p>Number of licenses managed by the license configuration.</p>"
  }
},
"LicenseCountHardLimit": {
  "target": "com.amazonaws.licensemanager#BoxBoolean",
  "traits": {
    "smithy.api#documentation": "<p>Indicates whether hard or soft license enforcement is used. Exceeding a hard limit\n blocks the launch of new instances.</p>"
  }
},
"LicenseRules": {
  "target":
"com.amazonaws.licensemanager#StringList",
  "traits": {
    "smithy.api#documentation": "<p>License rules. The syntax is #name=value (for example, #allowedTenancy=EC2-DedicatedHost). The available rules \n vary by dimension, as follows.</p>\n
<ul>\n
  <li>\n
    <p>\n
      <code>Cores</code> dimension: <code>allowedTenancy</code> |\n
      <code>licenseAffinityToHost</code> |\n
      <code>maximumCores</code> |
      <code>minimumCores</code>\n
    </p>\n
    </li>\n
    <li>\n
      <p>\n
        <code>Instances</code> dimension: <code>allowedTenancy</code> |\n
        <code>maximumCores</code> |
        <code>minimumCores</code> |\n
        <code>maximumSockets</code> | <code>minimumSockets</code> |\n
        <code>maximumVcpus</code> | <code>minimumVcpus</code>\n
      </p>\n
    </li>\n
    <li>\n
      <p>\n
        <code>Sockets</code> dimension: <code>allowedTenancy</code> |\n
        <code>licenseAffinityToHost</code> |\n
        <code>maximumSockets</code> |
        <code>minimumSockets</code>\n
      </p>\n
    </li>\n
    <li>\n
      <p>\n
        <code>vCPUs</code> dimension: <code>allowedTenancy</code> | \n
        <code>honorVcpuOptimization</code> | \n
        <code>maximumVcpus</code> |
        <code>minimumVcpus</code>\n
      </p>\n
    </li>\n
  </ul>\n
  <p>The unit for
  <code>licenseAffinityToHost</code> is days and the range is 1 to 180. The possible \n values for
  <code>allowedTenancy</code> are <code>EC2-Default</code>, <code>EC2-DedicatedHost</code>, and \n

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<code>EC2-DedicatedInstance</code>. The possible values for <code>honorVcpuOptimization</code> are \n <code>True</code> and <code>False</code>.</p>"

```
    }
  },

  "Tags": {
    "target": "com.amazonaws.licensemanager#TagList",
    "traits": {
      "smithy.api#documentation": "<p>Tags to add to the license configuration.</p>"
    }
  },
  "DisassociateWhenNotFound": {
    "target": "com.amazonaws.licensemanager#BoxBoolean",
    "traits": {
      "smithy.api#documentation": "<p>When true, disassociates a resource when software is
uninstalled.</p>"
    }
  },
  "ProductInformationList": {
    "target": "com.amazonaws.licensemanager#ProductInformationList",
    "traits": {
      "smithy.api#documentation": "<p>Product information.</p>"
    }
  },
  "traits": {
    "smithy.api#input": {}
  }
},
"com.amazonaws.licensemanager#CreateLicenseConfigurationResponse":
{
  "type": "structure",
  "members": {
    "LicenseConfigurationArn": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest"
```

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    },
    "output": {
      "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
      },
      {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ServerInternalException"
      },
      {
        "target": "com.amazonaws.licensemanager#ValidationException"
      }
    ],
    "traits": {
      "smithy.api#documentation": "<p>Creates a new license conversion task.</p>"
    }
  },
  "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest": {
    "type": "structure",
    "members": {
      "ResourceArn": {
        "target": "com.amazonaws.licensemanager#Arn",
        "traits": {
          "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource you are converting the license type for.</p>",
          "smithy.api#required": {}
        }
      },
      "SourceLicenseContext": {
        "target": "com.amazonaws.licensemanager#LicenseConversionContext",
        "traits": {
          "smithy.api#documentation": "<p>Information that identifies the license type you are converting from. \n\n For the structure of the source license, see <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/conversion-procedures.html#conversion-cli\">Convert a license type using the CLI </a> in the <i>License Manager User Guide</i>.</p>",
          "smithy.api#required": {}
        }
      }
    }
  }
}

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    }
  },
  "DestinationLicenseContext":
{
  "target": "com.amazonaws.licensemanager#LicenseConversionContext",
  "traits": {
    "smithy.api#documentation": "<p>Information that identifies the license type you are converting to.
For the structure of the destination license, see <a href=\"https://docs.aws.amazon.com/license-
manager/latest/userguide/conversion-procedures.html#conversion-cli\">Convert a license type using the CLI </a> in
the <i>License Manager User Guide</i>.</p>",
    "smithy.api#required": {}
  }
}
},
"traits": {
  "smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse": {
  "type": "structure",
  "members": {
    "LicenseConversionTaskId": {
      "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",

"traits": {
  "smithy.api#documentation": "<p>The ID of the created license type conversion task.</p>"
}
}
},
"traits": {
  "smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    }
  ],

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    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    },
    {
      "target": "com.amazonaws.licensemanager#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Creates a report generator.</p>"
  }
},
"com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest": {
  "type": "structure",
  "members": {
    "ReportGeneratorName":
    {
      "target": "com.amazonaws.licensemanager#ReportGeneratorName",
      "traits": {
        "smithy.api#documentation": "<p>Name of the report generator.</p>",
        "smithy.api#required": {}
      }
    },
    "Type": {
      "target": "com.amazonaws.licensemanager#ReportTypeList",
      "traits": {
        "smithy.api#documentation": "<p>Type of reports to generate. The following report types an be generated:</p>\n      <ul>\n        <li>\n          <p>License configuration report - Reports the number and details of consumed licenses for a license configuration.</p>\n        </li>\n        <li>\n          <p>Resource report - Reports the tracked licenses and resource consumption for a license configuration.</p>\n        </li>\n      </ul>",
        "smithy.api#required": {}
      }
    }
  }
},
"ReportContext": {
  "target": "com.amazonaws.licensemanager#ReportContext",

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    "traits": {
      "smithy.api#documentation": "<p>Defines the type of license configuration the report generator
tracks.</p>",
      "smithy.api#required": {}
    }
  },
  "ReportFrequency": {
    "target": "com.amazonaws.licensemanager#ReportFrequency",
    "traits": {
      "smithy.api#documentation": "<p>Frequency by which reports are generated. Reports can be
generated daily, monthly, or weekly.</p>",
      "smithy.api#required": {}
    }
  },
  "ClientToken": {
    "target": "com.amazonaws.licensemanager#ClientRequestToken",
    "traits": {
      "smithy.api#documentation": "<p>Unique,
case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
      "smithy.api#required": {}
    }
  },
  "Description": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Description of the report generator.</p>"
    }
  },
  "Tags": {
    "target": "com.amazonaws.licensemanager#TagList",
    "traits": {
      "smithy.api#documentation": "<p>Tags to add to the report generator.</p>"
    }
  },
  "traits": {
    "smithy.api#input": {}
  }
},
"com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse": {
  "type": "structure",
  "members": {
    "LicenseManagerReportGeneratorArn":
{
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the new report
generator.</p>"

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    }
  },
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#CreateLicenseRequest": {
  "type": "structure",
  "members": {
    "LicenseName": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>License name.</p>",
        "smithy.api#required": {}
      }
    },
    "ProductName": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Product
name.</p>",
        "smithy.api#required": {}
      }
    },
    "ProductSKU": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Product SKU.</p>",
        "smithy.api#required": {}
      }
    },
    "Issuer": {
      "target": "com.amazonaws.licensemanager#Issuer",
      "traits": {
        "smithy.api#documentation": "<p>License issuer.</p>",
        "smithy.api#required": {}
      }
    },
    "HomeRegion": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Home Region for the license.</p>",
        "smithy.api#required": {}
      }
    }
  }
},
"Validity": {

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    "target": "com.amazonaws.licensemanager#DatetimeRange",
    "traits": {
      "smithy.api#documentation": "<p>Date and time range during which the license is valid, in ISO8601-
UTC format.</p>",
      "smithy.api#required": {}
    }
  },
  "Entitlements": {
    "target": "com.amazonaws.licensemanager#EntitlementList",
    "traits": {
      "smithy.api#documentation": "<p>License entitlements.</p>",
      "smithy.api#required": {}
    }
  },
  "Beneficiary": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>License beneficiary.</p>",
      "smithy.api#required": {}
    }
  },
  "ConsumptionConfiguration": {
    "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
    "traits": {
      "smithy.api#documentation": "<p>Configuration for consumption of the license. Choose a provisional
configuration for workloads\n      running with continuous connectivity. Choose a borrow configuration for
workloads with offline\n      usage.</p>",
      "smithy.api#required": {}
    }
  },
  "LicenseMetadata": {
    "target": "com.amazonaws.licensemanager#MetadataList",
    "traits": {
      "smithy.api#documentation": "<p>Information about the license.</p>"
    }
  },
  "ClientToken": {
    "target": "com.amazonaws.licensemanager#ClientToken",
    "traits": {
      "smithy.api#documentation":
      "<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
      "smithy.api#required": {}
    }
  }
},
"traits": {
  "smithy.api#input": {}
}

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},
"com.amazonaws.licensemanager#CreateLicenseResponse": {
  "type": "structure",
  "members": {
    "LicenseArn": {
      "target": "com.amazonaws.licensemanager#Arn",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
      }
    },
    "Status": {
      "target": "com.amazonaws.licensemanager#LicenseStatus",
      "traits": {
        "smithy.api#documentation": "<p>License status.</p>"
      }
    },
    "Version": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>License version.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#CreateLicenseVersion": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#CreateLicenseVersionRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#CreateLicenseVersionResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#ConflictException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    }
  ],

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    {
      "target": "com.amazonaws.licensemanager#RedirectException"
    },
    {
      "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    },
    {
      "target": "com.amazonaws.licensemanager#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Creates a new version of the specified license.</p>"
  }
},
"com.amazonaws.licensemanager#CreateLicenseVersionRequest": {
  "type": "structure",
  "members": {
    "LicenseArn": {
      "target":
"com.amazonaws.licensemanager#Arn",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
        "smithy.api#required": {}
      }
    },
    "LicenseName": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>License name.</p>",
        "smithy.api#required": {}
      }
    },
    "ProductName": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Product name.</p>",
        "smithy.api#required": {}
      }
    },
    "Issuer": {
      "target": "com.amazonaws.licensemanager#Issuer",
      "traits": {
        "smithy.api#documentation": "<p>License issuer.</p>",
        "smithy.api#required": {}
      }
    }
  }
}

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    }
  },
  "HomeRegion": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Home Region of the license.</p>",
      "smithy.api#required": {}
    }
  },
  "Validity": {
    "target": "com.amazonaws.licensemanager#DatetimeRange",
    "traits": {
      "smithy.api#documentation": "<p>Date and time range during which the license is valid, in ISO8601-
UTC format.</p>",
      "smithy.api#required": {}
    }
  },
  "LicenseMetadata": {
    "target": "com.amazonaws.licensemanager#MetadataList",
    "traits": {
      "smithy.api#documentation": "<p>Information about the license.</p>"
    }
  },
  "Entitlements": {
    "target": "com.amazonaws.licensemanager#EntitlementList",
    "traits": {
      "smithy.api#documentation": "<p>License entitlements.</p>",
      "smithy.api#required": {}
    }
  },
  "ConsumptionConfiguration": {
    "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
    "traits": {
      "smithy.api#documentation": "<p>Configuration for consumption of the license. Choose a provisional
configuration for workloads\n      running with continuous connectivity. Choose a borrow configuration for
workloads with offline\n      usage.</p>",
      "smithy.api#required": {}
    }
  },
  "Status": {
    "target": "com.amazonaws.licensemanager#LicenseStatus",
    "traits": {
      "smithy.api#documentation": "<p>License status.</p>",
      "smithy.api#required": {}
    }
  },
  "ClientToken": {

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        "target": "com.amazonaws.licensemanager#ClientToken",
        "traits": {
            "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the
idempotency of the request.</p>",
            "smithy.api#required": {}
        }
    },
    "SourceVersion": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
            "smithy.api#documentation": "<p>Current version of the license.</p>"
        }
    }
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseVersionResponse": {
    "type": "structure",
    "members": {
        "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>License ARN.</p>"
            }
        },
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>New version of the license.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#LicenseStatus",
            "traits": {
                "smithy.api#documentation": "<p>License status.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output":
    {}
    }
},
"com.amazonaws.licensemanager#CreateToken": {
    "type": "operation",

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"input": {
  "target": "com.amazonaws.licensemanager#CreateTokenRequest"
},
"output": {
  "target": "com.amazonaws.licensemanager#CreateTokenResponse"
},
"errors": [
  {
    "target": "com.amazonaws.licensemanager#AccessDeniedException"
  },
  {
    "target": "com.amazonaws.licensemanager#AuthorizationException"
  },
  {
    "target": "com.amazonaws.licensemanager#RateLimitExceededException"
  },
  {
    "target": "com.amazonaws.licensemanager#RedirectException"
  },
  {
    "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
  },
  {
    "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
  },
  {
    "target": "com.amazonaws.licensemanager#ServerInternalException"
  },
  {
    "target": "com.amazonaws.licensemanager#ValidationException"
  }
],
"traits": {
  "smithy.api#documentation": "<p>Creates a long-lived token.</p>\n      <p>A refresh token is a JWT token used to get an access token. With an access token,\n      you can call AssumeRoleWithWebIdentity to get role credentials that you can use to\n      call License Manager to manage the specified license.</p>"
}
},
"com.amazonaws.licensemanager#CreateTokenRequest": {
  "type": "structure",
  "members": {
    "LicenseArn": {
      "target": "com.amazonaws.licensemanager#Arn",
      "traits":
{
      "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license. The ARN is mapped to the aud claim of the\n      JWT token.</p>",

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    "smithy.api#required": {}
  },
  "RoleArns": {
    "target": "com.amazonaws.licensemanager#ArnList",
    "traits": {
      "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the IAM roles to embed in the
token. \n License Manager does not check whether the roles are in use.</p>"
    }
  },
  "ExpirationInDays": {
    "target": "com.amazonaws.licensemanager#Integer",
    "traits": {
      "smithy.api#documentation": "<p>Token expiration, in days, counted from token creation. The
default is 365 days.</p>"
    }
  },
  "TokenProperties": {
    "target": "com.amazonaws.licensemanager#MaxSize3StringList",
    "traits": {
      "smithy.api#documentation": "<p>Data specified by the caller to be included in the JWT token. The
data is mapped\n to the amr claim of the JWT token.</p>"
    }
  },
  "ClientToken": {
    "target": "com.amazonaws.licensemanager#ClientToken",
    "traits": {
      "smithy.api#documentation": "<p>Idempotency token, valid for 10 minutes.</p>",
      "smithy.api#required": {}
    }
  },
  "traits": {
    "smithy.api#input": {}
  },
  "com.amazonaws.licensemanager#CreateTokenResponse": {
    "type": "structure",
    "members": {
      "TokenId": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Token ID.</p>"
        }
      }
    }
  },
  "TokenType": {
    "target": "com.amazonaws.licensemanager#TokenType",

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    "traits": {
      "smithy.api#documentation": "<p>Token type.</p>"
    }
  },
  "Token": {
    "target": "com.amazonaws.licensemanager#TokenString",
    "traits": {
      "smithy.api#documentation": "<p>Refresh token, encoded as a JWT token.</p>"
    }
  }
},
"traits": {
  "smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#DateTime": {
  "type": "timestamp"
},
"com.amazonaws.licensemanager#DatetimeRange": {
  "type": "structure",
  "members": {
    "Begin": {
      "target": "com.amazonaws.licensemanager#ISO8601DateTime",
      "traits": {
        "smithy.api#documentation": "<p>Start of the time range.</p>",
        "smithy.api#required": {}
      }
    },
    "End": {
      "target": "com.amazonaws.licensemanager#ISO8601DateTime",
      "traits": {
        "smithy.api#documentation": "<p>End of the time range.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>Describes a time range, in ISO8601-UTC format.</p>"
  }
},
"com.amazonaws.licensemanager#DeleteGrant": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#DeleteGrantRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#DeleteGrantResponse"
  },
  "errors": [

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    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    },
    {
      "target": "com.amazonaws.licensemanager#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Deletes
the specified grant.</p>"
  }
},
"com.amazonaws.licensemanager#DeleteGrantRequest": {
  "type": "structure",
  "members": {
    "GrantArn": {
      "target": "com.amazonaws.licensemanager#Arn",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
        "smithy.api#required": {}
      }
    },
    "StatusReason": {
      "target": "com.amazonaws.licensemanager#StatusReasonMessage",
      "traits": {
        "smithy.api#documentation": "<p>The Status reason for the delete request.</p>"
      }
    }
  },
  "Version": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Current version of the

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grant.<p>",
    "smithy.api#required": {}
  }
},
"traits": {
  "smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#DeleteGrantResponse": {
  "type": "structure",
  "members": {
    "GrantArn": {
      "target": "com.amazonaws.licensemanager#Arn",
      "traits": {
        "smithy.api#documentation": "<p>Grant ARN.</p>"
      }
    },
    "Status": {
      "target": "com.amazonaws.licensemanager#GrantStatus",
      "traits": {
        "smithy.api#documentation": "<p>Grant status.</p>"
      }
    },
    "Version": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation":
"<p>Grant version.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#DeleteLicense": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#DeleteLicenseRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#DeleteLicenseResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    }
  ],

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    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#ConflictException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    }
  ],
  {
    "target": "com.amazonaws.licensemanager#RateLimitExceededException"
  },
  {
    "target": "com.amazonaws.licensemanager#RedirectException"
  },
  {
    "target": "com.amazonaws.licensemanager#ServerInternalException"
  },
  {
    "target": "com.amazonaws.licensemanager#ValidationException"
  }
],
"traits": {
  "smithy.api#documentation": "<p>Deletes the specified license.</p>"
}
},
"com.amazonaws.licensemanager#DeleteLicenseConfiguration": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse"
  },
}
"errors": [
  {
    "target": "com.amazonaws.licensemanager#AccessDeniedException"
  },
  {
    "target": "com.amazonaws.licensemanager#AuthorizationException"
  },
  {
    "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
  },
  {
    "target": "com.amazonaws.licensemanager#RateLimitExceededException"
  }
]

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    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Deletes the specified license configuration.</p>\n    <p>You cannot delete a license configuration that is in use.</p>"
  }
},
"com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest": {
  "type": "structure",
  "members":
{
  "LicenseConfigurationArn": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>ID of the license configuration.</p>",
      "smithy.api#required": {}
    }
  }
},
  "traits": {
    "smithy.api#input": {}
  }
},
"com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse": {
  "type": "structure",
  "members": {},
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    }
  ],

```

```

    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    },
    {
      "target": "com.amazonaws.licensemanager#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Deletes the specified report generator.</p>\n    <p>This action deletes the report generator, which stops it from generating future reports.\n    The action cannot be reversed. It has no effect on the previous reports from this generator.</p>"
  }
},
"com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest": {
  "type": "structure",
  "members": {
    "LicenseManagerReportGeneratorArn": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator to be deleted.</p>",
        "smithy.api#required": {}
      }
    }
  },
  "traits": {
    "smithy.api#input": {}
  }
},
"com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse": {
  "type": "structure",
  "members": {},
  "traits": {
    "smithy.api#output": {}
  }
}

```

```

    },
    "com.amazonaws.licensemanager#DeleteLicenseRequest": {
      "type": "structure",
      "members": {
        "LicenseArn": {
          "target": "com.amazonaws.licensemanager#Arn",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
            "smithy.api#required": {}
          }
        },
        "SourceVersion": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Current version of the license.</p>",
            "smithy.api#required": {}
          }
        }
      }
    },
    "traits": {
      "smithy.api#input": {}
    }
  },
  "com.amazonaws.licensemanager#DeleteLicenseResponse": {
    "type": "structure",
    "members": {
      "Status": {
        "target": "com.amazonaws.licensemanager#LicenseDeletionStatus",
        "traits": {
          "smithy.api#documentation": "<p>License status.</p>"
        }
      },
      "DeletionDate": {
        "target": "com.amazonaws.licensemanager#ISO8601DateTime",
        "traits": {
          "smithy.api#documentation": "<p>Date when the license is deleted.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanager#DeleteToken": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#DeleteTokenRequest"
    }
  }
}

```

```

    },
    "output": {
      "target": "com.amazonaws.licensemanager#DeleteTokenResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#RedirectException"
      },
      {
        "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
      },
      {
        "target": "com.amazonaws.licensemanager#ServerInternalException"
      },
      {
        "target": "com.amazonaws.licensemanager#ValidationException"
      }
    ],
    "traits": {
      "smithy.api#documentation": "<p>Deletes the specified token. Must be called in the license home
Region.</p>"
    }
  },
  "com.amazonaws.licensemanager#DeleteTokenRequest": {
    "type": "structure",
    "members": {
      "TokenId": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Token ID.</p>",
          "smithy.api#required": {}
        }
      }
    },
    "traits": {
      "smithy.api#input": {}
    }
  },
},

```

```

"com.amazonaws.licensemanager#DeleteTokenResponse": {
  "type": "structure",
  "members": {},
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#DigitalSignatureMethod": {
  "type": "enum",
  "members": {
    "JWT_PS384": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "JWT_PS384"
      }
    }
  }
},
"com.amazonaws.licensemanager#Entitlement": {
  "type": "structure",
  "members": {
    "Name": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Entitlement name.</p>",
        "smithy.api#required": {}
      }
    },
    "Value": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Entitlement resource. Use only
if the unit is None.</p>"
      }
    },
    "MaxCount": {
      "target": "com.amazonaws.licensemanager#Long",
      "traits": {
        "smithy.api#documentation": "<p>Maximum entitlement count. Use if the unit is not None.</p>"
      }
    },
    "Overage": {
      "target": "com.amazonaws.licensemanager#BoxBoolean",
      "traits": {
        "smithy.api#documentation": "<p>Indicates whether overages are allowed.</p>"
      }
    }
  }
},

```

```

    "Unit": {
      "target": "com.amazonaws.licensemanager#EntitlementUnit",
      "traits": {
        "smithy.api#documentation": "<p>Entitlement unit.</p>",
        "smithy.api#required": {}
      }
    },
    "AllowCheckIn": {
      "target":
"com.amazonaws.licensemanager#BoxBoolean",
      "traits": {
        "smithy.api#documentation": "<p>Indicates whether check-ins are allowed.</p>"
      }
    },
    "traits": {
      "smithy.api#documentation": "<p>Describes a resource entitled for use with a license.</p>"
    }
  },
  "com.amazonaws.licensemanager#EntitlementData": {
    "type": "structure",
    "members": {
      "Name": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Entitlement data name.</p>",
          "smithy.api#required": {}
        }
      },
      "Value": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Entitlement
data value.</p>"
        }
      }
    },
    "Unit": {
      "target": "com.amazonaws.licensemanager#EntitlementDataUnit",
      "traits": {
        "smithy.api#documentation": "<p>Entitlement data unit.</p>",
        "smithy.api#required": {}
      }
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>Data associated with an entitlement resource.</p>"
  }
},

```



```

"com.amazonaws.licensemanager#EntitlementDataList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanager#EntitlementData"
  }
},
"com.amazonaws.licensemanager#EntitlementDataUnit": {
  "type": "enum",
  "members": {
    "COUNT": {
      "target": "smithy.api#Unit",
      "traits": {
"smithy.api#enumValue": "Count"
      }
    },
    "NONE": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "None"
      }
    },
    "SECONDS": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "Seconds"
      }
    },
    "MICROSECONDS": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "Microseconds"
      }
    },
    "MILLISECONDS": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "Milliseconds"
      }
    },
    "BYTES": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "Bytes"
      }
    },
    "KILOBYTES": {
      "target": "smithy.api#Unit",

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```

    "traits": {
      "smithy.api#enumValue": "Kilobytes"
    }
  },
  "MEGABYTES": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Megabytes"
    }
  },
  "GIGABYTES": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Gigabytes"
    }
  },
  "TERABYTES": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Terabytes"
    }
  },
  "BITS":
{
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "Bits"
  }
},
  "KILOBITS": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Kilobits"
    }
  },
  "MEGABITS": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Megabits"
    }
  },
  "GIGABITS": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Gigabits"
    }
  },
  "TERABITS": {

```

```

    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Terabits"
    }
  },
  "PERCENT": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Percent"
    }
  },
  "BYTES_PER_SECOND": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Bytes/Second"
    }
  },
  "KILOBYTES_PER_SECOND": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Kilobytes/Second"
    }
  },
  "MEGABYTES_PER_SECOND": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Megabytes/Second"
    }
  },
  "GIGABYTES_PER_SECOND": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Gigabytes/Second"
    }
  },
  "TERABYTES_PER_SECOND": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Terabytes/Second"
    }
  },
  "BITS_PER_SECOND": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Bits/Second"
    }
  },

```

```

"KILOBITS_PER_SECOND": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "Kilobits/Second"
  }
},
"MEGABITS_PER_SECOND": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue":
"Megabits/Second"
  }
},
"GIGABITS_PER_SECOND": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "Gigabits/Second"
  }
},
"TERABITS_PER_SECOND": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "Terabits/Second"
  }
},
"COUNT_PER_SECOND": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "Count/Second"
  }
}
},
"com.amazonaws.licensemanager#EntitlementList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanager#Entitlement"
  }
},
"com.amazonaws.licensemanager#EntitlementNotAllowedException":
{
  "type": "structure",
  "members": {
    "Message": {
      "target": "com.amazonaws.licensemanager#Message"
    }
  },
  "traits": {

```

```

    "smithy.api#documentation": "<p>The entitlement is not allowed.</p>",
    "smithy.api#error": "client",
    "smithy.api#httpError": 400
  }
},
"com.amazonaws.licensemanager#EntitlementUnit": {
  "type": "enum",
  "members": {
    "COUNT": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "Count"
      }
    },
    "NONE": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "None"
      }
    },
    "SECONDS": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "Seconds"
      }
    },
    "MICROSECONDS": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "Microseconds"
      }
    },
    "MILLISECONDS": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "Milliseconds"
      }
    },
    "BYTES": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "Bytes"
      }
    },
    "KILOBYTES": {
      "target": "smithy.api#Unit",
      "traits": {

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```

    "smithy.api#enumValue": "Kilobytes"
  }
},
"MEGABYTES": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "Megabytes"
  }
},
"GIGABYTES": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "Gigabytes"
  }
},
"TERABYTES": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "Terabytes"
  }
},
"BITS": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "Bits"
  }
},
"KILOBITS": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "Kilobits"
  }
},
"MEGABITS": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "Megabits"
  }
},
"GIGABITS": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "Gigabits"
  }
},
"TERABITS": {
  "target": "smithy.api#Unit",

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```

    "traits": {
      "smithy.api#enumValue": "Terabits"
    }
  },
  "PERCENT": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Percent"
    }
  },
  "BYTES_PER_SECOND": {
    "target":
"smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Bytes/Second"
    }
  },
  "KILOBYTES_PER_SECOND": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Kilobytes/Second"
    }
  },
  "MEGABYTES_PER_SECOND": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Megabytes/Second"
    }
  },
  "GIGABYTES_PER_SECOND": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Gigabytes/Second"
    }
  },
  "TERABYTES_PER_SECOND": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Terabytes/Second"
    }
  },
  "BITS_PER_SECOND": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Bits/Second"
    }
  },

```

```

"KILOBITS_PER_SECOND": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "Kilobits/Second"
  }
},
"MEGABITS_PER_SECOND": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "Megabits/Second"
  }
},
"GIGABITS_PER_SECOND": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "Gigabits/Second"
  }
},

"TERABITS_PER_SECOND": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "Terabits/Second"
  }
},
"COUNT_PER_SECOND": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "Count/Second"
  }
}
},
"com.amazonaws.licensemanager#EntitlementUsage": {
  "type": "structure",
  "members": {
    "Name": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Entitlement usage name.</p>",
        "smithy.api#required": {}
      }
    },
    "ConsumedValue": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Resource usage consumed.</p>",

```



```

        "smithy.api#required": {}
    },
    "MaxCount": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
            "smithy.api#documentation": "<p>Maximum entitlement usage count.</p>"
        }
    },
    "Unit": {
        "target": "com.amazonaws.licensemanager#EntitlementDataUnit",
        "traits": {
            "smithy.api#documentation": "<p>Entitlement usage unit.</p>",
            "smithy.api#required": {}
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Usage associated with an entitlement resource.</p>"
    },
    "com.amazonaws.licensemanager#EntitlementUsageList":
    {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#EntitlementUsage"
        }
    },
    "com.amazonaws.licensemanager#ExtendLicenseConsumption": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            }
        ]
    }
}

```

```

    },
    {
      "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    },
    {
      "target": "com.amazonaws.licensemanager#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Extends the expiration date for license consumption.</p>"
  }
},
"com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest": {
  "type": "structure",
  "members": {
    "LicenseConsumptionToken": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>License consumption token.</p>",
        "smithy.api#required": {}
      }
    }
  },
  "DryRun": {
    "target": "com.amazonaws.licensemanager#Boolean",
    "traits": {
      "smithy.api#default": false,
      "smithy.api#documentation": "<p>Checks whether you have the required permissions for the action, without actually making the request. Provides an error response if you do not have the required permissions.</p>"
    }
  }
},
"traits": {
  "smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse": {
  "type": "structure",
  "members": {
    "LicenseConsumptionToken": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>License consumption token.</p>"
      }
    }
  },

```

```

    "Expiration": {
      "target": "com.amazonaws.licensemanager#ISO8601DateTime",
      "traits": {
        "smithy.api#documentation": "<p>Date and time at which the license consumption expires.</p>"
      }
    },
    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanager#FailedDependencyException": {
    "type": "structure",
    "members": {
      "Message": {
        "target": "com.amazonaws.licensemanager#Message"
      },
      "ErrorCode": {
        "target": "com.amazonaws.licensemanager#String"
      }
    },
    "traits": {
      "aws.protocols#awsQueryError": {
        "code": "FailedDependency",
        "httpResponseCode": 424
      },
      "smithy.api#documentation":
        "<p>A dependency required to run the API is missing.</p>",
      "smithy.api#error": "client",
      "smithy.api#httpError": 424
    }
  },
  "com.amazonaws.licensemanager#Filter": {
    "type": "structure",
    "members": {
      "Name": {
        "target": "com.amazonaws.licensemanager#FilterName",
        "traits": {
          "smithy.api#documentation": "<p>Name of the filter. Filter names are case-sensitive.</p>"
        }
      },
      "Values": {
        "target": "com.amazonaws.licensemanager#FilterValues",
        "traits": {
          "smithy.api#documentation": "<p>The value of the filter, which is case-sensitive. You can only specify one value for the filter.</p>"
        }
      }
    }
  }
}

```

```

    }
  },
  "traits": {
    "smithy.api#documentation": "<p>A filter
name and value pair that is used to return more specific results from a\n      describe operation. Filters can be used
to match a set of resources by specific criteria,\n      such as tags, attributes, or IDs.</p>"
  }
},
"com.amazonaws.licensemanager#FilterLimitExceededException": {
  "type": "structure",
  "members": {
    "Message": {
      "target": "com.amazonaws.licensemanager#Message"
    }
  },
  "traits": {
    "aws.protocols#awsQueryError": {
      "code": "FilterLimitExceeded",
      "httpResponseCode": 400
    },
    "smithy.api#documentation": "<p>The request uses too many filters or too many filter values.</p>",
    "smithy.api#error": "client",
    "smithy.api#httpError": 400
  }
},
"com.amazonaws.licensemanager#FilterList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanager#Filter"
  }
},
"com.amazonaws.licensemanager#FilterName": {
  "type": "string"
},
"com.amazonaws.licensemanager#FilterValue": {
  "type": "string"
},
"com.amazonaws.licensemanager#FilterValues": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanager#FilterValue",
    "traits": {
      "smithy.api#xmlName": "item"
    }
  }
},
"com.amazonaws.licensemanager#Filters": {
  "type": "list",

```

```

"member": {
  "target": "com.amazonaws.licensemanager#Filter",
  "traits": {
    "smithy.api#xmlName": "item"
  }
},
"com.amazonaws.licensemanager#GetAccessToken": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#GetAccessTokenRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#GetAccessTokenResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    },
    {
      "target": "com.amazonaws.licensemanager#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Gets a temporary access token to use with  
AssumeRoleWithWebIdentity. Access  
tokens\n    are valid for one hour.</p>"
  }
},
"com.amazonaws.licensemanager#GetAccessTokenRequest": {
  "type": "structure",
  "members": {
    "Token": {
      "target": "com.amazonaws.licensemanager#TokenString",
      "traits": {
        "smithy.api#documentation": "<p>Refresh token, encoded as a JWT token.</p>",
        "smithy.api#required": {}
      }
    }
  },

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```

    "TokenProperties": {
      "target": "com.amazonaws.licensemanager#MaxSize3StringList",
      "traits": {
        "smithy.api#documentation": "<p>Token properties to validate against those present in the JWT
token.</p>"
      }
    },
    "traits": {
      "smithy.api#input": {}
    }
  },
  "com.amazonaws.licensemanager#GetAccessTokenResponse":
{
  "type": "structure",
  "members": {
    "AccessToken": {
      "target": "com.amazonaws.licensemanager#TokenString",
      "traits": {
        "smithy.api#documentation": "<p>Temporary access token.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#GetGrant": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#GetGrantRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#GetGrantResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    }
  ],
  {
    "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
  },
  {
    "target": "com.amazonaws.licensemanager#RateLimitExceededException"
  }
}

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    },
    {
      "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    },
    {
      "target": "com.amazonaws.licensemanager#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Gets detailed information about the specified grant.</p>"
  }
},
"com.amazonaws.licensemanager#GetGrantRequest": {
  "type": "structure",
  "members": {
    "GrantArn": {
      "target": "com.amazonaws.licensemanager#Arn",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
        "smithy.api#required": {}
      }
    },
    "Version": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Grant version.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#input": {}
  }
},
"com.amazonaws.licensemanager#GetGrantResponse": {
  "type": "structure",
  "members": {
    "Grant": {
      "target": "com.amazonaws.licensemanager#Grant",
      "traits": {
        "smithy.api#documentation": "<p>Grant details.</p>"
      }
    }
  },
  "traits": {

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"smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#GetLicense": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#GetLicenseRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#GetLicenseResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    }
  ],
  {
    "target": "com.amazonaws.licensemanager#ValidationException"
  }
],
"traits": {
  "smithy.api#documentation": "<p>Gets detailed information about the specified license.</p>"
}
},
"com.amazonaws.licensemanager#GetLicenseConfiguration": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#GetLicenseConfigurationRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#GetLicenseConfigurationResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
  ],

```



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    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Gets detailed information about the specified license configuration.</p>"
  }
},
"com.amazonaws.licensemanager#GetLicenseConfigurationRequest": {
  "type": "structure",
  "members": {
    "LicenseConfigurationArn": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>",
        "smithy.api#required": {}
      }
    }
  },
  "traits":
{
  "smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetLicenseConfigurationResponse": {
  "type": "structure",
  "members": {
    "LicenseConfigurationId": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Unique ID for the license configuration.</p>"
      }
    },
    "LicenseConfigurationArn": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
      }
    }
  }
}

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    }
  },
  "Name": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Name of the license configuration.</p>"
    }
  },
  "Description": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Description of the license configuration.</p>"
    }
  },
  "LicenseCountingType": {
    "target": "com.amazonaws.licensemanager#LicenseCountingType",
    "traits": {
      "smithy.api#documentation": "<p>Dimension for which the licenses are counted.</p>"
    }
  },
  "LicenseRules": {
    "target": "com.amazonaws.licensemanager#StringList",
    "traits": {
      "smithy.api#documentation": "<p>License rules.</p>"
    }
  },
  "LicenseCount": {
    "target": "com.amazonaws.licensemanager#BoxLong",

    "traits": {
      "smithy.api#documentation": "<p>Number of available licenses.</p>"
    }
  },
  "LicenseCountHardLimit": {
    "target": "com.amazonaws.licensemanager#BoxBoolean",
    "traits": {
      "smithy.api#documentation": "<p>Sets the number of available licenses as a hard limit.</p>"
    }
  },
  "ConsumedLicenses": {
    "target": "com.amazonaws.licensemanager#BoxLong",
    "traits": {
      "smithy.api#documentation": "<p>Number of licenses assigned to resources.</p>"
    }
  },
  "Status": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {

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    "smithy.api#documentation": "<p>License configuration status.</p>"
  }
},
"OwnerAccountId": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>Account ID of the owner of the license configuration.</p>"
  }
},
"ConsumedLicenseSummaryList": {
  "target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
  "traits": {
    "smithy.api#documentation": "<p>Summaries of the licenses consumed by resources.</p>"
  }
},
"ManagedResourceSummaryList": {
  "target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
  "traits": {
    "smithy.api#documentation": "<p>Summaries of the managed resources.</p>"
  }
},
"Tags": {
  "target": "com.amazonaws.licensemanager#TagList",
  "traits": {
    "smithy.api#documentation": "<p>Tags for the license configuration.</p>"
  }
},
"ProductInformationList": {
  "target": "com.amazonaws.licensemanager#ProductInformationList",
  "traits": {
    "smithy.api#documentation": "<p>Product information.</p>"
  }
},
"AutomatedDiscoveryInformation": {
  "target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
  "traits": {
    "smithy.api#documentation": "<p>Automated discovery information.</p>"
  }
},
"DisassociateWhenNotFound": {
  "target": "com.amazonaws.licensemanager#BoxBoolean",
  "traits": {
    "smithy.api#documentation": "<p>When
true, disassociates a resource when software is uninstalled.</p>"
  }
}
},

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    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanager#GetLicenseConversionTask": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#GetLicenseConversionTaskRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#GetLicenseConversionTaskResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
      },
      {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ServerInternalException"
      }
    ],
    "traits": {
      "smithy.api#documentation": "<p>Gets information about the specified license type conversion task.</p>"
    }
  },
  "com.amazonaws.licensemanager#GetLicenseConversionTaskRequest": {
    "type": "structure",
    "members": {
      "LicenseConversionTaskId": {
        "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
        "traits": {
          "smithy.api#documentation": "<p>ID of the license type conversion task to retrieve information on.</p>",
          "smithy.api#required": {}
        }
      }
    }
  },
  "traits": {
    "smithy.api#input": {}
  }
}

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    }
  },
  "com.amazonaws.licensemanager#GetLicenseConversionTaskResponse": {
    "type": "structure",
    "members": {
      "LicenseConversionTaskId": {
        "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
        "traits": {
          "smithy.api#documentation": "<p>ID of the license type conversion task.</p>"
        }
      },
      "ResourceArn": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the resources the license
conversion task is associated with.</p>"
        }
      },
      "SourceLicenseContext": {
        "target": "com.amazonaws.licensemanager#LicenseConversionContext",
        "traits": {
          "smithy.api#documentation": "<p>Information
about the license type converted from.</p>"
        }
      },
      "DestinationLicenseContext": {
        "target": "com.amazonaws.licensemanager#LicenseConversionContext",
        "traits": {
          "smithy.api#documentation": "<p>Information about the license type converted to.</p>"
        }
      },
      "StatusMessage": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>The status message for the conversion task.</p>"
        }
      },
      "Status": {
        "target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
        "traits": {
          "smithy.api#documentation": "<p>Status of the license type conversion task.</p>"
        }
      }
    },
    "StartTime": {
      "target": "com.amazonaws.licensemanager#DateTime",
      "traits": {
        "smithy.api#documentation": "<p>Time at which the license type conversion task was started .</p>"
      }
    }
  }
}

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    }
  },
  "LicenseConversionTime": {
    "target": "com.amazonaws.licensemanager#DateTime",
    "traits": {
      "smithy.api#documentation": "<p>Amount of time to complete the license type conversion.</p>"
    }
  },
  "EndTime": {
    "target": "com.amazonaws.licensemanager#DateTime",
    "traits": {
      "smithy.api#documentation": "<p>Time at which the license type conversion task was
completed.</p>"
    }
  }
},
"traits": {
  "smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetLicenseManagerReportGenerator":
{
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
    }
  ],
  {
    "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
  }
}

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    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    },
    {
      "target": "com.amazonaws.licensemanager#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Gets information about the specified report generator.</p>"
  }
},
"com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest": {
  "type": "structure",
  "members": {
    "LicenseManagerReportGeneratorArn": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator.</p>",
        "smithy.api#required":
      }
    }
  },
  "traits": {
    "smithy.api#input": {}
  }
},
"com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse": {
  "type": "structure",
  "members": {
    "ReportGenerator": {
      "target": "com.amazonaws.licensemanager#ReportGenerator",
      "traits": {
        "smithy.api#documentation": "<p>A report generator that creates periodic reports about your license configurations.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#GetLicenseRequest": {
  "type": "structure",
  "members": {
    "LicenseArn": {
      "target": "com.amazonaws.licensemanager#Arn",

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    "traits": {
"smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
      "smithy.api#required": {}
    },
    "Version": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>License version.</p>"
      }
    },
    "traits": {
      "smithy.api#input": {}
    },
  },
  "com.amazonaws.licensemanager#GetLicenseResponse": {
    "type": "structure",
    "members": {
      "License": {
        "target": "com.amazonaws.licensemanager#License",
        "traits": {
          "smithy.api#documentation": "<p>License details.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#output": {}
    },
  },
  "com.amazonaws.licensemanager#GetLicenseUsage": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#GetLicenseUsageRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#GetLicenseUsageResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {

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        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
        "target": "com.amazonaws.licensemanager#ServerInternalException"
    },
    {

"target": "com.amazonaws.licensemanager#ValidationException"
    }
],
"traits": {
    "smithy.api#documentation": "<p>Gets detailed information about the usage of the specified license.</p>"
}
},
"com.amazonaws.licensemanager#GetLicenseUsageRequest": {
    "type": "structure",
    "members": {
        "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#GetLicenseUsageResponse": {
    "type": "structure",
    "members": {
        "LicenseUsage": {
            "target":
"com.amazonaws.licensemanager#LicenseUsage",
            "traits": {
                "smithy.api#documentation": "<p>License usage details.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#GetServiceSettings": {

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"type": "operation",
"input": {
  "target": "com.amazonaws.licensemanager#GetServiceSettingsRequest"
},
"output": {
  "target": "com.amazonaws.licensemanager#GetServiceSettingsResponse"
},
"errors": [
  {
    "target": "com.amazonaws.licensemanager#AccessDeniedException"
  },
  {
    "target": "com.amazonaws.licensemanager#AuthorizationException"
  },
  {
    "target": "com.amazonaws.licensemanager#RateLimitExceededException"
  },
  {
    "target": "com.amazonaws.licensemanager#ServerInternalException"
  }
],
"traits": {
  "smithy.api#documentation": "<p>Gets the License Manager settings for the current Region.</p>"
}
},
"com.amazonaws.licensemanager#GetServiceSettingsRequest": {
  "type": "structure",
  "members": {},
  "traits": {
    "smithy.api#input": {}
  }
},
"com.amazonaws.licensemanager#GetServiceSettingsResponse": {
  "type": "structure",
  "members": {
    "S3BucketArn": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Regional S3 bucket path for storing reports, license trail event data,
discovery data,\n    and so on.</p>"
      }
    }
  },
  "SnsTopicArn": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>SNS topic configured to receive notifications from License
Manager.</p>"
    }
  }
}

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    }
  },
  "OrganizationConfiguration": {
    "target": "com.amazonaws.licensemanager#OrganizationConfiguration",
    "traits": {
      "smithy.api#documentation": "<p>Indicates whether Organizations is integrated with License
Manager for\n      cross-account discovery.</p>"
    }
  },
  "EnableCrossAccountsDiscovery": {
    "target": "com.amazonaws.licensemanager#BoxBoolean",
    "traits": {
      "smithy.api#documentation": "<p>Indicates whether cross-account discovery is enabled.</p>"
    }
  },
},
"LicenseManagerResourceShareArn": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource share. The License
Manager management account \n      provides member accounts with access to this share.</p>"
  }
},
"traits": {
  "smithy.api#output": {}
},
},
"com.amazonaws.licensemanager#Grant": {
  "type": "structure",
  "members": {
    "GrantArn": {
      "target": "com.amazonaws.licensemanager#Arn",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
        "smithy.api#required": {}
      }
    }
  },
},
"GrantName": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>Grant name.</p>",
    "smithy.api#required": {}
  }
},
"ParentArn": {
  "target": "com.amazonaws.licensemanager#Arn",

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    "traits": {
      "smithy.api#documentation": "<p>Parent ARN.</p>",
      "smithy.api#required": {}
    }
  },
  "LicenseArn": {
    "target": "com.amazonaws.licensemanager#Arn",
    "traits": {
      "smithy.api#documentation": "<p>License ARN.</p>",
      "smithy.api#required": {}
    }
  },
  "GranteePrincipalArn": {
    "target": "com.amazonaws.licensemanager#Arn",
    "traits": {

"smithy.api#documentation": "<p>The grantee principal ARN.</p>",
      "smithy.api#required": {}
    }
  },
  "HomeRegion": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Home Region of the grant.</p>",
      "smithy.api#required": {}
    }
  },
  "GrantStatus": {
    "target": "com.amazonaws.licensemanager#GrantStatus",
    "traits": {
      "smithy.api#documentation": "<p>Grant status.</p>",
      "smithy.api#required": {}
    }
  },
  "StatusReason": {
    "target": "com.amazonaws.licensemanager#StatusReasonMessage",
    "traits": {
      "smithy.api#documentation": "<p>Grant status reason.</p>"
    }
  },
  "Version": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Grant version.</p>",
      "smithy.api#required": {}
    }
  },
  "GrantedOperations": {

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    "target": "com.amazonaws.licensemanager#AllowedOperationList",
    "traits": {
      "smithy.api#documentation": "<p>Granted operations.</p>",
      "smithy.api#required": {}
    }
  },
  "Options": {
    "target": "com.amazonaws.licensemanager#Options",
    "traits": {
      "smithy.api#documentation": "<p>The options specified for the grant.</p>"
    }
  }
},
"traits": {
  "smithy.api#documentation":
"<p>Describes a grant.</p>"
}
},
"com.amazonaws.licensemanager#GrantList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanager#Grant"
  }
},
"com.amazonaws.licensemanager#GrantStatus": {
  "type": "enum",
  "members": {
    "PENDING_WORKFLOW": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "PENDING_WORKFLOW"
      }
    },
    "PENDING_ACCEPT": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "PENDING_ACCEPT"
      }
    },
    "REJECTED": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "REJECTED"
      }
    }
  }
},
"ACTIVE": {
  "target": "smithy.api#Unit",

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    "traits": {
      "smithy.api#enumValue": "ACTIVE"
    }
  },
  "FAILED_WORKFLOW": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "FAILED_WORKFLOW"
    }
  },
  "DELETED": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "DELETED"
    }
  },
  "PENDING_DELETE": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "PENDING_DELETE"
    }
  },
  "DISABLED": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "DISABLED"
    }
  },
  "WORKFLOW_COMPLETED": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "WORKFLOW_COMPLETED"
    }
  }
},
"com.amazonaws.licensemanager#GrantedLicense": {
  "type": "structure",
  "members": {
    "LicenseArn": {
      "target": "com.amazonaws.licensemanager#Arn",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
      }
    },
    "LicenseName": {
      "target": "com.amazonaws.licensemanager#String",

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    "traits": {
      "smithy.api#documentation": "<p>License name.</p>"
    }
  },
  "ProductName": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Product name.</p>"
    }
  },
  "ProductSKU": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Product SKU.</p>"
    }
  },
  "Issuer": {
    "target": "com.amazonaws.licensemanager#IssuerDetails",
    "traits": {
      "smithy.api#documentation": "<p>Granted license issuer.</p>"
    }
  },
  "HomeRegion": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Home Region of the granted license.</p>"
    }
  },
  "Status": {
    "target": "com.amazonaws.licensemanager#LicenseStatus",
    "traits": {
      "smithy.api#documentation": "<p>Granted license status.</p>"
    }
  },
  "Validity": {
    "target": "com.amazonaws.licensemanager#DatetimeRange",
    "traits": {
      "smithy.api#documentation": "<p>Date and time range during which the granted license is valid, in ISO8601-UTC format.</p>"
    }
  },
  "Beneficiary": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Granted license beneficiary.</p>"
    }
  }
}

```

```

    },
    "Entitlements": {
      "target": "com.amazonaws.licensemanager#EntitlementList",
      "traits": {
        "smithy.api#documentation": "<p>License entitlements.</p>"
      }
    },
    "ConsumptionConfiguration": {
      "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
      "traits": {
        "smithy.api#documentation": "<p>Configuration for consumption of the license.</p>"
      }
    },
    "LicenseMetadata": {
      "target": "com.amazonaws.licensemanager#MetadataList",
      "traits": {
        "smithy.api#documentation": "<p>Granted license metadata.</p>"
      }
    },
    "CreateTime": {
      "target": "com.amazonaws.licensemanager#ISO8601DateTime",
      "traits": {
        "smithy.api#documentation": "<p>Creation time of the granted license.</p>"
      }
    }
  }
},
"Version": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>Version of the granted license.</p>"
  }
},
"ReceivedMetadata": {
  "target": "com.amazonaws.licensemanager#ReceivedMetadata",
  "traits": {
    "smithy.api#documentation": "<p>Granted license received metadata.</p>"
  }
}
},
"traits": {
  "smithy.api#documentation": "<p>Describes a license that is granted to a grantee.</p>"
}
},
"com.amazonaws.licensemanager#GrantedLicenseList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanager#GrantedLicense"
  }
}

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    },
    "com.amazonaws.licensemanager#ISO8601DateTime":
    {
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
            },
            "smithy.api#pattern": "^(-(?:[1-9][0-9]*)?[0-9]{4})-(1[0-2]|0[1-9])-(3[0-1]|0[1-9]|[1-2][0-9])T(2[0-3]|[0-1][0-9]):([0-5][0-9]):([0-5][0-9])(\\.([0-9]+)?(?:Z|[-+](?:2[ 0-3]|[0-1][0-9]):[0-5][0-9])+)?"
        }
    },
    "com.amazonaws.licensemanager#Integer": {
        "type": "integer"
    },
    "com.amazonaws.licensemanager#InvalidParameterValueException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "InvalidParameterValueProvided",
                "httpResponseCode": 400
            },
            "smithy.api#documentation":
            "<p>One or more parameter values are not valid.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    },
    "com.amazonaws.licensemanager#InvalidResourceStateException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "InvalidResourceState",
                "httpResponseCode": 400
            },
            "smithy.api#documentation": "<p>License Manager cannot allocate a license to a resource because of its state.</p>\n    <p>For example, you cannot allocate a license to an instance in the process of shutting\n

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down.</p>",
  "smithy.api#error": "client",
  "smithy.api#httpError": 400
}
},

"com.amazonaws.licensemanager#InventoryFilter": {
  "type": "structure",
  "members": {
    "Name": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Name of the filter.</p>",
        "smithy.api#required": {}
      }
    },
    "Condition": {
      "target": "com.amazonaws.licensemanager#InventoryFilterCondition",
      "traits": {
        "smithy.api#documentation": "<p>Condition of the filter.</p>",
        "smithy.api#required": {}
      }
    },
    "Value": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Value of the filter.</p>"
      }
    }
  }
},

"traits": {
  "smithy.api#documentation": "<p>An inventory filter.</p>"
}
},

"com.amazonaws.licensemanager#InventoryFilterCondition": {
  "type": "enum",
  "members": {
    "EQUALS": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "EQUALS"
      }
    },
    "NOT_EQUALS": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "NOT_EQUALS"
      }
    }
  }
}

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    }
  },
  "BEGINS_WITH": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "BEGINS_WITH"
    }
  },
  "CONTAINS": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "CONTAINS"
    }
  }
}
},
"com.amazonaws.licensemanager#InventoryFilterList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanager#InventoryFilter"
  }
},
"com.amazonaws.licensemanager#Issuer": {
  "type": "structure",
  "members": {
    "Name": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Issuer name.</p>",
        "smithy.api#required": {}
      }
    },
    "SignKey": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Asymmetric KMS key from Key Management Service. The KMS
key must have a key usage
of sign and verify, \n      and support the RSASSA-PSS SHA-256 signing algorithm.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>Details about the issuer of a license.</p>"
  }
},
"com.amazonaws.licensemanager#IssuerDetails": {
  "type": "structure",
  "members": {

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    "Name": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Issuer name.</p>"
      }
    },
    "SignKey": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Asymmetric KMS key from Key Management Service. The KMS
key must have a key usage of sign and verify, \n      and support the RSASSA-PSS SHA-256 signing
algorithm.</p>"
      }
    },
    "KeyFingerprint": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Issuer key fingerprint.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>Details associated with the issuer of a license.</p>"
  }
},
"com.amazonaws.licensemanager#License": {
  "type": "structure",
  "members": {
    "LicenseArn": {
      "target": "com.amazonaws.licensemanager#Arn",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
      }
    },
    "LicenseName": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>License name.</p>"
      }
    },
    "ProductName": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Product name.</p>"
      }
    },
    "ProductSKU": {

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    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Product SKU.</p>"
    }
  },
  "Issuer": {
    "target": "com.amazonaws.licensemanager#IssuerDetails",
    "traits": {
      "smithy.api#documentation": "<p>License issuer.</p>"
    }
  },
  "HomeRegion": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Home Region of the license.</p>"
    }
  },
  "Status": {
    "target": "com.amazonaws.licensemanager#LicenseStatus",
    "traits": {
      "smithy.api#documentation": "<p>License status.</p>"
    }
  },
  "Validity": {
    "target": "com.amazonaws.licensemanager#DatetimeRange",
    "traits": {
      "smithy.api#documentation": "<p>Date and time range during which the license is valid, in ISO8601-
UTC format.</p>"
    }
  },
  "Beneficiary": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>License beneficiary.</p>"
    }
  },
  "Entitlements": {
    "target": "com.amazonaws.licensemanager#EntitlementList",
    "traits": {
      "smithy.api#documentation": "<p>License entitlements.</p>"
    }
  },
  "ConsumptionConfiguration": {
    "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
    "traits": {
      "smithy.api#documentation": "<p>Configuration for consumption of the license.</p>"
    }
  }
}

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    }
  },
  "LicenseMetadata": {
    "target": "com.amazonaws.licensemanager#MetadataList",
    "traits": {
      "smithy.api#documentation": "<p>License metadata.</p>"
    }
  },
  "CreateTime": {
    "target": "com.amazonaws.licensemanager#ISO8601DateTime",
    "traits": {
      "smithy.api#documentation": "<p>License
creation time.</p>"
    }
  },
  "Version": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>License version.</p>"
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>Software license that is managed in License Manager.</p>"
  },
  "com.amazonaws.licensemanager#LicenseConfiguration": {
    "type": "structure",
    "members": {
      "LicenseConfigurationId": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Unique ID of the license configuration.</p>"
        }
      },
      "LicenseConfigurationArn": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
        }
      },
      "Name": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Name of the license configuration.</p>"
        }
      },
      "Description": {

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    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Description of the license configuration.</p>"
    }
  },
  "LicenseCountingType": {
    "target": "com.amazonaws.licensemanager#LicenseCountingType",
    "traits": {
      "smithy.api#documentation": "<p>Dimension to use to track the license inventory.</p>"
    }
  },
  "LicenseRules": {
    "target": "com.amazonaws.licensemanager#StringList",
    "traits": {
      "smithy.api#documentation": "<p>License rules.</p>"
    }
  },
  "LicenseCount": {
    "target": "com.amazonaws.licensemanager#BoxLong",
    "traits": {
      "smithy.api#documentation": "<p>Number of licenses managed by the license configuration.</p>"
    }
  },
  "LicenseCountHardLimit": {
    "target": "com.amazonaws.licensemanager#BoxBoolean",
    "traits": {
      "smithy.api#documentation": "<p>Number of available licenses as a hard limit.</p>"
    }
  },
  "DisassociateWhenNotFound": {
    "target": "com.amazonaws.licensemanager#BoxBoolean",
    "traits": {
      "smithy.api#documentation": "<p>When true, disassociates a resource when software is
uninstalled.</p>"
    }
  },
  "ConsumedLicenses": {
    "target": "com.amazonaws.licensemanager#BoxLong",
    "traits": {
      "smithy.api#documentation": "<p>Number of licenses consumed. </p>"
    }
  },
  "Status": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Status of the license configuration.</p>"
    }
  },

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"OwnerAccountId": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>Account ID of the license configuration's owner.</p>"
  }
},
"ConsumedLicenseSummaryList": {
  "target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
  "traits": {
    "smithy.api#documentation": "<p>Summaries for licenses consumed by various resources.</p>"
  }
},
"ManagedResourceSummaryList": {
  "target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
  "traits": {
    "smithy.api#documentation": "<p>Summaries for managed resources.</p>"
  }
},
"ProductInformationList": {
  "target": "com.amazonaws.licensemanager#ProductInformationList",
  "traits": {
    "smithy.api#documentation": "<p>Product information.</p>"
  }
},
"AutomatedDiscoveryInformation": {
  "target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
  "traits": {
    "smithy.api#documentation": "<p>Automated discovery information.</p>"
  }
},
"traits": {
  "smithy.api#documentation": "<p>A license configuration is an abstraction of a customer license agreement that can be consumed and enforced by License Manager. Components include specifications for the license type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n Dedicated Instance, Dedicated Host, or all of these), host affinity (how long a VM\n must be associated with a host), and the number of licenses purchased and used.</p>"
}
},
"com.amazonaws.licensemanager#LicenseConfigurationAssociation": {
  "type": "structure",
  "members": {
    "ResourceArn":
{
  "target": "com.amazonaws.licensemanager#String",
  "traits": {

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        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
    }
},
"ResourceType": {
    "target": "com.amazonaws.licensemanager#ResourceType",
    "traits": {
        "smithy.api#documentation": "<p>Type of server resource.</p>"
    }
},
"ResourceOwnerId": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
        "smithy.api#documentation": "<p>ID of the Amazon Web Services account that owns the resource
consuming licenses.</p>"
    }
},
"AssociationTime": {
    "target": "com.amazonaws.licensemanager#DateTime",
    "traits": {
        "smithy.api#documentation": "<p>Time when the license configuration was associated with the resource.</p>"
    }
},
"AmiAssociationScope": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
        "smithy.api#documentation": "<p>Scope of AMI associations. The possible value is <code>cross-
account</code>.</p>"
    }
},
"traits": {
    "smithy.api#documentation": "<p>Describes an association with a license configuration.</p>"
},
"com.amazonaws.licensemanager#LicenseConfigurationAssociations": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#LicenseConfigurationAssociation"
    }
},
"com.amazonaws.licensemanager#LicenseConfigurationStatus": {
    "type": "enum",
    "members":
{
    "AVAILABLE": {
        "target": "smithy.api#Unit",
        "traits": {

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        "smithy.api#enumValue": "AVAILABLE"
    }
},
"DISABLED": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "DISABLED"
    }
}
},
"com.amazonaws.licensemanager#LicenseConfigurationUsage": {
    "type": "structure",
    "members": {
        "ResourceArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
            }
        },
        "ResourceType": {
            "target": "com.amazonaws.licensemanager#ResourceType",
            "traits": {
                "smithy.api#documentation": "<p>Type of resource.</p>"
            }
        },
        "ResourceStatus": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Status of the resource.</p>"
            }
        },
        "ResourceOwnerId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>ID of the account that owns the resource.</p>"
            }
        },
        "AssociationTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Time when the license configuration was initially associated with the resource.</p>"
            }
        }
    }
},

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```

"ConsumedLicenses": {
  "target": "com.amazonaws.licensemanager#BoxLong",
  "traits": {
    "smithy.api#documentation": "<p>Number of licenses consumed by the resource.</p>"
  }
},
"traits": {
  "smithy.api#documentation": "<p>Details about the usage of a resource associated with a license configuration.</p>"
},
"com.amazonaws.licensemanager#LicenseConfigurationUsageList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanager#LicenseConfigurationUsage"
  }
},
"com.amazonaws.licensemanager#LicenseConfigurations": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanager#LicenseConfiguration"
  }
},
"com.amazonaws.licensemanager#LicenseConversionContext": {
  "type": "structure",
  "members": {
    "UsageOperation": {
      "target": "com.amazonaws.licensemanager#UsageOperation",
      "traits": {
        "smithy.api#documentation": "<p>The Usage operation value that corresponds to the license type you are converting your resource from. For more information about which platforms correspond to which usage operation values see <a href='\"https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/billing-info-fields.html#billing-info\">Sample data: usage operation by platform</a>\n  </p>"
      }
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>Information about a license type conversion task.</p>"
  }
},
"com.amazonaws.licensemanager#LicenseConversionTask": {
  "type": "structure",
  "members": {
    "LicenseConversionTaskId": {

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"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
  "traits": {
    "smithy.api#documentation": "<p>The ID of the license type conversion task.</p>"
  }
},
"ResourceArn": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource associated
with the license type\n      conversion task.</p>"
  }
},
"SourceLicenseContext": {
  "target": "com.amazonaws.licensemanager#LicenseConversionContext",
  "traits": {
    "smithy.api#documentation": "<p>Information about the license type this conversion task converted
from.</p>"
  }
},
"DestinationLicenseContext": {
  "target":
"com.amazonaws.licensemanager#LicenseConversionContext",
  "traits": {
    "smithy.api#documentation": "<p>Information about the license type this conversion task converted
to.</p>"
  }
},
"Status": {
  "target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
  "traits": {
    "smithy.api#documentation": "<p>The status of the conversion task.</p>"
  }
},
"StatusMessage": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>The status message for the conversion task.</p>"
  }
},
"StartTime": {
  "target": "com.amazonaws.licensemanager#DateTime",
  "traits": {
    "smithy.api#documentation":
"<p>The time the conversion task was started at.</p>"
  }
},
"LicenseConversionTime": {
  "target": "com.amazonaws.licensemanager#DateTime",

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    "traits": {
      "smithy.api#documentation": "<p>The time the usage operation value of the resource was
changed.</p>"
    }
  },
  "EndTime": {
    "target": "com.amazonaws.licensemanager#DateTime",
    "traits": {
      "smithy.api#documentation": "<p>The time the conversion task was completed.</p>"
    }
  }
},
"traits": {
  "smithy.api#documentation": "<p>Information about a license type conversion task.</p>"
}
},
"com.amazonaws.licensemanager#LicenseConversionTaskId": {
  "type": "string",
  "traits": {

    "smithy.api#length": {
      "min": 0,
      "max": 50
    },
    "smithy.api#pattern": "^\\ct-[a-zA-Z0-9]*$"
  }
},
"com.amazonaws.licensemanager#LicenseConversionTaskStatus": {
  "type": "enum",
  "members": {
    "IN_PROGRESS": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "IN_PROGRESS"
      }
    },
    "SUCCEEDED": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "SUCCEEDED"
      }
    },
    "FAILED": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "FAILED"
      }
    }
  }
}

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    }
  },
  "com.amazonaws.licensemanager#LicenseConversionTasks":
  {
    "type": "list",
    "member": {
      "target": "com.amazonaws.licensemanager#LicenseConversionTask"
    }
  },
  "com.amazonaws.licensemanager#LicenseCountingType": {
    "type": "enum",
    "members": {
      "VCPU": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "vCPU"
        }
      },
      "INSTANCE": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "Instance"
        }
      },
      "CORE": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "Core"
        }
      },
      "SOCKET": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "Socket"
        }
      }
    }
  },
  "com.amazonaws.licensemanager#LicenseDeletionStatus": {
    "type": "enum",
    "members": {
      "PENDING_DELETE": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "PENDING_DELETE"
        }
      },
      "DELETED": {

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        "target": "smithy.api#Unit",
        "traits": {
            "smithy.api#enumValue": "DELETED"
        }
    },
    "com.amazonaws.licensemanager#LicenseList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#License"
        }
    },
    "com.amazonaws.licensemanager#LicenseOperationFailure": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
                }
            },
            "ResourceType": {
                "target": "com.amazonaws.licensemanager#ResourceType",
                "traits": {
                    "smithy.api#documentation": "<p>Resource type.</p>"
                }
            },
            "ErrorMessage": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Error message.</p>"
                }
            },
            "FailureTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Failure time.</p>"
                }
            },
            "OperationName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the operation.</p>"
                }
            }
        }
    },

```

```

"ResourceOwnerId": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>ID of the Amazon Web Services account that owns the
resource.</p>"
  }
},
"OperationRequestedBy": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>The requester is \"License Manager Automated Discovery\".</p>"
  }
},
"MetadataList": {
  "target": "com.amazonaws.licensemanager#MetadataList",
  "traits": {
    "smithy.api#documentation": "<p>Reserved.</p>"
  }
},
"traits": {
  "smithy.api#documentation": "<p>Describes the failure of a license operation.</p>"
}
},
"com.amazonaws.licensemanager#LicenseOperationFailureList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanager#LicenseOperationFailure"
  }
},
"com.amazonaws.licensemanager#LicenseSpecification": {
  "type": "structure",
  "members": {
    "LicenseConfigurationArn": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",

        "smithy.api#required": {}
      }
    },
    "AmiAssociationScope": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Scope of AMI associations. The possible value is <code>cross-
account</code>.</p>"
      }
    }
  }
}

```



```

    }
  }
},
"traits": {
  "smithy.api#documentation": "<p>Details for associating a license configuration with a resource.</p>"
}
},
"com.amazonaws.licensemanager#LicenseSpecifications": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanager#LicenseSpecification"
  }
},
"com.amazonaws.licensemanager#LicenseStatus": {
  "type": "enum",
  "members": {
    "AVAILABLE": {
      "target": "smithy.api#Unit",

      "traits": {
        "smithy.api#enumValue": "AVAILABLE"
      }
    },
    "PENDING_AVAILABLE": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "PENDING_AVAILABLE"
      }
    },
    "DEACTIVATED": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "DEACTIVATED"
      }
    },
    "SUSPENDED": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "SUSPENDED"
      }
    },
    "EXPIRED": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "EXPIRED"
      }
    }
  }
},

```

```

"PENDING_DELETE": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "PENDING_DELETE"
  }
},
"DELETED": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "DELETED"
  }
}
},
"com.amazonaws.licensemanager#LicenseUsage": {
  "type": "structure",
  "members": {
    "EntitlementUsages": {
      "target": "com.amazonaws.licensemanager#EntitlementUsageList",
      "traits": {
        "smithy.api#documentation": "<p>License entitlement usages.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>Describes the entitlement usage associated with a license.</p>"
  }
},
"com.amazonaws.licensemanager#LicenseUsageException": {
  "type": "structure",
  "members": {
    "Message": {
      "target": "com.amazonaws.licensemanager#Message"
    }
  },
  "traits": {
    "aws.protocols#awsQueryError": {
      "code": "LicenseUsageFailure",
      "httpResponseCode": 412
    },
    "smithy.api#documentation": "<p>You do not have enough licenses available to support a new resource launch.</p>",
    "smithy.api#error": "client",
    "smithy.api#httpError": 412
  }
},
"com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration": {

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```

"type": "operation",
"input": {
  "target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest"
},
"output": {
  "target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse"
},
"errors": [
  {
    "target": "com.amazonaws.licensemanager#AccessDeniedException"
  },
  {
    "target": "com.amazonaws.licensemanager#AuthorizationException"
  },
  {
    "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
  },
  {
    "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
  },
  {
    "target": "com.amazonaws.licensemanager#RateLimitExceededException"
  },
  {
    "target": "com.amazonaws.licensemanager#ServerInternalException"
  }
],
"traits": {
  "smithy.api#documentation": "<p>Lists the resource associations for the
specified license configuration.</p>\n    <p>Resource associations need not consume licenses from a license
configuration. \n    For example, an AMI or a stopped instance might not consume a license (depending on \n
the license rules).</p>"
}
},
"com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest": {
"type": "structure",
"members": {
  "LicenseConfigurationArn": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of a license configuration.</p>",
      "smithy.api#required": {}
    }
  },
  "MaxResults": {
    "target": "com.amazonaws.licensemanager#BoxInteger",
    "traits": {

```

```

    "smithy.api#documentation": "<p>Maximum number of results
to return in a single call.</p>"
  }
},
"NextToken": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
  }
}
},
"traits": {
  "smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse": {
  "type": "structure",
  "members": {
    "LicenseConfigurationAssociations": {
      "target": "com.amazonaws.licensemanager#LicenseConfigurationAssociations",
      "traits": {
        "smithy.api#documentation": "<p>Information about the associations for the license
configuration.</p>"
      }
    },
    "NextToken": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Token for the next set of results.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#ListDistributedGrants": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#ListDistributedGrantsRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#ListDistributedGrantsResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    }
  ]
}
}
}

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    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    },
    {
      "target": "com.amazonaws.licensemanager#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Lists the grants distributed for the specified license.</p>"
  }
},
"com.amazonaws.licensemanager#ListDistributedGrantsRequest": {
  "type": "structure",
  "members": {
    "GrantArns": {
      "target": "com.amazonaws.licensemanager#ArnList",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the grants.</p>"
      }
    },
    "Filters": {
      "target": "com.amazonaws.licensemanager#FilterList",
      "traits": {
        "smithy.api#documentation": "<p>Filters to scope the results. The following filters are supported:</p>\n
        <ul>\n
        <li>\n
        <p>\n
        <code>LicenseArn</code>\n
        </p>\n
        </li>\n
        <li>\n
        <p>\n
        <code>GrantStatus</code>\n
        </p>\n
        </li>\n
        <li>\n
        <p>\n
        <code>GranteePrincipalARN</code>\n
        </p>\n
        </li>\n
        <li>\n
        <p>\n
        <code>ProductSKU</code>\n
        </p>\n
        </li>\n
        <li>\n
        <p>\n
        <code>LicenseIssuerName</code>\n
        </p>\n
        </li>\n
        </ul>"
      }
    }
  },
  "NextToken": {
    "target": "com.amazonaws.licensemanager#String",
  }
}

```

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    "traits": {
      "smithy.api#documentation": "<p>Token for the next set of results.</p>"
    }
  },
  "MaxResults": {
    "target": "com.amazonaws.licensemanager#MaxSize100",
    "traits": {
      "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
    }
  }
},
"traits": {
  "smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListDistributedGrantsResponse": {
  "type": "structure",
  "members": {
    "Grants": {
      "target": "com.amazonaws.licensemanager#GrantList",

"traits": {
  "smithy.api#documentation": "<p>Distributed grant details.</p>"
}
},
"NextToken": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
  }
}
},
"traits": {
  "smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse"
  },
  "errors": [
    {

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```

"target": "com.amazonaws.licensemanager#AccessDeniedException"
  },
  {
    "target": "com.amazonaws.licensemanager#AuthorizationException"
  },
  {
    "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
  },
  {
    "target": "com.amazonaws.licensemanager#RateLimitExceededException"
  },
  {
    "target": "com.amazonaws.licensemanager#ServerInternalException"
  }
],
"traits": {
  "smithy.api#documentation": "<p>Lists the license configuration operations that failed.</p>"
}
},
"com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest": {
  "type": "structure",
  "members": {
    "LicenseConfigurationArn": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name of the license configuration.</p>",
        "smithy.api#required": {}
      }
    },
    "MaxResults": {
      "target": "com.amazonaws.licensemanager#BoxInteger",
      "traits": {
        "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
      }
    },
    "NextToken": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Token for the next set of results.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#input": {}
  }
},
"com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse":

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```

{
  "type": "structure",
  "members": {
    "LicenseOperationFailureList": {
      "target": "com.amazonaws.licensemanager#LicenseOperationFailureList",
      "traits": {
        "smithy.api#documentation": "<p>License configuration operations that failed.</p>"
      }
    },
    "NextToken": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Token for the next set of results.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#ListLicenseConfigurations": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#ListLicenseConfigurationsRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#ListLicenseConfigurationsResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    }
  ]
}

```



```

    ],
    "traits": {
      "smithy.api#documentation": "<p>Lists the license configurations
for your account.</p>"
    }
  },
  "com.amazonaws.licensemanager#ListLicenseConfigurationsRequest": {
    "type": "structure",
    "members": {
      "LicenseConfigurationArns": {
        "target": "com.amazonaws.licensemanager#StringList",
        "traits": {
          "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the license
configurations.</p>"
        }
      },
      "MaxResults": {
        "target": "com.amazonaws.licensemanager#BoxInteger",
        "traits": {
          "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
        }
      },
      "NextToken": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Token for the next
set of results.</p>"
        }
      },
      "Filters": {
        "target": "com.amazonaws.licensemanager#Filters",
        "traits": {
          "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical
operators\n are supported:</p>\n <ul>\n <li>\n <p>\n
<code>licenseCountingType</code> - The dimension for which licenses are counted.\n Possible values are
<code>vCPU</code> | <code>Instance</code> | <code>Core</code> | <code>Socket</code>.\n Logical
operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n </li>\n <li>\n
<p>\n <code>enforceLicenseCount</code> - A Boolean value that indicates whether hard license
enforcement is used. \n Logical operators are <code>EQUALS</code> |
<code>NOT_EQUALS</code>.</p>\n
</li>\n <li>\n <p>\n <code>usagelimitExceeded</code> - A Boolean value that
indicates whether the available licenses have been exceeded. \n Logical operators are
<code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n </li>\n </ul>"
        }
      }
    }
  },
  "traits": {
    "smithy.api#input": {}
  }
}

```

```

    }
  },
  "com.amazonaws.licensemanager#ListLicenseConfigurationsResponse": {
    "type": "structure",
    "members": {
      "LicenseConfigurations": {
        "target": "com.amazonaws.licensemanager#LicenseConfigurations",
        "traits": {
          "smithy.api#documentation": "<p>Information about the license configurations.</p>"
        }
      },
      "NextToken": {
        "target": "com.amazonaws.licensemanager#String",

        "traits": {
          "smithy.api#documentation": "<p>Token for the next set of results.</p>"
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
  },
  "com.amazonaws.licensemanager#ListLicenseConversionTasks": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#ListLicenseConversionTasksRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#ListLicenseConversionTasksResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
      },
      {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ServerInternalException"
      }
    ],
  },

```

```

    "traits": {
      "smithy.api#documentation": "<p>Lists the license type conversion tasks for your account.</p>"
    }
  },
  "com.amazonaws.licensemanager#ListLicenseConversionTasksRequest": {
    "type": "structure",
    "members": {
      "NextToken": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Token for the next set of results.</p>"
        }
      },
      "MaxResults": {
        "target": "com.amazonaws.licensemanager#BoxInteger",
        "traits": {
          "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
        }
      },
      "Filters": {
        "target": "com.amazonaws.licensemanager#Filters",
        "traits": {
          "smithy.api#documentation": "<p>\n    Filters to scope the results. Valid filters are
<code>ResourceArns</code> and <code>Status</code>.\n  </p>"
        }
      }
    },
    "traits": {
      "smithy.api#input": {}
    }
  },
  "com.amazonaws.licensemanager#ListLicenseConversionTasksResponse": {
    "type": "structure",
    "members": {
      "LicenseConversionTasks": {
        "target": "com.amazonaws.licensemanager#LicenseConversionTasks",
        "traits": {
          "smithy.api#documentation": "<p>Information about the license configuration tasks for your
account.</p>"
        }
      },
      "NextToken": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Token for the next set of results.</p>"
        }
      }
    }
  }
}

```

```

    },
    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanager#ListLicenseManagerReportGenerators": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target":
"com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
      },
      {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
      },
      {
        "target": "com.amazonaws.licensemanager#ServerInternalException"
      },
      {
        "target": "com.amazonaws.licensemanager#ValidationException"
      }
    ],
    "traits": {
      "smithy.api#documentation": "<p>Lists the report generators for your account.</p>"
    }
  },
  "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest":
{
  "type": "structure",
  "members": {

```

```

    "Filters": {
      "target": "com.amazonaws.licensemanager#FilterList",
      "traits": {
        "smithy.api#documentation": "<p>Filters to scope the results. The following filters are supported:
</p>\n      <ul>\n        <li>\n          <p>\n            <code>LicenseConfigurationArn</code>\n          </li>\n        </ul>\n      }
    },
    "NextToken": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Token for the next set of results.</p>"
      }
    },
    "MaxResults": {
      "target": "com.amazonaws.licensemanager#MaxSize100",
      "traits": {
        "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
      }
    },
    "traits": {
      "smithy.api#input": {}
    },
    "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse": {
      "type": "structure",
      "members": {
        "ReportGenerators": {
          "target": "com.amazonaws.licensemanager#ReportGeneratorList",
          "traits": {
            "smithy.api#documentation": "<p>A report generator that creates periodic reports about your license
configurations.</p>"
          }
        },
        "NextToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
          }
        }
      }
    },
    "traits": {
      "smithy.api#output": {}
    },
  },

```

```

"com.amazonaws.licensemanager#ListLicenseSpecificationsForResource": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Describes the license configurations for the specified resource.</p>"
  }
},
"com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest": {
  "type": "structure",
  "members": {
    "ResourceArn": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of a resource that has an associated license configuration.</p>",
        "smithy.api#required": {}
      }
    },
    "MaxResults": {
      "target": "com.amazonaws.licensemanager#BoxInteger",
      "traits": {
        "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
      }
    },
    "NextToken": {

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```

        "target": "com.amazonaws.licensemanager#String",
        "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse": {
    "type": "structure",
    "members": {
        "LicenseSpecifications": {
            "target": "com.amazonaws.licensemanager#LicenseSpecifications",
            "traits": {
                "smithy.api#documentation": "<p>License configurations associated with a resource.</p>"
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListLicenseVersions": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListLicenseVersionsRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListLicenseVersionsResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        }
    ]
}

```

```

    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Lists all versions of the specified license.</p>"
  }
},
"com.amazonaws.licensemanager#ListLicenseVersionsRequest": {
  "type": "structure",
  "members": {
    "LicenseArn": {
      "target": "com.amazonaws.licensemanager#Arn",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
        "smithy.api#required": {}
      }
    },
    "NextToken": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Token for the next set of results.</p>"
      }
    },
    "MaxResults": {
      "target": "com.amazonaws.licensemanager#MaxSize100",
      "traits": {
        "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#input": {}
  }
},
"com.amazonaws.licensemanager#ListLicenseVersionsResponse": {
  "type": "structure",
  "members": {
    "Licenses": {
      "target": "com.amazonaws.licensemanager#LicenseList",
      "traits": {
        "smithy.api#documentation": "<p>License details.</p>"
      }
    }
  },
}

```



```

"NextToken": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
  }
},
"traits": {
  "smithy.api#output": {}
},
"com.amazonaws.licensemanager#ListLicenses": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#ListLicensesRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#ListLicensesResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    },
    {
      "target": "com.amazonaws.licensemanager#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Lists the licenses for your account.</p>"
  }
},
"com.amazonaws.licensemanager#ListLicensesRequest": {
  "type": "structure",
  "members": {
    "LicenseArns": {

```

```

    "target": "com.amazonaws.licensemanager#ArnList",
    "traits": {
      "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the licenses.</p>"
    }
  },

  "Filters": {
    "target": "com.amazonaws.licensemanager#FilterList",
    "traits": {
      "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n  <ul>\n    <li>\n      <p>\n        <code>Beneficiary</code>\n      </p>\n    </li>\n    <li>\n      <p>\n        <code>ProductSKU</code>\n      </p>\n    </li>\n    <li>\n      <p>\n        <code>Fingerprint</code>\n      </p>\n    </li>\n    <li>\n      <p>\n        <code>Status</code>\n      </p>\n    </li>\n  </ul>"
    }
  },
  "NextToken": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Token
for the next set of results.</p>"
    }
  },
  "MaxResults": {
    "target": "com.amazonaws.licensemanager#MaxSize100",
    "traits": {
      "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
    }
  }
},
"traits": {
  "smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListLicensesResponse": {
  "type": "structure",
  "members": {
    "Licenses": {
      "target": "com.amazonaws.licensemanager#LicenseList",
      "traits": {
        "smithy.api#documentation": "<p>License details.</p>"
      }
    }
  },
  "NextToken": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {

```

```

"smithy.api#documentation": "<p>Token for the next set of results.</p>"
  }
}
},
"traits": {
  "smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListReceivedGrants": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#ListReceivedGrantsRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#ListReceivedGrantsResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    },
    {
      "target": "com.amazonaws.licensemanager#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Lists grants that are received. Received grants are grants created while specifying the\n    recipient as this Amazon Web Services account, your organization, or an organizational unit\n    (OU) to which this member account belongs.</p>"
  }
},
"com.amazonaws.licensemanager#ListReceivedGrantsForOrganization": {
  "type": "operation",
  "input": {

```

```

    "target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    },
    {
      "target":
"com.amazonaws.licensemanager#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Lists the grants received for all accounts in the organization.</p>"
  }
},
"com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest": {
  "type": "structure",
  "members": {
    "LicenseArn": {
      "target": "com.amazonaws.licensemanager#Arn",
      "traits": {
        "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the received license.</p>",
        "smithy.api#required": {}
      }
    },
    "Filters": {
      "target": "com.amazonaws.licensemanager#FilterList",
      "traits": {
        "smithy.api#documentation": "<p>Filters to scope the results. The following filters are supported:</p>\n"
      }
    }
  }
}

```

```

    <ul>\n      <li>\n        <p>\n          <code>ParentArn</code>\n        </p>\n      </li>\n    </ul>\n  }
},
  "NextToken": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Token for the next set of results.</p>"
    }
  },
  "MaxResults": {
    "target": "com.amazonaws.licensemanager#MaxSize100",
    "traits": {
      "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
    }
  }
},
"traits": {
  "smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse":
{
  "type": "structure",
  "members": {
    "Grants": {
      "target": "com.amazonaws.licensemanager#GrantList",
      "traits": {
        "smithy.api#documentation": "<p>Lists the grants the organization has received.</p>"
      }
    },
    "NextToken": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Token for the next set of results.</p>"
      }
    }
  }
},
"traits": {
  "smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListReceivedGrantsRequest": {
  "type": "structure",
  "members": {
    "GrantArns": {
      "target": "com.amazonaws.licensemanager#ArnList",

```

```

    "traits": {
      "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the grants.</p>"
    }
  },
  "Filters": {
    "target": "com.amazonaws.licensemanager#FilterList",
    "traits": {
      "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n  <ul>\n    <li>\n      <p>\n        <code>ProductSKU</code>\n      </p>\n    </li>\n    <li>\n      <p>\n        <code>LicenseIssuerName</code>\n      </p>\n    </li>\n    <li>\n      <p>\n        <code>LicenseArn</code>\n      </p>\n    </li>\n    <li>\n      <p>\n        <code>GrantStatus</code>\n      </p>\n    </li>\n  </ul>\n    <code>GranterAccountId</code>\n  </p>\n  </li>\n  </ul>"
    }
  },
  "NextToken": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Token for the next set of results.</p>"
    }
  },
  "MaxResults": {
    "target": "com.amazonaws.licensemanager#MaxSize100",
    "traits": {
      "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
    }
  }
},
"traits": {
  "smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListReceivedGrantsResponse": {
  "type": "structure",
  "members": {
    "Grants": {
      "target": "com.amazonaws.licensemanager#GrantList",
      "traits": {
        "smithy.api#documentation": "<p>Received grant details.</p>"
      }
    },
    "NextToken": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Token for the next set of results.</p>"
      }
    }
  }
}

```

```

    },
    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanager#ListReceivedLicenses": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#ListReceivedLicensesRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#ListReceivedLicensesResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
      },
      {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ServerInternalException"
      },
      {
        "target": "com.amazonaws.licensemanager#ValidationException"
      }
    ],
    "traits": {
      "smithy.api#documentation": "<p>Lists received licenses.</p>"
    }
  },
  "com.amazonaws.licensemanager#ListReceivedLicensesForOrganization":
{
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse"
  }
}

```

```

    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
      },
      {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ServerInternalException"
      },
      {
        "target": "com.amazonaws.licensemanager#ValidationException"
      }
    ],
    "traits": {
      "smithy.api#documentation": "<p>Lists the licenses received for all accounts in the organization.</p>"
    }
  },
  "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest": {
    "type": "structure",
    "members": {
      "Filters": {
        "target": "com.amazonaws.licensemanager#FilterList",
        "traits": {
          "smithy.api#documentation": "<p>Filters to scope the results. The following filters are supported:</p>\n      <ul>\n        <li>\n          <p>\n            <code>Beneficiary</code>\n          </li>\n        <li>\n          <p>\n            <code>ProductSKU</code>\n          </p>\n        </li>\n      </ul>"
        }
      },
      "NextToken": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Token for the next set of results.</p>"
        }
      }
    },
    "MaxResults": {

```



```

    "target": "com.amazonaws.licensemanager#MaxSize100",
    "traits": {
      "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
    }
  },
  "traits": {
    "smithy.api#input": {}
  }
},
"com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse": {
  "type": "structure",
  "members": {
    "Licenses": {
      "target": "com.amazonaws.licensemanager#GrantedLicenseList",
      "traits": {
        "smithy.api#documentation": "<p>Lists the licenses the organization has received.</p>"
      }
    },
    "NextToken": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Token for the next set of results.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#ListReceivedLicensesRequest": {
  "type": "structure",
  "members": {
    "LicenseArns": {
      "target": "com.amazonaws.licensemanager#ArnList",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the licenses.</p>"
      }
    }
  },
  "traits": {
    "Filters": {
      "target": "com.amazonaws.licensemanager#FilterList",
      "traits": {
        "smithy.api#documentation": "<p>Filters to scope the results. The following filters are supported:</p>\n
        <ul>\n
          <li>\n
            <p>\n
              <code>ProductSKU</code>\n
            </li>\n
          <li>\n
            <p>\n
              <code>Status</code>\n
            </li>\n
          <li>\n
            <p>\n
              <code>Fingerprint</code>\n
            </li>\n
          <li>\n
            <p>\n
              <code>IssuerName</code>\n
            </li>\n
        </ul>\n
      }
    }
  }
}

```

```

<code>Beneficiary</code>\n      </p>\n    </li>\n  </ul>"
  }
},
"NextToken": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
  }
},
"MaxResults": {
  "target": "com.amazonaws.licensemanager#MaxSize100",
  "traits": {
    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
  }
}
},
"traits": {
  "smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListReceivedLicensesResponse": {
  "type": "structure",
  "members": {
    "Licenses": {
      "target": "com.amazonaws.licensemanager#GrantedLicenseList",
      "traits": {
        "smithy.api#documentation": "<p>Received license details.</p>"
      }
    }
  },
  "NextToken": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Token for the next set of results.</p>"
    }
  }
},
"traits": {
  "smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListResourceInventory": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#ListResourceInventoryRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#ListResourceInventoryResponse"
  }
}

```

```

    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#FailedDependencyException"
      },
      {
        "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
      },
      {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ServerInternalException"
      }
    ],
    "traits": {
      "smithy.api#documentation": "<p>Lists resources managed using Systems Manager inventory.</p>"
    }
  },
  "com.amazonaws.licensemanager#ListResourceInventoryRequest": {
    "type": "structure",
    "members": {
      "MaxResults": {
        "target": "com.amazonaws.licensemanager#BoxInteger",
        "traits": {
          "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
        }
      },
      "NextToken": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Token for the next set of results.</p>"
        }
      },
      "Filters": {
        "target": "com.amazonaws.licensemanager#InventoryFilterList",
        "traits": {
          "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical operators are supported:\n      <ul>\n        <li>\n          <p>\n            <code>account_id</code>"

```

- The ID of the Amazon Web Services account that owns the resource. Logical operators are `EQUALS` | `NOT_EQUALS`.

`application_name` - The name of the application. Logical operators are `EQUALS` | `BEGINS_WITH`.

`license_included` - The type of license included. Logical operators are `EQUALS` | `NOT_EQUALS`. Possible values are `sql-server-enterprise` | `sql-server-standard` | `sql-server-web` | `windows-server-datacenter`.

`platform` - The platform of the resource. Logical operators are `EQUALS` | `BEGINS_WITH`.

`resource_id` - The ID of the resource. Logical operators are `EQUALS` | `NOT_EQUALS`.

`tag:key` - The key/value combination of a tag assigned to the resource. Logical operators are `EQUALS` (single account) or `NOT_EQUALS` (cross account).

```

    }
  },
  "traits": {
    "smithy.api#input": {}
  },
  "com.amazonaws.licensemanager#ListResourceInventoryResponse": {
    "type": "structure",
    "members": {
      "ResourceInventoryList": {
        "target": "com.amazonaws.licensemanager#ResourceInventoryList",
        "traits": {
          "smithy.api#documentation": "<p>Information about the resources.</p>"
        }
      },
      "NextToken": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Token for the next set of results.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanager#ListTagsForResource": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#ListTagsForResourceRequest"
    },
  },

```

```

"output": {
  "target": "com.amazonaws.licensemanager#ListTagsForResourceResponse"
},
"errors": [
  {
    "target": "com.amazonaws.licensemanager#AccessDeniedException"
  },
  {
    "target": "com.amazonaws.licensemanager#AuthorizationException"
  },
  {
    "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
  },
  {
    "target": "com.amazonaws.licensemanager#RateLimitExceededException"
  },
  {
    "target": "com.amazonaws.licensemanager#ServerInternalException"
  }
],
"traits": {
  "smithy.api#documentation": "<p>Lists the tags for the specified license configuration.</p>"
}
},
"com.amazonaws.licensemanager#ListTagsForResourceRequest": {
  "type": "structure",
  "members": {
    "ResourceArn": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>",
        "smithy.api#required": {}
      }
    }
  },
  "traits": {
    "smithy.api#input": {}
  }
},
"com.amazonaws.licensemanager#ListTagsForResourceResponse": {
  "type": "structure",
  "members": {
    "Tags": {
      "target": "com.amazonaws.licensemanager#TagList",
      "traits": {
        "smithy.api#documentation": "<p>Information about the tags.</p>"
      }
    }
  }
}

```

```

    }
  }
},
"traits": {
  "smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListTokens": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#ListTokensRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#ListTokensResponse"
  },
  "errors":
[
  {
    "target": "com.amazonaws.licensemanager#AccessDeniedException"
  },
  {
    "target": "com.amazonaws.licensemanager#AuthorizationException"
  },
  {
    "target": "com.amazonaws.licensemanager#RateLimitExceededException"
  },
  {
    "target": "com.amazonaws.licensemanager#ServerInternalException"
  },
  {
    "target": "com.amazonaws.licensemanager#ValidationException"
  }
],
"traits": {
  "smithy.api#documentation": "<p>Lists your tokens.</p>"
}
},
"com.amazonaws.licensemanager#ListTokensRequest": {
  "type": "structure",
  "members": {
    "TokenIds": {
      "target": "com.amazonaws.licensemanager#StringList",
      "traits": {
        "smithy.api#documentation": "<p>Token IDs.</p>"
      }
    },
  },
  "Filters": {

```

```

        "target": "com.amazonaws.licensemanager#FilterList",
        "traits": {
            "smithy.api#documentation": "<p>Filters to scope the results. The following filter is supported:</p>\n
<ul>\n      <li>\n        <p>\n          <code>LicenseArns</code>\n        </p>\n      </li>\n    </ul>"
        }
    },
    "NextToken": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
        }
    },
    "MaxResults": {
        "target": "com.amazonaws.licensemanager#MaxSize100",
        "traits": {
            "smithy.api#documentation":
"<p>Maximum number of results to return in a single call.</p>"
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#ListTokensResponse": {
    "type": "structure",
    "members": {
        "Tokens": {
            "target": "com.amazonaws.licensemanager#TokenList",
            "traits": {
                "smithy.api#documentation": "<p>Received token details.</p>"
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListUsageForLicenseConfiguration":
{
    "type": "operation",

```

```

"input": {
  "target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest"
},
"output": {
  "target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse"
},
"errors": [
  {
    "target": "com.amazonaws.licensemanager#AccessDeniedException"
  },
  {
    "target": "com.amazonaws.licensemanager#AuthorizationException"
  },
  {
    "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
  },
  {
    "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
  },
  {
    "target": "com.amazonaws.licensemanager#RateLimitExceededException"
  },
  {
    "target": "com.amazonaws.licensemanager#ServerInternalException"
  }
],
"traits": {
  "smithy.api#documentation": "<p>Lists all license usage records for a license configuration, displaying
license\n    consumption details by resource at a selected point in time. Use this action to audit the\n    current
license consumption for any license inventory and configuration.</p>"
}
},
"com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest": {
  "type": "structure",
  "members": {
    "LicenseConfigurationArn": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
        "smithy.api#required": {}
      }
    },
    "MaxResults": {
      "target": "com.amazonaws.licensemanager#BoxInteger",
      "traits": {
        "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
      }
    }
  }
}

```



```

    },
    "NextToken": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Token for the next set of results.</p>"
      }
    },
    "Filters": {
      "target": "com.amazonaws.licensemanager#Filters",
      "traits": {
        "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical
operators\n    are supported:</p>\n    <ul>\n        <li>\n            <p>\n
<code>resourceArn</code> - The ARN of the license configuration resource.\n
        Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n        </li>\n
        <li>\n            <p>\n                <code>resourceType</code> - The resource type
(<code>EC2_INSTANCE</code> | <code>EC2_HOST</code> | <code>EC2_AMI</code> |
<code>SYSTEMS_MANAGER_MANAGED_INSTANCE</code>). \n                Logical operators are
<code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n            <li>\n                <p>\n                    <code>resourceAccount</code> - The ID of the account that owns the resource. \n                    Logical operators
are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n                </li>\n            </ul>"
      }
    }
  },
  "traits": {
    "smithy.api#input": {}
  }
},
"com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse": {
  "type": "structure",
  "members": {

"LicenseConfigurationUsageList": {
    "target": "com.amazonaws.licensemanager#LicenseConfigurationUsageList",
    "traits": {
      "smithy.api#documentation": "<p>Information about the license configurations.</p>"
    }
  },
  "NextToken": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Token for the next set of results.</p>"
    }
  }
},
"traits": {
  "smithy.api#output": {}
}
},

```

```

"com.amazonaws.licensemanager#Location": {
  "type": "string"
},
"com.amazonaws.licensemanager#Long": {
  "type": "long"
},
"com.amazonaws.licensemanager#ManagedResourceSummary": {
  "type": "structure",
  "members": {
    "ResourceType":
{
    "target": "com.amazonaws.licensemanager#ResourceType",
    "traits": {
      "smithy.api#documentation": "<p>Type of resource associated with a license.</p>"
    }
  },
  "AssociationCount": {
    "target": "com.amazonaws.licensemanager#BoxLong",
    "traits": {
      "smithy.api#documentation": "<p>Number of resources associated with licenses.</p>"
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>Summary information about a managed resource.</p>"
  }
},
"com.amazonaws.licensemanager#ManagedResourceSummaryList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanager#ManagedResourceSummary"
  }
},
"com.amazonaws.licensemanager#MaxSize100": {
  "type": "integer",
  "traits": {
    "smithy.api#range": {
      "min": 1,
      "max": 100
    }
  }
},
"com.amazonaws.licensemanager#MaxSize3StringList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanager#String"
  }
},

```

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    "traits": {
      "smithy.api#length": {
        "min": 0,
        "max": 3
      }
    },
    "com.amazonaws.licensemanager#Message": {
      "type": "string"
    },
    "com.amazonaws.licensemanager#Metadata": {
      "type": "structure",
      "members": {
        "Name": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>The key name.</p>"
          }
        },
      },
    },
    "Value": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>The value.</p>"
      }
    },
    "traits": {
      "smithy.api#documentation": "<p>Describes key/value pairs.</p>"
    },
    "com.amazonaws.licensemanager#MetadataList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanager#Metadata"
      }
    },
    "com.amazonaws.licensemanager#NoEntitlementsAllowedException": {
      "type": "structure",
      "members": {
        "Message": {
          "target": "com.amazonaws.licensemanager#Message"
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>There are no entitlements found for this license, or the entitlement maximum count is reached.</p>",

```

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    "smithy.api#error": "client",
    "smithy.api#httpError": 400
  }
},
"com.amazonaws.licensemanager#Options": {
  "type": "structure",
  "members": {
    "ActivationOverrideBehavior": {
      "target": "com.amazonaws.licensemanager#ActivationOverrideBehavior",
      "traits": {
        "smithy.api#documentation": "<p>An activation option for your grant that determines the behavior of
activating a grant.\n      Activation options can only be used with granted licenses sourced from the Amazon Web
Services Marketplace. Additionally, the operation must specify the value of <code>ACTIVE</code> for the\n
<code>Status</code> parameter.</p>\n      <ul>\n        <li>\n          <p>As a license administrator, you can
optionally specify an\n          <code>ActivationOverrideBehavior</code> when activating a grant.</p>\n
</li>\n        <li>\n          <p>As a grantor, you can optionally specify an\n
<code>ActivationOverrideBehavior</code> when you activate a grant for a grantee\n          account in your
organization.</p>\n        </li>\n        <li>\n          <p>As a grantee, if the grantor creating the distributed
grant doesnt specify an\n          <code>ActivationOverrideBehavior</code>, you can optionally specify one
when you\n          are activating the grant.</p>\n        </li>\n      </ul>\n      <dl>\n
<dt>DISTRIBUTED_GRANTS_ONLY</dt>\n        <dd>\n          <p>Use this value to activate a grant
without replacing any member accounts\n          active grants for the same product.</p>\n        </dd>\n
<dt>ALL_GRANTS_PERMITTED_BY_ISSUER</dt>\n        <dd>\n          <p>Use this value to activate a
grant and disable other active grants in any\n          member accounts
for the same product. This action will also replace their\n          previously activated grants with this activated
grant.</p>\n        </dd>\n      </dl>"
      }
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>The options you can specify when you create a new version of a grant,
such as activation\n      override behavior. For more information, see <a
href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/granted-licenses.html\">Granted licenses in
License Manager</a> in the <i>License Manager User Guide</i>.</p>"
  }
},
"com.amazonaws.licensemanager#OrganizationConfiguration": {
  "type": "structure",
  "members": {
    "EnableIntegration": {
      "target": "com.amazonaws.licensemanager#Boolean",
      "traits": {
        "smithy.api#default": false,
        "smithy.api#documentation":
"<p>Enables Organizations integration.</p>",
        "smithy.api#required": {}
      }
    }
  }
}

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    },
    "traits": {
      "smithy.api#documentation": "<p>Configuration information for Organizations.</p>"
    }
  },
  "com.amazonaws.licensemanager#PrincipalArnList": {
    "type": "list",
    "member": {
      "target": "com.amazonaws.licensemanager#Arn"
    },
    "traits": {
      "smithy.api#length": {
        "min": 1,
        "max": 1
      }
    }
  },
  "com.amazonaws.licensemanager#ProductInformation": {
    "type": "structure",
    "members": {
      "ResourceType": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Resource type. The
possible values are <code>SSM_MANAGED</code> | <code>RDS</code>.</p>",
          "smithy.api#required": {}
        }
      },
      "ProductInformationFilterList": {
        "target": "com.amazonaws.licensemanager#ProductInformationFilterList",
        "traits": {
          "smithy.api#documentation": "<p>A Product information filter consists of a
<code>ProductInformationFilterComparator</code> which is a logical operator, a
<code>ProductInformationFilterName</code> which specifies the type of filter being declared, and a
<code>ProductInformationFilterValue</code> that specifies the value to filter on. </p>\n    <p>Accepted values
for <code>ProductInformationFilterName</code> are listed here along with descriptions and valid options for
<code>ProductInformationFilterComparator</code>. </p>\n    <p>The following filters and are supported when
the resource type \n    is <code>SSM_MANAGED</code>:</p>\n
    <ul>\n    <li>\n    <p>\n    <code>Application Name</code> - The name of the
application.\n    Logical operator is <code>EQUALS</code>.</p>\n    </li>\n    <li>\n    <p>\n    <code>Application Publisher</code> - The publisher of the application.\n    Logical
operator is <code>EQUALS</code>.</p>\n    </li>\n    <li>\n    <p>\n    <code>Application Version</code> - The version of the application.\n    Logical operator is
<code>EQUALS</code>.</p>\n    </li>\n    <li>\n    <p>\n    <code>Platform
Name</code> - The name of the platform.\n    Logical operator is <code>EQUALS</code>.</p>\n
    </li>\n    <li>\n    <p>\n    <code>Platform Type</code> - The platform type.\n
    Logical operator is <code>EQUALS</code>.</p>\n

```

`Tag:key` - The key of a tag attached to an Amazon Web Services resource you wish to exclude from automated discovery. Logical operator is `NOT_EQUALS`. The key for your tag must be appended to `Tag:` following the example: `Tag:name-of-your-key`. `ProductInformationFilterValue` is optional if you are not using values for the key.

`AccountId` - The 12-digit ID of an Amazon Web Services account you wish to exclude from automated discovery. Logical operator is `NOT_EQUALS`.

`License Included` - The type of license included. Logical operators are `EQUALS` and `NOT_EQUALS`. Possible values are: `sql-server-enterprise` | `sql-server-standard` | `sql-server-web` | `windows-server-datacenter`.

The following filters and logical operators are supported when the resource type is `RDS`:

- `Engine Edition` - The edition of the database engine. Logical operator is `EQUALS`. Possible values are: `oracle-ee` | `oracle-se` | `oracle-se1` | `oracle-se2`.
- `License Pack` - The license pack. Logical operator is `EQUALS`. Possible values are: `data guard` | `diagnostic pack sqlt` | `tuning pack sqlt` | `ols` | `olap`.

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</li>\n    </ul>",&n
    "smithy.api#required": {}
  }
},
"traits": {
  "smithy.api#documentation": "<p>Describes product information for a license configuration.</p>"
},
"com.amazonaws.licensemanager#ProductInformationFilter": {
  "type": "structure",
  "members": {
    "ProductInformationFilterName": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Filter name.</p>",
        "smithy.api#required": {}
      }
    },
    "ProductInformationFilterValue": {
      "target": "com.amazonaws.licensemanager#StringList",
      "traits": {
        "smithy.api#documentation": "<p>Filter value.</p>"
      }
    },
    "ProductInformationFilterComparator": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {

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        "smithy.api#documentation": "<p>Logical operator.</p>",
        "smithy.api#required": {}
    }
}
},
"traits": {
    "smithy.api#documentation": "<p>Describes product information filters.</p>"
}
},
"com.amazonaws.licensemanager#ProductInformationFilterList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ProductInformationFilter"
    }
},
"com.amazonaws.licensemanager#ProductInformationList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ProductInformation"
    }
},
"com.amazonaws.licensemanager#ProvisionalConfiguration": {
    "type": "structure",
    "members": {
        "MaxTimeToLiveInMinutes": {
            "target": "com.amazonaws.licensemanager#BoxInteger",
            "traits": {
                "smithy.api#documentation": "<p>Maximum time for the provisional configuration, in minutes.</p>",
                "smithy.api#required": {}
            }
        }
    }
},
"traits": {
    "smithy.api#documentation": "<p>Details about a provisional configuration.</p>"
}
},
"com.amazonaws.licensemanager#RateLimitExceededException": {
    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    }
},
"traits": {
    "aws.protocols#awsQueryError": {
        "code": "RateLimitExceeded",
        "httpResponseCode": 429
    }
},

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    "smithy.api#documentation": "<p>Too many requests have been submitted. Try again after a brief
wait.</p>",
    "smithy.api#error": "client",
    "smithy.api#httpError": 429
  }
},
"com.amazonaws.licensemanager#ReceivedMetadata": {
  "type": "structure",
  "members": {
    "ReceivedStatus": {
      "target": "com.amazonaws.licensemanager#ReceivedStatus",
      "traits": {
        "smithy.api#documentation": "<p>Received status.</p>"
      }
    },
    "ReceivedStatusReason": {
      "target": "com.amazonaws.licensemanager#StatusReasonMessage",
      "traits": {
        "smithy.api#documentation": "<p>Received
status reason.</p>"
      }
    },
    "AllowedOperations": {
      "target": "com.amazonaws.licensemanager#AllowedOperationList",
      "traits": {
        "smithy.api#documentation": "<p>Allowed operations.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>Metadata associated with received licenses and grants.</p>"
  }
},
"com.amazonaws.licensemanager#ReceivedStatus": {
  "type": "enum",
  "members": {
    "PENDING_WORKFLOW": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "PENDING_WORKFLOW"
      }
    },
    "PENDING_ACCEPT": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue":
"PENDING_ACCEPT"
      }
    }
  }
}

```



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    },
    "REJECTED": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "REJECTED"
      }
    },
    "ACTIVE": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "ACTIVE"
      }
    },
    "FAILED_WORKFLOW": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "FAILED_WORKFLOW"
      }
    },
    "DELETED": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "DELETED"
      }
    },
    "DISABLED": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "DISABLED"
      }
    },
    "WORKFLOW_COMPLETED": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "WORKFLOW_COMPLETED"
      }
    }
  }
},
"com.amazonaws.licensemanager#RedirectException": {
  "type": "structure",
  "members": {
    "Location": {
      "target": "com.amazonaws.licensemanager#Location",
      "traits": {
        "smithy.api#httpHeader": "Location"
      }
    }
  },

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    "Message": {
      "target": "com.amazonaws.licensemanager#Message"
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>This is not the correct Region for the resource. Try again.</p>",
    "smithy.api#error": "client",
    "smithy.api#httpError": 308
  }
},
"com.amazonaws.licensemanager#RejectGrant": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#RejectGrantRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#RejectGrantResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target":
"com.amazonaws.licensemanager#ResourceLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    },
    {
      "target": "com.amazonaws.licensemanager#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Rejects the specified grant.</p>"
  }
},
"com.amazonaws.licensemanager#RejectGrantRequest": {
  "type": "structure",

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"members": {
  "GrantArn": {
    "target": "com.amazonaws.licensemanager#Arn",
    "traits": {
      "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
      "smithy.api#required": {}
    }
  }
},
"traits": {
  "smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#RejectGrantResponse": {
  "type": "structure",
  "members": {
    "GrantArn": {
      "target": "com.amazonaws.licensemanager#Arn",
      "traits": {
        "smithy.api#documentation": "<p>Grant ARN.</p>"
      }
    },
    "Status": {
      "target": "com.amazonaws.licensemanager#GrantStatus",
      "traits": {
        "smithy.api#documentation": "<p>Grant status.</p>"
      }
    },
    "Version": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Grant version.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#RenewType":
{
  "type": "enum",
  "members": {
    "NONE": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "None"
      }
    }
  }
}

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    }
  },
  "WEEKLY": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Weekly"
    }
  },
  "MONTHLY": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Monthly"
    }
  }
}
},
"com.amazonaws.licensemanager#ReportContext": {
  "type": "structure",
  "members": {
    "licenseConfigurationArns": {
      "target": "com.amazonaws.licensemanager#ArnList",
      "traits": {

        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration that this
generator reports on.</p>",
        "smithy.api#required": {}
      }
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>Details of the license configuration that this generator reports on.</p>"
  }
},
"com.amazonaws.licensemanager#ReportFrequency": {
  "type": "structure",
  "members": {
    "value": {
      "target": "com.amazonaws.licensemanager#Integer",
      "traits": {
        "smithy.api#documentation": "<p>Number of times within the frequency period that a report is
generated. \n    The only supported value is <code>1</code>.</p>"
      }
    }
  },
  "period": {
    "target": "com.amazonaws.licensemanager#ReportFrequencyType",

    "traits": {
      "smithy.api#documentation": "<p>Time period between each report. The period can be daily, weekly,

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or monthly.</p>"
    }
  }
},
"traits": {
  "smithy.api#documentation": "<p>Details about how frequently reports are generated.</p>"
}
},
"com.amazonaws.licensemanager#ReportFrequencyType": {
  "type": "enum",
  "members": {
    "DAY": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "DAY"
      }
    },
    "WEEK": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "WEEK"
      }
    },
    "MONTH": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "MONTH"
      }
    }
  }
},
"com.amazonaws.licensemanager#ReportGenerator": {
  "type": "structure",
  "members": {
    "ReportGeneratorName": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Name of the report generator.</p>"
      }
    },
    "ReportType": {
      "target": "com.amazonaws.licensemanager#ReportTypeList",
      "traits": {
        "smithy.api#documentation": "<p>Type of reports that are generated.</p>"
      }
    },
    "ReportContext": {

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        "target": "com.amazonaws.licensemanager#ReportContext",
        "traits": {
            "smithy.api#documentation": "<p>License
configuration type for this generator.</p>"
        }
    },
    "ReportFrequency": {
        "target": "com.amazonaws.licensemanager#ReportFrequency",
        "traits": {
            "smithy.api#documentation": "<p>Details about how frequently reports are generated.</p>"
        }
    },
    "LicenseManagerReportGeneratorArn": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator.</p>"
        }
    },
    "LastRunStatus": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
            "smithy.api#documentation": "<p>Status of the last report generation attempt.</p>"
        }
    },
    "LastRunFailureReason":
    {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
            "smithy.api#documentation": "<p>Failure message for the last report generation attempt.</p>"
        }
    },
    "LastReportGenerationTime": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
            "smithy.api#documentation": "<p>Time the last report was generated at.</p>"
        }
    },
    "ReportCreatorAccount": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
            "smithy.api#documentation": "<p>The Amazon Web Services account ID used to create the report
generator.</p>"
        }
    },
    "Description": {
        "target": "com.amazonaws.licensemanager#String",

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"traits": {
  "smithy.api#documentation": "<p>Description of the report generator.</p>"
},
},
"S3Location": {
  "target": "com.amazonaws.licensemanager#S3Location",
  "traits": {
    "smithy.api#documentation": "<p>Details of the S3 bucket that report generator reports are published
to.</p>"
  }
},
"CreateTime": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>Time the report was created.</p>"
  }
},
"Tags": {
  "target": "com.amazonaws.licensemanager#TagList",
  "traits": {
    "smithy.api#documentation": "<p>Tags associated with the report generator.</p>"
  }
}
},
"traits": {
  "smithy.api#documentation": "<p>Describe the details of a report generator.</p>"
}
},
"com.amazonaws.licensemanager#ReportGeneratorList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanager#ReportGenerator"
  }
},
"com.amazonaws.licensemanager#ReportGeneratorName": {
  "type": "string",
  "traits": {
    "smithy.api#length": {
      "min": 1,
      "max": 100
    }
  }
},
"com.amazonaws.licensemanager#ReportType": {
  "type": "enum",
  "members": {
    "LICENSE_CONFIGURATION_SUMMARY_REPORT": {

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        "target": "smithy.api#Unit",
        "traits": {
            "smithy.api#enumValue": "LicenseConfigurationSummaryReport"
        }
    },
    "LICENSE_CONFIGURATION_USAGE_REPORT": {
        "target": "smithy.api#Unit",
        "traits": {
            "smithy.api#enumValue": "LicenseConfigurationUsageReport"
        }
    }
},
"com.amazonaws.licensemanager#ReportTypeList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ReportType"
    }
},
"com.amazonaws.licensemanager#ResourceInventory": {
    "type": "structure",
    "members": {
        "ResourceId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>ID of the resource.</p>"
            }
        },
        "ResourceType": {
            "target": "com.amazonaws.licensemanager#ResourceType",
            "traits": {
                "smithy.api#documentation": "<p>Type of resource.</p>"
            }
        },
        "ResourceArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
            }
        },
        "Platform": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Platform of the resource.</p>"
            }
        }
    }
},

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    "PlatformVersion": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Platform version of the resource in the inventory.</p>"
      }
    },
    "ResourceOwningAccountId": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>ID of the account that owns the resource.</p>"
      }
    },
    "traits": {
      "smithy.api#documentation": "<p>Details about a resource.</p>"
    },
    "com.amazonaws.licensemanager#ResourceInventoryList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanager#ResourceInventory"
      }
    },
    "com.amazonaws.licensemanager#ResourceLimitExceededException": {
      "type": "structure",
      "members": {
        "Message": {
          "target": "com.amazonaws.licensemanager#Message"
        }
      },
      "traits": {
        "aws.protocols#awsQueryError": {
          "code": "ResourceLimitExceeded",

          "httpResponseCode": 400
        },
        "smithy.api#documentation": "<p>Your resource limits have been exceeded.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
      }
    },
    "com.amazonaws.licensemanager#ResourceNotFoundException": {
      "type": "structure",
      "members": {
        "Message": {
          "target": "com.amazonaws.licensemanager#Message"
        }
      }
    }
  }

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    },
    "traits": {
      "aws.protocols#awsQueryError": {
        "code": "InvalidResource.NotFound",
        "httpResponseCode": 400
      },
      "smithy.api#documentation": "<p>The resource cannot be found.</p>",
      "smithy.api#error": "client",
      "smithy.api#httpError": 400
    }
  },
  "com.amazonaws.licensemanager#ResourceType": {
    "type": "enum",
    "members": {
      "EC2_INSTANCE": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "EC2_INSTANCE"
        }
      },
      "EC2_HOST": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "EC2_HOST"
        }
      },
      "EC2_AMI": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "EC2_AMI"
        }
      },
      "RDS": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "RDS"
        }
      },
      "SYSTEMS_MANAGER_MANAGED_INSTANCE": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "SYSTEMS_MANAGER_MANAGED_INSTANCE"
        }
      }
    }
  },
  "com.amazonaws.licensemanager#S3Location": {
    "type": "structure",

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"members": {
  "bucket": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Name of the S3 bucket reports are published to.</p>"
    }
  },
  "keyPrefix": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Prefix of the S3 bucket reports are published to.</p>"
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>Details of the S3 bucket that report generator reports are published to.</p>"
  },
  "com.amazonaws.licensemanager#ServerInternalException": {
    "type": "structure",
    "members": {
      "Message": {
        "target": "com.amazonaws.licensemanager#Message"
      }
    },
    "traits": {
      "aws.protocols#awsQueryError": {
        "code": "InternalServerError",
        "httpResponseCode": 500
      },
      "smithy.api#documentation": "<p>The server experienced an internal error. Try again.</p>",
      "smithy.api#error": "server",
      "smithy.api#httpError": 500
    }
  },
  "com.amazonaws.licensemanager#SignedToken": {
    "type": "string",
    "traits": {
      "smithy.api#length": {
        "min": 4096
      }
    }
  },
  "com.amazonaws.licensemanager#StatusReasonMessage": {
    "type": "string",
    "traits":

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{
  "smithy.api#length": {
    "min": 0,
    "max": 400
  },
  "smithy.api#pattern": "^[\s\S]+$"
}
},
"com.amazonaws.licensemanager#String": {
  "type": "string"
},
"com.amazonaws.licensemanager#StringList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanager#String"
  }
},
"com.amazonaws.licensemanager#Tag": {
  "type": "structure",
  "members": {
    "Key": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Tag key.</p>"
      }
    },
    "Value": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation":
"<p>Tag value.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>Details about a tag for a license configuration.</p>"
  }
},
"com.amazonaws.licensemanager#TagKeyList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanager#String"
  }
},
"com.amazonaws.licensemanager#TagList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanager#Tag"
  }
}

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    }
  },
  "com.amazonaws.licensemanager#TagResource": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#TagResourceRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#TagResourceResponse"
    },
    "errors": [
      {
        "target":
"com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
      },
      {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ServerInternalException"
      }
    ],
    "traits": {
      "smithy.api#documentation": "<p>Adds the specified tags to the specified license configuration.</p>"
    }
  },
  "com.amazonaws.licensemanager#TagResourceRequest": {
    "type": "structure",
    "members": {
      "ResourceArn": {
        "target": "com.amazonaws.licensemanager#String",
        "traits":
{
          "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
          "smithy.api#required": {}
        }
      },
      "Tags": {
        "target": "com.amazonaws.licensemanager#TagList",
        "traits": {
          "smithy.api#documentation": "<p>One or more tags.</p>",

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        "smithy.api#required": {}
    }
}
},
"traits": {
    "smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#TagResourceResponse": {
    "type": "structure",
    "members": {},
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#TokenData": {
    "type": "structure",
    "members": {
        "TokenId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token ID.</p>"
            }
        },
        "TokenType": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Type of token generated. The supported value is
<code>REFRESH_TOKEN</code>.</p>"
            }
        },
        "LicenseArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
            }
        },
        "ExpirationTime": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Token expiration time, in ISO8601-UTC
format.</p>"
            }
        },
        "TokenProperties": {
            "target": "com.amazonaws.licensemanager#MaxSize3StringList",
            "traits": {
                "smithy.api#documentation": "<p>Data specified by the caller.</p>"
            }
        }
    }
}

```

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    }
  },
  "RoleArns": {
    "target": "com.amazonaws.licensemanager#ArnList",
    "traits": {
      "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the roles included in the
token.</p>"
    }
  },
  "Status": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Token status. The possible values are
<code>AVAILABLE</code> and <code>DELETED</code>.</p>"
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>Describes a token.</p>"
  }
},
"com.amazonaws.licensemanager#TokenList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanager#TokenData"
  }
},
"com.amazonaws.licensemanager#TokenString": {
  "type": "string",
  "traits": {
    "smithy.api#length": {
      "min": 0,
      "max": 4096
    },
    "smithy.api#pattern": "^\\S+$"
  }
},
"com.amazonaws.licensemanager#TokenType": {
  "type": "enum",
  "members": {
    "REFRESH_TOKEN": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "REFRESH_TOKEN"
      }
    }
  }
}

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    },
    "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException":
    {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The digital signature method is unsupported. Try your request
again.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    },
    "com.amazonaws.licensemanager#UntagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#UntagResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#UntagResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Removes the specified tags from the specified license
configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#UntagResourceRequest": {
        "type": "structure",

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"members": {
  "ResourceArn": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
      "smithy.api#required": {}
    }
  },
  "TagKeys": {
    "target": "com.amazonaws.licensemanager#TagKeyList",
    "traits": {
      "smithy.api#documentation": "<p>Keys identifying the tags to remove.</p>",
      "smithy.api#required": {}
    }
  }
},
"traits": {
  "smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UntagResourceResponse": {
  "type": "structure",
  "members": {},
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#UpdateLicenseConfiguration": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {

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    "target": "com.amazonaws.licensemanager#RateLimitExceededException"
  },
  {
    "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
  },
  {
    "target": "com.amazonaws.licensemanager#ServerInternalException"
  }
],
"traits": {
  "smithy.api#documentation": "<p>Modifies the attributes of an existing license configuration.</p>"
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest": {
  "type": "structure",
  "members": {
    "LicenseConfigurationArn": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "configuration.</p>",
        "smithy.api#required": {}
      }
    },
    "LicenseConfigurationStatus": {
      "target": "com.amazonaws.licensemanager#LicenseConfigurationStatus",
      "traits": {
        "smithy.api#documentation": "<p>New status of the license configuration.</p>"
      }
    },
    "LicenseRules": {
      "target": "com.amazonaws.licensemanager#StringList",
      "traits": {
        "smithy.api#documentation": "<p>New license rule. The only rule that you can add after you create a license\n configuration is licenseAffinityToHost.</p>"
      }
    },
    "LicenseCount": {
      "target": "com.amazonaws.licensemanager#BoxLong",
      "traits": {
        "smithy.api#documentation": "<p>New number of licenses managed by the license\n configuration.</p>"
      }
    },
    "LicenseCountHardLimit": {
      "target": "com.amazonaws.licensemanager#BoxBoolean",
      "traits": {

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        "smithy.api#documentation": "<p>New hard limit of the number of available licenses.</p>"
    }
},
"Name": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
        "smithy.api#documentation": "<p>New name
of the license configuration.</p>"
    }
},
"Description": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
        "smithy.api#documentation": "<p>New description of the license configuration.</p>"
    }
},
"ProductInformationList": {
    "target": "com.amazonaws.licensemanager#ProductInformationList",
    "traits": {
        "smithy.api#documentation": "<p>New product information.</p>"
    }
},
"DisassociateWhenNotFound": {
    "target": "com.amazonaws.licensemanager#BoxBoolean",
    "traits": {
        "smithy.api#documentation": "<p>When true, disassociates a resource when software is
uninstalled.</p>"
    }
}
},
"traits":
{
    "smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse": {
    "type": "structure",
    "members": {},
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest"
    },
    "output": {

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    "target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    },
    {
      "target": "com.amazonaws.licensemanager#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Updates a report generator.</p>\n    <p>After you make changes to a report generator, it starts generating new reports within 60 minutes of being updated.</p>"
  },
  "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest":
  {
    "type": "structure",
    "members": {
      "LicenseManagerReportGeneratorArn": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator to update.</p>",
          "smithy.api#required": {}
        }
      },
      "ReportGeneratorName": {
        "target": "com.amazonaws.licensemanager#ReportGeneratorName",
        "traits": {

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        "smithy.api#documentation": "<p>Name of the report generator.</p>",
        "smithy.api#required": {}
    }
},
"Type": {
    "target": "com.amazonaws.licensemanager#ReportTypeList",
    "traits": {
        "smithy.api#documentation":
"<p>Type of reports to generate. The following report types are supported:</p>\n    <ul>\n        <li>\n<p>License configuration report - Reports the number and details of consumed licenses for a license
configuration.</p>\n        </li>\n        <li>\n        <p>Resource report - Reports the tracked licenses and
resource consumption for a license configuration.</p>\n        </li>\n    </ul>",
        "smithy.api#required": {}
    }
},
"ReportContext": {
    "target": "com.amazonaws.licensemanager#ReportContext",
    "traits": {
        "smithy.api#documentation": "<p>The report context.</p>",
        "smithy.api#required": {}
    }
},
"ReportFrequency": {
    "target": "com.amazonaws.licensemanager#ReportFrequency",
    "traits":
{
    "smithy.api#documentation": "<p>Frequency by which reports are generated.</p>",
    "smithy.api#required": {}
}
},
"ClientToken": {
    "target": "com.amazonaws.licensemanager#ClientRequestToken",
    "traits": {
        "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the
idempotency of the request.</p>",
        "smithy.api#required": {}
    }
},
"Description": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
        "smithy.api#documentation": "<p>Description of the report generator.</p>"
    }
}
},
"traits": {
    "smithy.api#input": {}
}
}

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    },
    "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse":
    {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidResourceStateException"
            },
            {
                "target": "com.amazonaws.licensemanager#LicenseUsageException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Adds or removes the specified license configurations for the specified Amazon Web Services resource.</p>\n    <p>You can update the license specifications of AMIs, instances, and hosts.\n    You cannot update the license specifications for launch templates and CloudFormation templates, \n    as they send license configurations to the operation that creates the resource.</p>"
        }
    },

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"com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest": {
  "type": "structure",
  "members": {
    "ResourceArn": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon Web Services
resource.</p>",
        "smithy.api#required": {}
      }
    },
    "AddLicenseSpecifications": {
      "target": "com.amazonaws.licensemanager#LicenseSpecifications",
      "traits": {
        "smithy.api#documentation": "<p>ARNs of the license configurations to add.</p>"
      }
    },
    "RemoveLicenseSpecifications": {
      "target": "com.amazonaws.licensemanager#LicenseSpecifications",
      "traits": {
        "smithy.api#documentation":
"<p>ARNs of the license configurations to remove.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#input": {}
  }
},
"com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse": {
  "type": "structure",
  "members": {},
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#UpdateServiceSettings": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#UpdateServiceSettingsRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#UpdateServiceSettingsResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    }
  ]
}

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    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Updates License Manager settings for the current Region.</p>"
  }
},
"com.amazonaws.licensemanager#UpdateServiceSettingsRequest": {
  "type": "structure",
  "members": {
    "S3BucketArn": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon S3 bucket where
the License
Manager information is stored.</p>"
      }
    },
    "SnsTopicArn": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon SNS topic used
for License Manager alerts.</p>"
      }
    }
  },
  "OrganizationConfiguration": {
    "target": "com.amazonaws.licensemanager#OrganizationConfiguration",
    "traits": {
      "smithy.api#documentation": "<p>Enables integration with Organizations for cross-account
discovery.</p>"
    }
  },
  "EnableCrossAccountsDiscovery": {
    "target": "com.amazonaws.licensemanager#BoxBoolean",
    "traits": {
      "smithy.api#documentation": "<p>Activates cross-account discovery.</p>"
    }
  }
}

```



```
}  
  }  
},  
"traits": {  
  "smithy.api#input": {}  
}  
},  
"com.amazonaws.licensemanager#UpdateServiceSettingsResponse": {  
  "type": "structure",  
  "members": {},  
  "traits": {  
    "smithy.api#output": {}  
  }  
},  
"com.amazonaws.licensemanager#UsageOperation": {  
  "type": "string",  
  "traits": {  
    "smithy.api#length": {  
      "min": 0,  
      "max": 50  
    }  
  }  
},  
"com.amazonaws.licensemanager#ValidationException": {  
  "type": "structure",  
  "members": {  
    "Message": {  
      "target": "com.amazonaws.licensemanager#Message"  
    }  
  },  
  "traits": {  
    "smithy.api#documentation": "<p>The provided input is not valid. Try your request again.</p>",  
  
    "smithy.api#error": "client",  
    "smithy.api#httpError": 400  
  }  
}  
}  
}
```

```
// Code generated by smithy-go-codegen DO NOT EDIT.
```

```
package licensemanager
```

```
import (  
  "context"  
  "fmt"  
  awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"  
  "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
```

```

"github.com/aws/smithy-go/middleware"
smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Deletes the specified license.
func (c *Client) DeleteLicense(ctx context.Context, params *DeleteLicenseInput, optFns ...func(*Options))
(*DeleteLicenseOutput, error) {
    if params == nil {
        params = &DeleteLicenseInput{}
    }

    result, metadata, err := c.invokeOperation(ctx, "DeleteLicense", params, optFns,
c.addOperationDeleteLicenseMiddlewares)
    if err != nil {
        return nil, err
    }

    out := result.(*DeleteLicenseOutput)
    out.ResultMetadata = metadata
    return out, nil
}

type DeleteLicenseInput struct {

    // Amazon Resource Name (ARN) of the license.
    //
    // This member is required.
    LicenseArn *string

    // Current version of the license.
    //
    // This member is required.
    SourceVersion
    *string

    noSmithyDocumentSerde
}

type DeleteLicenseOutput struct {

    // Date when the license is deleted.
    DeletionDate *string

    // License status.
    Status types.LicenseDeletionStatus

    // Metadata pertaining to the operation's result.
    ResultMetadata middleware.Metadata

```

```

noSmithyDocumentSerde
}

func (c *Client) addOperationDeleteLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
if err := stack.Serialize.Add(&setOperationInputMiddleware{ }, middleware.After); err != nil {
return err
}
err = stack.Serialize.Add(&awsAwsjson11_serializeOpDeleteLicense{ }, middleware.After)
if err != nil {
return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpDeleteLicense{ }, middleware.After)
if err != nil {
return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "DeleteLicense"); err != nil {
return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addLegacyEndpointContextSetter(stack, options); err !=
nil {
return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
return err
}
if err = addClientRequestID(stack); err != nil {
return err
}
if err = addComputeContentLength(stack); err != nil {
return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
return err
}
if err = addComputePayloadSHA256(stack); err != nil {
return err
}
if err = addRetry(stack, options); err != nil {
return err
}
if err = addRawResponseToMetadata(stack); err != nil {
return err
}
if err = addRecordResponseTiming(stack); err != nil {
return err
}
}

```

```

if err = addClientUserAgent(stack, options); err != nil {
    return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
    return err
}
if err = addOpDeleteLicenseValidationMiddleware(stack);
err != nil {
    return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDeleteLicense(options.Region),
middleware.Before); err != nil {
    return err
}
if err = addRecursionDetection(stack); err != nil {
    return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
    return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
    return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
    return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
    return err
}
return nil
}

func newServiceMetadataMiddleware_opDeleteLicense(region string) *awsmiddleware.RegisterServiceMetadata {
    return &awsmiddleware.RegisterServiceMetadata{
        Region:    region,
        ServiceID: ServiceID,
        OperationName: "DeleteLicense",
    }
}

```

# 1.75 aws-aws-sdk-go-v2-service-internal-checksum 1.1.26

## 1.75.1 Available under license :

name: License Scan

on: [pull\_request]

jobs:

licensescan:

name: License Scan

runs-on: ubuntu-latest

strategy:

matrix:

python-version: [3.9]

steps:

- name: Checkout target

uses: actions/checkout@v2

with:

path: sdkbase

ref: \${{ github.base\_ref }}

- name: Checkout this ref

uses: actions/checkout@v2

with:

path: new-ref

fetch-depth: 0

- name: Get Diff

run: git --git-dir ./new-ref/.git diff --name-only --diff-filter=ACMRT \${{ github.event.pull\_request.base.sha }}

\${{ github.sha }} > refDiffFiles.txt

- name: Get Target Files

run: git --git-dir ./sdkbase/.git ls-files | grep -xf refDiffFiles.txt - > targetFiles.txt

- name: Checkout scancode

uses: actions/checkout@v2

with:

repository: nexB/scancode-toolkit

path: scancode-toolkit

fetch-depth: 1

- name: Set up Python \${{ matrix.python-version }}

uses: actions/setup-python@v2

with:

python-version: \${{ matrix.python-version }}

# ScanCode

- name: Self-configure scancode

working-directory: ./scancode-toolkit

run: ./scancode --help

```

- name: Run Scan code on target
  run: cat targetFiles.txt | while read filename; do echo ./sdkbase/$filename; done | xargs ./scancode-
  toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> old-licenses.txt
- name: Run Scan code on pr ref
  run: cat refDiffFiles.txt | while read filename; do echo ./new-ref/$filename; done | xargs ./scancode-
  toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> new-licenses.txt
# compare
- name: License test
  run: if ! cmp old-licenses.txt new-licenses.txt; then echo "Licenses differ! Failing."; exit -1; else echo "Licenses
  are the same. Success."; exit 0; fi
// Code generated by smithy-go-codegen DO NOT EDIT.

```

```

package licensemanager

```

```

import (
    "context"
    "fmt"
    awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
    "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
    "github.com/aws/smithy-go/middleware"
    smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license for offline use.
func (c *Client) CheckoutBorrowLicense(ctx context.Context, params *CheckoutBorrowLicenseInput, optFns
...func(*Options)) (*CheckoutBorrowLicenseOutput, error) {
    if params == nil {
        params = &CheckoutBorrowLicenseInput{}
    }

    result, metadata, err := c.invokeOperation(ctx, "CheckoutBorrowLicense", params, optFns,
c.addOperationCheckoutBorrowLicenseMiddlewares)
    if err != nil {
        return nil, err
    }

    out := result.(*CheckoutBorrowLicenseOutput)
    out.ResultMetadata = metadata
    return out, nil
}

type CheckoutBorrowLicenseInput struct {

    // Unique, case-sensitive identifier that you provide to ensure the idempotency of
    //
    the request.
    //
    // This member is required.

```

```

ClientToken *string

// Digital signature method. The possible value is JSON Web Signature (JWS)
// algorithm PS384. For more information, see RFC 7518 Digital Signature with
// RSASSA-PSS (https://tools.ietf.org/html/rfc7518#section-3.5) .
//
// This member is required.
DigitalSignatureMethod types.DigitalSignatureMethod

// License entitlements. Partial checkouts are not supported.
//
// This member is required.
Entitlements []types.EntitlementData

// Amazon Resource Name (ARN) of the license. The license must use the borrow
// consumption configuration.
//
// This member is required.
LicenseArn *string

// Information about constraints.
CheckoutMetadata []types.Metadata

// Node ID.
NodeId *string

noSmithyDocumentSerde
}

type CheckoutBorrowLicenseOutput struct {

// Information about constraints.
CheckoutMetadata []types.Metadata

// Allowed license entitlements.
EntitlementsAllowed []types.EntitlementData

//
// Date and time at which the license checkout expires.
Expiration *string

// Date and time at which the license checkout is issued.
IssuedAt *string

// Amazon Resource Name (ARN) of the license.
LicenseArn *string

// License consumption token.

```

```

LicenseConsumptionToken *string

// Node ID.
NodeId *string

// Signed token.
SignedToken *string

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutBorrowLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
    if err := stack.Serialize.Add(&setOperationInputMiddleware{ }, middleware.After); err != nil {
        return err
    }
    err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutBorrowLicense{ }, middleware.After)
    if err != nil {
        return err
    }
    err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutBorrowLicense{ }, middleware.After)
    if err != nil {
        return err
    }
    if err := addProtocolFinalizerMiddlewares(stack,
options, "CheckoutBorrowLicense"); err != nil {
        return fmt.Errorf("add protocol finalizers: %v", err)
    }

    if err = addLegacyEndpointContextSetter(stack, options); err != nil {
        return err
    }
    if err = addSetLoggerMiddleware(stack, options); err != nil {
        return err
    }
    if err = addClientRequestID(stack); err != nil {
        return err
    }
    if err = addComputeContentLength(stack); err != nil {
        return err
    }
    if err = addResolveEndpointMiddleware(stack, options); err != nil {
        return err
    }
    if err = addComputePayloadSHA256(stack); err != nil {

```



```

return err
}
if err = addRetry(stack, options); err != nil {
return err
}
if err = addRawResponseToMetadata(stack); err != nil {
return err
}
if err = addRecordResponseTiming(stack); err != nil {
return err
}
if err = addClientUserAgent(stack, options); err != nil {
return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack);
err != nil {
return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
return err
}
if err = addOpCheckoutBorrowLicenseValidationMiddleware(stack); err != nil {
return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutBorrowLicense(options.Region),
middleware.Before); err != nil {
return err
}
if err = addRecursionDetection(stack); err != nil {
return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
return err
}
return nil
}

```

```

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
return &awsmiddleware.RegisterServiceMetadata{
Region:    region,
ServiceID: ServiceID,
OperationName:
"CheckoutBorrowLicense",
}
}
ListLicenses
Initialize stack step
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
Serialize stack step
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
RecursionDetection
Finalize stack step
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
Retry
RetryMetricsHeader
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
RecordResponseTiming
RequestResponseLogger
{
"smithy": "2.0",
"shapes": {
"com.amazonaws.licenseanagerlinuxsubscriptions#BoxInteger": {
"type": "integer"
}
}
}

```

```

    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong": {
      "type": "long"
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Filter": {
      "type": "structure",
      "members": {
        "Name": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The type of name to filter by.</p>"
          }
        },
        "Values": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
          "traits": {
            "smithy.api#documentation": "<p>One or more values for the name to filter by.</p>"
          }
        },
        "Operator": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Operator",
          "traits": {
            "smithy.api#documentation": "<p>An operator for filtering results.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>A filter object that is used to return more specific results from a describe operation.\n  Filters can be used to match a set of resources by specific criteria.</p>"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Filter"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse"
      },
      "errors": [
        {

```

```

        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerError"
    },
    {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
    },
    {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
    }
],
"traits": {
    "smithy.api#documentation": "<p>Lists the Linux subscriptions service settings.</p>",
    "smithy.api#http": {
        "code": 200,
        "method": "POST",
        "uri": "/subscription/GetServiceSettings"
    },
    "smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest":
{
    "type": "structure",
    "members": {}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse": {
    "type": "structure",
    "members": {
        "LinuxSubscriptionsDiscovery": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
            "traits": {
                "smithy.api#documentation": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
            }
        },
        "LinuxSubscriptionsDiscoverySettings": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
            "traits": {
                "smithy.api#documentation": "<p>Lists the settings defined for Linux subscriptions discovery. The settings include if\n Organizations integration has been enabled, and which Regions data will be aggregated from.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
            "traits": {
                "smithy.api#documentation": "<p>Indicates the status of Linux subscriptions settings being applied.</p>"
            }
        }
    },
}

```

```

"StatusMessage": {
  "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
  "traits": {
    "smithy.api#documentation": "<p>A message which details the Linux subscriptions service settings
current status.</p>"
  }
},
"HomeRegions": {
  "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
  "traits": {
    "smithy.api#documentation": "<p>The Region in which License Manager displays
the aggregated data for Linux\n  subscriptions.</p>"
  }
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Instance": {
  "type": "structure",
  "members": {
    "AmiId": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>The AMI ID used to launch the instance.</p>"
      }
    },
    "InstanceID": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>The instance ID of the resource.</p>"
      }
    },
    "InstanceType": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>The instance type of the resource.</p>"
      }
    }
  },
  "AccountID": {
    "target": "smithy.api#String",
    "traits": {
      "smithy.api#documentation": "<p>The account ID which owns the instance.</p>"
    }
  },
  "Status": {
    "target": "smithy.api#String",
    "traits": {
      "smithy.api#documentation": "<p>The status of the instance.</p>"
    }
  }
}

```

```

    }
  },
  "Region": {
    "target": "smithy.api#String",
    "traits": {
      "smithy.api#documentation": "<p>The Region the instance is running in.</p>"
    }
  },
  "UsageOperation": {
    "target": "smithy.api#String",
    "traits": {
      "smithy.api#documentation": "<p>The usage operation of the instance. For more information, see For
more information, see\n    <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-
subscriptions-usage-operation.html\">Usage\n    operation values</a> in the <i>License Manager User
Guide</i>.</p>"
    }
  },
  "ProductCode": {
    "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList",
    "traits": {
      "smithy.api#documentation": "<p>The product code for the instance. For more information, see <a
href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-subscriptions-usage-
operation.html\">Usage\n    operation values</a> in the <i>License Manager User Guide</i> .</p>"
    }
  },
  "LastUpdatedTime": {
    "target": "smithy.api#String",
    "traits": {
      "smithy.api#documentation": "<p>The time in which the last discovery
updated the instance details.</p>"
    }
  },
  "SubscriptionName": {
    "target": "smithy.api#String",
    "traits": {
      "smithy.api#documentation": "<p>The name of the subscription being used by the instance.</p>"
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>Details discovered information about a running instance using Linux
subscriptions.</p>"
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList": {
    "type": "list",
    "member": {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Instance"
    }
  }
}

```

```

    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerError": {
    "type": "structure",
    "members": {
      "message": {
        "target": "smithy.api#String"
      }
    },
    "traits": {
      "smithy.api#documentation": "<p>An exception occurred with the service.</p>",
      "smithy.api#error": "server"
    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#LicenseManagerLinuxSubscriptions": {
    "type": "service",
    "version": "2018-05-10",
    "operations": [
      {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings"
      },
      {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances"
      },
      {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions"
      },
      {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings"
      }
    ],
    "traits": {
      "aws.api#service": {
        "sdkId": "License Manager Linux Subscriptions",
        "arnNamespace": "license-manager-linux-subscriptions",
        "cloudTrailEventSource": "license-manager-linux-subscriptions.amazonaws.com"
      },
      "aws.auth#sigv4": {
        "name": "license-manager-linux-subscriptions"
      },
      "aws.protocols#restJson1": {},
      "smithy.api#cors": {
        "additionalAllowedHeaders": [
          "*",
          "content-type",
          "x-amz-content-sha256",
          "x-amz-user-agent",

```

```

    "x-amzn-platform-id",
    "x-amzn-trace-id",
    "content-length",
    "x-api-key",
    "authorization",
    "x-amz-date",

    "x-amz-security-token",
    "Access-Control-Allow-Headers",
    "Access-Control-Allow-Methods",
    "Access-Control-Allow-Origin"
  ],
  "additionalExposedHeaders": [
    "x-amzn-errortype",
    "x-amzn-requestid",
    "x-amzn-trace-id"
  ]
},
"smithy.api#documentation": "<p>With License Manager, you can discover and track your commercial
Linux subscriptions on running\n  Amazon EC2 instances.</p>",
"smithy.api#title": "AWS License Manager Linux Subscriptions",
"smithy.rules#endpointRuleSet": {
  "version": "1.0",
  "parameters": {
    "Region": {
      "builtIn": "AWS::Region",
      "required": false,
      "documentation": "The
AWS region used to dispatch the request.",
      "type": "String"
    },
    "UseDualStack": {
      "builtIn": "AWS::UseDualStack",
      "required": true,
      "default": false,
      "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not
support dual-stack, dispatching the request MAY return an error.",
      "type": "Boolean"
    },
    "UseFIPS": {
      "builtIn": "AWS::UseFIPS",
      "required": true,
      "default": false,
      "documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the
configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",

      "type": "Boolean"
    }
  }
},

```



```

"Endpoint": {
  "builtIn": "SDK::Endpoint",
  "required": false,
  "documentation": "Override the endpoint used to send this request",
  "type": "String"
}
},
"rules": [
  {
    "conditions": [
      {
        "fn": "isSet",
        "argv": [
          {
            "ref": "Endpoint"
          }
        ]
      }
    ]
  }
],
"type": "tree",
"rules": [
  {
    "conditions": [
      {
        "fn": "booleanEquals",
        "argv": [
          {
            "ref": "UseFIPS"
          },
          true
        ]
      }
    ],
    "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
    "type": "error"
  },
  {
    "conditions": [],
    "type": "tree",
    "rules": [
      {
        "conditions": [
          {
            "fn": "booleanEquals",
            "argv": [
              {

```

```

        "ref": "UseDualStack"
    },
    true
]
}
],
"error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
"type": "error"
},
{
    "conditions": [],

"endpoint": {
    "url": {
        "ref": "Endpoint"
    },
    "properties": {},
    "headers": {}
    },
    "type": "endpoint"
}
]
}
]
},
{
    "conditions": [],
    "type": "tree",
    "rules": [
        {
            "conditions": [
                {
                    "fn": "isSet",

"argv": [
        {
            "ref": "Region"
        }
    ]
    }
],
"type": "tree",
"rules": [
    {
        "conditions": [
            {
                "fn": "aws.partition",
                "argv": [

```

```

        {
            "ref": "Region"
        }
    ],
    "assign": "PartitionResult"
    }
],
"type": "tree",
"rules": [
    {
        "conditions": [
            {
                "fn": "booleanEquals",
                "argv": [
                    {
                        "ref": "UseFIPS"
                    },
                    true
                ]
            },
            {
                "fn": "booleanEquals",
                "argv": [
                    {
                        "ref": "UseDualStack"
                    },
                    true
                ]
            }
        ],
        "type": "tree",
        "rules": [
            {
                "conditions": [
                    {
                        "fn": "booleanEquals",
                        "argv": [
                            true,
                            {
                                "fn": "getAttr",
                                "argv": [
                                    {
                                        "ref": "PartitionResult"
                                    },
                                    "supportsFIPS"
                                ]
                            }
                        ]
                    }
                ]
            }
        ]
    }
]

```

```

    ]
}

]
},
{
  "fn": "booleanEquals",
  "argv": [
    true,
    {
      "fn": "getAttr",
      "argv": [
        {
          "ref": "PartitionResult"
        },
        "supportsDualStack"
      ]
    }
  ]
},
],
"type": "tree",
"rules": [
  {
    "conditions": [],
    "type": "tree",
    "rules": [
      {
        "conditions": [],
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
          "properties": {},
          "headers": {}
        },
        "type": "endpoint"
      }
    ]
  }
],
},
{
  "conditions": [],
  "error": "FIPS and DualStack are enabled, but this partition does not support
one or both",

```

```

        "type": "error"
      }
    ]
  },
  {
    "conditions": [
      {
        "fn": "booleanEquals",
        "argv": [
          {
            "ref": "UseFIPS"
          },
          true
        ]
      }
    ],
    "type": "tree",
    "rules": [
      {
        "conditions": [
          {
            "fn": "booleanEquals",
            "argv": [
              true,
              {
                "fn": "getAttr",
                "argv": [
                  {
                    "ref": "PartitionResult"
                  },
                  "supportsFIPS"
                ]
              }
            ]
          }
        ],
        "type": "tree",
        "rules": [
          {
            "conditions": [],
            "type": "tree",
            "rules": [
              {
                "conditions": [],
                "endpoint": {

```

```

        "url": "https://license-manager-linux-subscriptions-
fips.{Region}.{PartitionResult#dnsSuffix}",
        "properties": {},
        "headers": {}
    },
    "type": "endpoint"
}
]
}
]
},
{
    "conditions": [],
    "error": "FIPS is enabled but this partition does not support FIPS",
    "type": "error"
}
]

```

},

```

{
    "conditions": [
        {
            "fn": "booleanEquals",
            "argv": [
                {
                    "ref": "UseDualStack"
                },
                true
            ]
        }
    ],
    "type": "tree",
    "rules": [
        {
            "conditions": [
                {
                    "fn": "booleanEquals",
                    "argv": [
                        true,
                        {
                            "fn": "getAttr",
                            "argv": [
                                {
                                    "ref": "PartitionResult"
                                },
                                "supportsDualStack"
                            ]
                        }
                    ]
                }
            ]
        }
    ]
}

```

```

        ]
      }
    ]
  }
],
"type": "tree",
"rules": [
  {
    "conditions": [],
    "type": "tree",
    "rules": [
      {
        "conditions": [],
        "endpoint": {
          "url": "https://license-manager-linux-
subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
          "properties": {},
          "headers": {}
        },
        "type": "endpoint"
      }
    ]
  }
]
},
{
  "conditions": [],
  "error": "DualStack is enabled but this partition does not support DualStack",
  "type": "error"
}
],
{
  "conditions": [],
  "type": "tree",
  "rules": [
    {
      "conditions": [],
      "endpoint": {
        "url":
"https://license-manager-linux-subscriptions.{Region}.{PartitionResult#dnsSuffix}",
        "properties": {},
        "headers": {}
      },
      "type": "endpoint"
    }
  ]
}

```

```

        ]
      }
    ]
  }
},
{
  "conditions": [],
  "error": "Invalid Configuration: Missing Region",
  "type": "error"
}
]
}
]
},
"smithy.rules#endpointTests": {
  "testCases": [
    {
      "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions-fips.us-east-1.api.aws"
        }
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": true,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions-fips.us-east-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
      "expect": {
        "endpoint": {

```



```

        "url": "https://license-manager-linux-subscriptions.us-east-1.api.aws"
    }
},
"params": {
    "Region": "us-east-1",
    "UseFIPS": false,
    "UseDualStack": true
}
},
{
    "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager-linux-subscriptions.us-east-1.amazonaws.com"
        }
    },
    "params": {
        "Region": "us-east-1",
        "UseFIPS": false,
        "UseDualStack": false
    }
},
{
    "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
    "expect": {
        "endpoint": {

            "url": "https://license-manager-linux-subscriptions-fips.cn-north-1.api.amazonwebservices.com.cn"
        }
    },
    "params": {
        "Region": "cn-north-1",
        "UseFIPS": true,
        "UseDualStack": true
    }
},
{
    "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager-linux-subscriptions-fips.cn-north-1.amazonaws.com.cn"
        }
    },
    "params": {
        "Region": "cn-north-1",
        "UseFIPS": true,
        "UseDualStack": false
    }
}

```

```

    },
    {
      "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
        }
      },
      "params": {
        "Region": "cn-north-1",
        "UseFIPS": false,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions.cn-north-1.amazonaws.com.cn"
        }
      },
      "params": {
        "Region": "cn-north-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.api.aws"
        }
      },
      "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": true,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.amazonaws.com"
        }
      },
    },
  },

```

```

    "params": {
      "Region": "us-gov-east-1",
      "UseFIPS": true,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-linux-subscriptions.us-gov-east-1.api.aws"
      }
    },
    "params": {
      "Region": "us-gov-east-1",
      "UseFIPS": false,
      "UseDualStack": true
    }
  },
  {
    "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-linux-subscriptions.us-gov-east-1.amazonaws.com"
      }
    },
    "params": {
      "Region": "us-gov-east-1",
      "UseFIPS": false,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
    "expect": {
      "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
    },
    "params": {
      "Region": "us-iso-east-1",
      "UseFIPS": true,
      "UseDualStack": true
    }
  },
  {
    "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
    "expect": {
      "endpoint": {

```

```

        "url": "https://license-manager-linux-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
    }
},
"params": {
    "Region": "us-iso-east-1",
    "UseFIPS": true,
    "UseDualStack": false
}
},
{
    "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
    "expect": {
        "error": "DualStack is enabled but this partition does not support DualStack"
    },
    "params": {
        "Region": "us-iso-east-1",
        "UseFIPS": false,
        "UseDualStack": true
    }
},
{

```

```

"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager-linux-subscriptions.us-iso-east-1.c2s.ic.gov"
        }
    },
    "params": {
        "Region": "us-iso-east-1",
        "UseFIPS": false,
        "UseDualStack": false
    }
},
{
    "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
    "expect": {
        "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
    },
    "params": {

        "Region": "us-isob-east-1",
        "UseFIPS": true,
        "UseDualStack": true
    }
},
{
    "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",

```

```

    "expect": {
      "endpoint": {
        "url": "https://license-manager-linux-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
      }
    },
    "params": {
      "Region": "us-isob-east-1",
      "UseFIPS": true,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For region us-isob-east-1 with FIPS disabled
and DualStack enabled",
    "expect": {
      "error": "DualStack is enabled but this partition does not support DualStack"
    },
    "params": {
      "Region": "us-isob-east-1",
      "UseFIPS": false,
      "UseDualStack": true
    }
  },
  {
    "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-linux-subscriptions.us-isob-east-1.sc2s.sgov.gov"
      }
    },
    "params": {
      "Region": "us-isob-east-1",

"UseFIPS": false,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
    "expect": {
      "endpoint": {
        "url": "https://example.com"
      }
    },
    "params": {
      "Region": "us-east-1",
      "UseFIPS": false,
      "UseDualStack": false,

```

```
        "Endpoint": "https://example.com"
      }
    },
    {
      "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
```

```
    "expect": {
      "endpoint": {
        "url": "https://example.com"
      }
    },
    "params": {
      "UseFIPS": false,
      "UseDualStack": false,
      "Endpoint": "https://example.com"
    }
  },
  {
    "documentation": "For custom endpoint with fips enabled and dualstack disabled",
    "expect": {
      "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
    },
    "params": {
      "Region": "us-east-1",
      "UseFIPS": true,
      "UseDualStack": false,
```

```
    "Endpoint": "https://example.com"
  }
},
{
  "documentation": "For custom endpoint with fips disabled and dualstack enabled",
  "expect": {
    "error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
  },
  "params": {
    "Region": "us-east-1",
    "UseFIPS": false,
    "UseDualStack": true,
    "Endpoint": "https://example.com"
  }
},
{
  "documentation": "Missing region",
  "expect": {
    "error": "Invalid Configuration: Missing Region"
  }
}
```

```

    }
    ],
    "version": "1.0"
  }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery": {
  "type": "string",
  "traits": {
    "smithy.api#enum": [
      {
        "name": "Enabled",
        "value": "Enabled",
        "documentation": "Enabled LinuxSubscriptionsDiscovery"
      },
      {
        "name": "Disabled",
        "value": "Disabled",
        "documentation": "Disabled LinuxSubscriptionsDiscovery"
      }
    ]
  }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings": {
  "type": "structure",
  "members": {
    "SourceRegions": {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
      "traits": {
        "smithy.api#documentation": "<p>The Regions in which to discover data for Linux
subscriptions.</p>",
        "smithy.api#required": {}
      }
    },
    "OrganizationIntegration": {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration",
      "traits": {
        "smithy.api#documentation": "<p>Details if you have enabled resource discovery across your
accounts in Organizations.</p>",
        "smithy.api#required": {}
      }
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>Lists the settings defined for discovering Linux subscriptions.</p>"
  }
},

```

```

"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances": {
  "type":
"operation",
  "input": {
    "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerError"
    },
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
    },
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Lists the running Amazon EC2 instances that were discovered with commercial Linux\n  subscriptions.</p>",
    "smithy.api#http": {

"code": 200,
  "method": "POST",
  "uri": "/subscription/ListLinuxSubscriptionInstances"
  },
  "smithy.api#idempotent": {},
  "smithy.api#paginated": {
    "inputToken": "NextToken",
    "outputToken": "NextToken",
    "pageSize": "MaxResults",
    "items": "Instances"
  }
  },
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest": {
  "type": "structure",
  "members": {
    "Filters": {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
      "traits": {
        "smithy.api#documentation": "<p>An array of structures that you can use to filter the results to those that match one or\n  more sets of key-value pairs that you specify. For example, you can filter by the name of\n  <code>AmiID</code> with an optional operator to see subscriptions that match, partially\n  match, or don't match a certain Amazon Machine Image (AMI) ID.</p>\n  <p>The valid names for this filter

```



```

are:</p>\n      <ul>\n        <li>\n          <p>\n            <code>AmiID</code>\n          </p>\n        </li>\n        <li>\n          <p>\n            <code>InstanceID</code>\n          </p>\n        </li>\n        <li>\n          <p>\n            <code>AccountID</code>\n          </p>\n        </li>\n        <li>\n          <p>\n            <code>Status</code>\n          </p>\n        </li>\n        <li>\n          <p>\n            <code>Region</code>\n          </p>\n        </li>\n        <li>\n          <p>\n            <code>UsageOperation</code>\n          </p>\n        </li>\n        <li>\n          <p>\n            <code>ProductCode</code>\n          </p>\n        </li>\n        <li>\n          <p>\n            <code>InstanceType</code>\n          </p>\n        </li>\n      </ul>\n    <p>The valid Operators for this filter are:</p>\n    <ul>\n      <li>\n        <p>\n          <code>contains</code>\n        </p>\n      </li>\n      <li>\n        <p>\n          <code>equals</code>\n        </p>\n      </li>\n      <li>\n        <p>\n          <code>Notequal</code>\n        </p>\n      </li>\n    </ul>\n  }
},
"MaxResults": {
  "target": "com.amazonaws.licenseanagerlinuxsubscriptions#BoxInteger",
  "traits": {
    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
  }
}
},
"NextToken": {
  "target": "smithy.api#String",
  "traits": {
    "smithy.api#documentation": "<p>Token for the next set of results.</p>",
    "smithy.api#length": {
      "min": 1,
      "max": 16384
    }
  }
}
},
"traits": {
  "smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if parameters in request increases."
}
},
"com.amazonaws.licenseanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse": {
  "type": "structure",
  "members": {
    "Instances": {
      "target": "com.amazonaws.licenseanagerlinuxsubscriptions#InstanceList",
      "traits": {
        "smithy.api#documentation":
"<p>An array that contains instance objects.</p>"
      }
    }
  }
},
"NextToken": {
  "target": "smithy.api#String",

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    "traits": {
      "smithy.api#documentation": "<p>Token for the next set of results.</p>"
    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerErrorException"
      },
      {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
      },
      {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
      }
    ],
    "traits": {
      "smithy.api#documentation": "<p>Lists the Linux subscriptions that have been discovered. If you have linked your\n organization, the returned results will include data aggregated across your accounts in\n Organizations.</p>",
      "smithy.api#http": {
        "code": 200,
        "method": "POST",
        "uri": "/subscription/ListLinuxSubscriptions"
      },
      "smithy.api#idempotent": {},
      "smithy.api#paginated": {
        "inputToken": "NextToken",
        "outputToken": "NextToken",
        "pageSize": "MaxResults",
        "items": "Subscriptions"
      }
    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest": {
    "type": "structure",
    "members": {
      "Filters": {

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```

    "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
    "traits": {
      "smithy.api#documentation": "<p>An array of structures that you can use to filter the results to those
that match one or\n    more sets of key-value pairs that you specify. For example, you can filter by the name of\n
<code>Subscription</code> with an optional operator to see subscriptions that match,\n    partially match, or don't
match a certain subscription's name.</p>\n    <p>The valid names for this filter are:</p>\n    <ul>\n
<li>\n        <p>\n            <code>Subscription</code>\n            </p>\n        </li>\n    </ul>\n
<p>The valid Operators for this filter are:</p>\n
    <ul>\n        <li>\n            <p>\n                <code>contains</code>\n                </p>\n            </li>\n
<li>\n        <p>\n            <code>equals</code>\n            </p>\n        </li>\n        <li>\n            <p>\n                <code>NotEqual</code>\n                </p>\n            </li>\n    </ul>"
    }
  },
  "MaxResults": {
    "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
    "traits": {
      "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
    }
  },
  "NextToken": {
    "target": "smithy.api#String",
    "traits": {
      "smithy.api#documentation": "<p>Token for the next set of results.</p>",
      "smithy.api#length": {
        "min": 1,
        "max": 16384
      }
    }
  },
  "traits": {
    "smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if
parameters in request increases."
  }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse": {
  "type": "structure",
  "members": {
    "Subscriptions": {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList",
      "traits": {
        "smithy.api#documentation": "<p>An array that contains subscription objects.</p>"
      }
    },
    "NextToken": {
      "target": "smithy.api#String",
      "traits": {

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        "smithy.api#documentation": "<p>Token for
the next set of results.</p>"
    }
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Operator": {
    "type": "string",
    "traits": {
        "smithy.api#enum": [
            {
                "name": "EQUAL",
                "value": "Equal",
                "documentation": "Equal operator"
            },
            {
                "name": "NOT_EQUAL",
                "value": "NotEqual",
                "documentation": "Not equal operator"
            },
            {
                "name": "CONTAINS",
                "value": "Contains",
                "documentation": "Contains operator"
            }
        ],
        "smithy.api#length": {
            "min": 1,
            "max": 20
        }
    }
},

"com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration": {
    "type": "string",
    "traits": {
        "smithy.api#enum": [
            {
                "name": "Enabled",
                "value": "Enabled",
                "documentation": "Enabled OrganizationIntegration"
            },
            {
                "name": "Disabled",
                "value": "Disabled",
                "documentation": "Disabled OrganizationIntegration"
            }
        ]
    }
}

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    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList": {
    "type": "list",
    "member": {
      "target": "smithy.api#String"
    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#Status": {
    "type": "string",
    "traits": {
      "smithy.api#enum": [
{
      "name": "InProgress",
      "value": "InProgress",
      "documentation": "InProgress status"
    },
    {
      "name": "Completed",
      "value": "Completed",
      "documentation": "Completed status"
    },
    {
      "name": "Successful",
      "value": "Successful",
      "documentation": "Successful status"
    },
    {
      "name": "Failed",
      "value": "Failed",
      "documentation": "Failed status"
    }
  ]
}
    ],
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#StringList": {
    "type": "list",
    "member": {
      "target": "smithy.api#String",
      "traits":
{
      "smithy.api#length": {
        "min": 1,
        "max": 100
      }
    }
  },

```

```

"traits": {
  "smithy.api#length": {
    "min": 1,
    "max": 100
  },
  "smithy.api#uniqueItems": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#StringMap": {
  "type": "map",
  "key": {
    "target": "smithy.api#String"
  },
  "value": {
    "target": "smithy.api#String"
  }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Subscription": {
  "type": "structure",
  "members": {
    "Name": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>The name of the subscription.</p>"
      }
    },
    "Type": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>The type of subscription. The type can be subscription-included with Amazon EC2, Bring Your Own\n  Subscription model (BYOS), or from the Amazon Web Services Marketplace. Certain subscriptions may use licensing from the\n  Amazon Web Services Marketplace as well as OS licensing from Amazon EC2 or BYOS.</p>"
      }
    },
    "InstanceCount": {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong",
      "traits": {
        "smithy.api#documentation": "<p>The total amount of running instances using this subscription.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>An object which details a discovered Linux subscription.</p>"
  }
},

```

```

"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription"
  }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException": {
  "type": "structure",
  "members": {
    "message": {
      "target": "smithy.api#String"
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>The request was denied due to request throttling.</p>",
    "smithy.api#error": "client"
  }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerError"
    },
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
    },
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Updates the service settings for Linux subscriptions.</p>",
    "smithy.api#http": {
      "code": 200,
      "method": "POST",
      "uri": "/subscription/UpdateServiceSettings"
    },
    "smithy.api#idempotent": {}
  }
},

```

```

"com.amazonaws.licenseanagerlinuxsubscriptions#UpdateServiceSettingsRequest":
{
  "type": "structure",
  "members": {
    "LinuxSubscriptionsDiscovery": {
      "target": "com.amazonaws.licenseanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
      "traits": {
        "smithy.api#documentation": "<p>Describes if the discovery of Linux subscriptions is enabled.</p>",
        "smithy.api#required": {}
      }
    },
    "LinuxSubscriptionsDiscoverySettings": {
      "target": "com.amazonaws.licenseanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
      "traits": {
        "smithy.api#documentation": "<p>The settings defined for Linux subscriptions discovery. The settings include if Organizations\n  integration has been enabled, and which Regions data will be aggregated from.</p>",
        "smithy.api#required": {}
      }
    },
    "AllowUpdate": {
      "target": "smithy.api#Boolean",
      "traits": {
        "smithy.api#documentation": "<p>Describes if updates are allowed to the service settings for Linux subscriptions. If you\n  allow updates, you can aggregate Linux subscription data in more than one home Region.</p>"
      }
    }
  },
  "com.amazonaws.licenseanagerlinuxsubscriptions#UpdateServiceSettingsResponse": {
    "type": "structure",
    "members": {
      "LinuxSubscriptionsDiscovery": {
        "target": "com.amazonaws.licenseanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
        "traits": {
          "smithy.api#documentation": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
        }
      },
      "LinuxSubscriptionsDiscoverySettings": {
        "target": "com.amazonaws.licenseanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
        "traits": {
          "smithy.api#documentation": "<p>The settings defined for Linux subscriptions discovery. The settings include if Organizations\n  integration has been enabled, and which Regions data will be aggregated from.</p>"
        }
      }
    }
  }
}

```



```

    },
    "Status": {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
      "traits": {
        "smithy.api#documentation": "<p>Indicates the status of Linux subscriptions settings being
applied.</p>"
      }
    },
    "StatusMessage": {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
      "traits": {
        "smithy.api#documentation":
"<p>A message which details the Linux subscriptions service settings current status.</p>"
      }
    },
    "HomeRegions": {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
      "traits": {
        "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated
data for Linux\n  subscriptions.</p>"
      }
    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException": {
    "type": "structure",
    "members": {
      "message": {
        "target": "smithy.api#String"
      }
    },
    "traits": {
      "smithy.api#documentation": "<p>The provided input is not valid. Try your request again.</p>",
      "smithy.api#error": "client"
    }
  }
}

```

// Code generated by smithy-go-codegen DO NOT EDIT.

```
package licensemanager
```

```

import (
    "context"
    "fmt"
    awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
    "github.com/aws/smithy-go/middleware"
    smithyhttp "github.com/aws/smithy-go/transport/http"

```

```

)

// Checks in the specified license. Check in a license when it is no longer in use.
func (c *Client) CheckInLicense(ctx context.Context, params *CheckInLicenseInput, optFns ...func(*Options))
(*CheckInLicenseOutput, error) {
    if params == nil {
        params = &CheckInLicenseInput{}
    }

    result, metadata, err := c.invokeOperation(ctx, "CheckInLicense", params, optFns,
c.addOperationCheckInLicenseMiddlewares)
    if err != nil {
        return nil, err
    }

    out := result.(*CheckInLicenseOutput)
    out.ResultMetadata = metadata
    return out, nil
}

type CheckInLicenseInput struct {

    // License consumption token.
    //
    // This member is required.
    LicenseConsumptionToken *string

    // License beneficiary.
    Beneficiary *string

    noSmithyDocumentSerde
}

type
CheckInLicenseOutput struct {
    // Metadata pertaining to the operation's result.
    ResultMetadata middleware.Metadata

    noSmithyDocumentSerde
}

func (c *Client) addOperationCheckInLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
    if err := stack.Serialize.Add(&setOperationInputMiddleware{ }, middleware.After); err != nil {
        return err
    }
    err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckInLicense{ }, middleware.After)
    if err != nil {
        return err
    }
}

```

```

}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckInLicense{}, middleware.After)
if err != nil {
    return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "CheckInLicense"); err != nil {
    return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addLegacyEndpointContextSetter(stack, options); err != nil {
    return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
    return err
}
if err = addClientRequestID(stack); err != nil {
    return err
}
if
err = addComputeContentLength(stack); err != nil {
    return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
    return err
}
if err = addComputePayloadSHA256(stack); err != nil {
    return err
}
if err = addRetry(stack, options); err != nil {
    return err
}
if err = addRawResponseToMetadata(stack); err != nil {
    return err
}
if err = addRecordResponseTiming(stack); err != nil {
    return err
}
if err = addClientUserAgent(stack, options); err != nil {
    return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
    return err
}

```

```

}
if err = addOpCheckInLicenseValidationMiddleware(stack); err != nil {
    return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckInLicense(options.Region),
middleware.Before); err != nil {
    return
err
}
if err = addRecursionDetection(stack); err != nil {
    return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
    return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
    return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
    return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
    return err
}
return nil
}

func newServiceMetadataMiddleware_opCheckInLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
    return &awsmiddleware.RegisterServiceMetadata{
        Region:    region,
        ServiceID: ServiceID,
        OperationName: "CheckInLicense",
    }
}
CheckoutBorrowLicense
Initialize stack step
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
Serialize stack step
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength

```

```

UserAgent
RecursionDetection
Finalize stack step
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
Retry
RetryMetricsHeader
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
RecordResponseTiming
RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
    "context"
    "fmt"
    awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
    "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
    "github.com/aws/smithy-go/middleware"
    smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists received licenses.
func (c *Client) ListReceivedLicenses(ctx context.Context, params *ListReceivedLicensesInput, optFns
...func(*Options)) (*ListReceivedLicensesOutput, error) {
    if params == nil {
        params = &ListReceivedLicensesInput{}
    }

    result, metadata, err := c.invokeOperation(ctx, "ListReceivedLicenses", params, optFns,
c.addOperationListReceivedLicensesMiddlewares)
    if err != nil {
        return nil, err
    }

    out := result.(*ListReceivedLicensesOutput)

```

```

out.ResultMetadata = metadata
return out, nil
}

type ListReceivedLicensesInput struct {

// Filters to scope the results. The following filters are supported:
// - ProductSKU
// - Status
// - Fingerprint
//
// - IssuerName
// - Beneficiary
Filters []types.Filter

// Amazon Resource Names (ARNs) of the licenses.
LicenseArns []string

// Maximum number of results to return in a single call.
MaxResults *int32

// Token for the next set of results.
NextToken *string

noSmithyDocumentSerde
}

type ListReceivedLicensesOutput struct {

// Received license details.
Licenses []types.GrantedLicense

// Token for the next set of results.
NextToken *string

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationListReceivedLicensesMiddlewares(stack *middleware.Stack, options Options) (err
error) {
if err := stack.Serialize.Add(&setOperationInputMiddleware{ }, middleware.After); err != nil {
return err
}
err = stack.Serialize.Add(&awsAwsjson11_serializeOpListReceivedLicenses{ }, middleware.After)
if err != nil {

```

```

return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListReceivedLicenses{ },
middleware.After)
if err != nil {
return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "ListReceivedLicenses"); err != nil {
return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addLegacyEndpointContextSetter(stack, options); err != nil {
return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
return err
}
if err = addClientRequestID(stack); err != nil {
return err
}
if err = addComputeContentLength(stack); err != nil {
return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
return err
}
if err = addComputePayloadSHA256(stack); err != nil {
return err
}
if err = addRetry(stack, options); err != nil {
return err
}
if err = addRawResponseToMetadata(stack); err != nil {
return err
}
if err = addRecordResponseTiming(stack); err != nil {
return err
}
if err = addClientUserAgent(stack, options); err != nil {
return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
err != nil {
return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
return err
}
}

```

```

if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
    return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListReceivedLicenses(options.Region),
middleware.Before); err != nil {
    return err
}
if err = addRecursionDetection(stack); err != nil {
    return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
    return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
    return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
    return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
    return err
}
return nil
}

```

```

func newServiceMetadataMiddleware_opListReceivedLicenses(region string)
*awsmiddleware.RegisterServiceMetadata {
return &awsmiddleware.RegisterServiceMetadata{
    Region:    region,
    ServiceID:
ServiceID,
    OperationName: "ListReceivedLicenses",
}
}
// Code generated by smithy-go-codegen DO NOT EDIT.

```

```

package licensemanager

```

```

import (
    "context"
    "fmt"
    awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
    "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
    "github.com/aws/smithy-go/middleware"
    smithyhttp "github.com/aws/smithy-go/transport/http"
)

```

```

// Checks out the specified license. If the account that created the license is

```



```

// the same that is performing the check out, you must specify the account as the
// beneficiary.
func (c *Client) CheckoutLicense(ctx context.Context, params *CheckoutLicenseInput, optFns ...func(*Options))
(*CheckoutLicenseOutput, error) {
    if params == nil {
        params = &CheckoutLicenseInput{}
    }

    result, metadata, err := c.invokeOperation(ctx, "CheckoutLicense", params, optFns,
c.addOperationCheckoutLicenseMiddlewares)
    if err != nil {
        return nil, err
    }

    out := result.(*CheckoutLicenseOutput)
    out.ResultMetadata = metadata
    return out, nil
}

type CheckoutLicenseInput struct {

    // Checkout
    type.
    //
    // This member is required.
    CheckoutType types.CheckoutType

    // Unique, case-sensitive identifier that you provide to ensure the idempotency of
    // the request.
    //
    // This member is required.
    ClientToken *string

    // License entitlements.
    //
    // This member is required.
    Entitlements []types.EntitlementData

    // Key fingerprint identifying the license.
    //
    // This member is required.
    KeyFingerprint *string

    // Product SKU.
    //
    // This member is required.
    ProductSKU *string

```

```

// License beneficiary.
Beneficiary *string

// Node ID.
NodeId *string

noSmithyDocumentSerde
}

type CheckoutLicenseOutput struct {

// Checkout type.
CheckoutType types.CheckoutType

// Allowed license entitlements.
EntitlementsAllowed []types.EntitlementData

// Date and time at which the license checkout expires.
Expiration *string

// Date and time at which the license checkout is issued.
IssuedAt *string

// Amazon Resource Name (ARN) of the checkout license.
LicenseArn
*string

// License consumption token.
LicenseConsumptionToken *string

// Node ID.
NodeId *string

// Signed token.
SignedToken *string

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
if err := stack.Serialize.Add(&setOperationInputMiddleware{ }, middleware.After); err != nil {
return err
}
err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutLicense{ }, middleware.After)
if err != nil {

```

```

return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutLicense{ }, middleware.After)
if err != nil {
return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutLicense"); err != nil {
return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addLegacyEndpointContextSetter(stack, options); err != nil {
return err
}
if err = addSetLoggerMiddleware(stack,
options); err != nil {
return err
}
if err = addClientRequestID(stack); err != nil {
return err
}
if err = addComputeContentLength(stack); err != nil {
return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
return err
}
if err = addComputePayloadSHA256(stack); err != nil {
return err
}
if err = addRetry(stack, options); err != nil {
return err
}
if err = addRawResponseToMetadata(stack); err != nil {
return err
}
if err = addRecordResponseTiming(stack); err != nil {
return err
}
if err = addClientUserAgent(stack, options); err != nil {
return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {

```

```

return err
}
if err = addOpCheckoutLicenseValidationMiddleware(stack); err != nil {
return err
}
if err =
stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutLicense(options.Region), middleware.Before);
err != nil {
return err
}
if err = addRecursionDetection(stack); err != nil {
return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
return err
}
return nil
}

func newServiceMetadataMiddleware_opCheckoutLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
return &awsmiddleware.RegisterServiceMetadata{
Region:    region,
ServiceID: ServiceID,
OperationName: "CheckoutLicense",
}
}
DisassociateLicense
Initialize stack step
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
Serialize stack step
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID

```

ComputeContentLength  
UserAgent  
RecursionDetection  
Finalize stack step  
ResolveAuthScheme  
GetIdentity  
ResolveEndpointV2  
disableHTTPS  
ComputePayloadHash  
Retry  
RetryMetricsHeader  
setLegacyContextSigningOptions  
Signing  
Deserialize stack step  
AddRawResponseToMetadata  
ErrorCloseResponseBody  
CloseResponseBody  
ResponseErrorWrapper  
RequestIDRetriever  
OperationDeserializer  
RecordResponseTiming  
RequestResponseLogger  
CheckoutLicense  
Initialize stack step  
RegisterServiceMetadata  
legacyEndpointContextSetter  
SetLogger  
OperationInputValidation  
Serialize stack step  
setOperationInput  
ResolveEndpoint  
OperationSerializer  
Build stack step  
ClientRequestID  
ComputeContentLength  
UserAgent  
RecursionDetection  
Finalize stack step  
ResolveAuthScheme  
GetIdentity  
ResolveEndpointV2  
disableHTTPS  
ComputePayloadHash  
Retry  
RetryMetricsHeader  
setLegacyContextSigningOptions  
Signing  
Deserialize stack step

AddRawResponseToMetadata  
ErrorCloseResponseBody  
CloseResponseBody  
ResponseErrorWrapper  
RequestIDRetriever  
OperationDeserializer  
RecordResponseTiming  
RequestResponseLogger  
AssociateLicense  
Initialize stack step  
RegisterServiceMetadata  
legacyEndpointContextSetter  
SetLogger  
OperationInputValidation  
Serialize stack step  
setOperationInput  
ResolveEndpoint  
OperationSerializer  
Build stack step  
ClientRequestID  
ComputeContentLength  
UserAgent  
RecursionDetection  
Finalize stack step  
ResolveAuthScheme  
GetIdentity  
ResolveEndpointV2  
disableHTTPS  
ComputePayloadHash  
Retry  
RetryMetricsHeader  
setLegacyContextSigningOptions  
Signing  
Deserialize stack step  
AddRawResponseToMetadata  
ErrorCloseResponseBody  
CloseResponseBody  
ResponseErrorWrapper  
RequestIDRetriever  
OperationDeserializer  
RecordResponseTiming  
RequestResponseLogger  
CheckInLicense  
Initialize stack step  
RegisterServiceMetadata  
legacyEndpointContextSetter  
SetLogger  
OperationInputValidation

Serialize stack step  
setOperationInput  
ResolveEndpoint  
OperationSerializer  
Build stack step  
ClientRequestID  
ComputeContentLength  
UserAgent  
RecursionDetection  
Finalize stack step  
ResolveAuthScheme  
GetIdentity  
ResolveEndpointV2  
disableHTTPS  
ComputePayloadHash  
Retry  
RetryMetricsHeader  
setLegacyContextSigningOptions  
Signing  
Deserialize stack step  
AddRawResponseToMetadata  
ErrorCloseResponseBody  
CloseResponseBody  
ResponseErrorWrapper  
RequestIDRetriever  
OperationDeserializer  
RecordResponseTiming  
RequestResponseLogger  
AWS SDK for Go  
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CreateLicense  
Initialize stack step  
RegisterServiceMetadata  
legacyEndpointContextSetter  
SetLogger  
OperationInputValidation  
Serialize stack step  
setOperationInput  
ResolveEndpoint  
OperationSerializer  
Build stack step  
ClientRequestID  
ComputeContentLength  
UserAgent  
RecursionDetection  
Finalize stack step  
ResolveAuthScheme

GetIdentity  
ResolveEndpointV2  
disableHTTPS  
ComputePayloadHash  
Retry  
RetryMetricsHeader  
setLegacyContextSigningOptions  
Signing  
Deserialize stack step  
AddRawResponseToMetadata  
ErrorCloseResponseBody  
CloseResponseBody  
ResponseErrorWrapper  
RequestIDRetriever  
OperationDeserializer  
RecordResponseTiming  
RequestResponseLogger  
GetLicense  
Initialize stack step  
RegisterServiceMetadata  
legacyEndpointContextSetter  
SetLogger  
OperationInputValidation  
Serialize stack step  
setOperationInput  
ResolveEndpoint  
OperationSerializer  
Build stack step  
ClientRequestID  
ComputeContentLength  
UserAgent  
RecursionDetection  
Finalize stack step  
ResolveAuthScheme  
GetIdentity  
ResolveEndpointV2  
disableHTTPS  
ComputePayloadHash  
Retry  
RetryMetricsHeader  
setLegacyContextSigningOptions  
Signing  
Deserialize stack step  
AddRawResponseToMetadata  
ErrorCloseResponseBody  
CloseResponseBody  
ResponseErrorWrapper  
RequestIDRetriever



```

OperationDeserializer
RecordResponseTiming
RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
    "context"
    "fmt"
    awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
    "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
    "github.com/aws/smithy-go/middleware"
    smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Creates a license.
func (c *Client) CreateLicense(ctx context.Context, params *CreateLicenseInput, optFns ...func(*Options))
(*CreateLicenseOutput, error) {
    if params == nil {
        params = &CreateLicenseInput{}
    }

    result, metadata, err := c.invokeOperation(ctx, "CreateLicense", params, optFns,
c.addOperationCreateLicenseMiddlewares)
    if err != nil {
        return nil, err
    }

    out := result.(*CreateLicenseOutput)
    out.ResultMetadata = metadata
    return out, nil
}

type CreateLicenseInput struct {

    // License beneficiary.
    //
    // This member is required.
    Beneficiary *string

    // Unique, case-sensitive identifier that you provide to ensure the idempotency of
    // the request.
    //
    //
    //
    // This member is required.
    ClientToken *string

```

```

// Configuration for consumption of the license. Choose a provisional
// configuration for workloads running with continuous connectivity. Choose a
// borrow configuration for workloads with offline usage.
//
// This member is required.
ConsumptionConfiguration *types.ConsumptionConfiguration

// License entitlements.
//
// This member is required.
Entitlements []types.Entitlement

// Home Region for the license.
//
// This member is required.
HomeRegion *string

// License issuer.
//
// This member is required.
Issuer *types.Issuer

// License name.
//
// This member is required.
LicenseName *string

// Product name.
//
// This member is required.
ProductName *string

// Product SKU.
//
// This member is required.
ProductSKU *string

// Date and time range during which the license is valid, in ISO8601-UTC format.
//
// This member is required.
Validity *types.DatetimeRange

// Information about
the license.
LicenseMetadata []types.Metadata

noSmithyDocumentSerde
}

```

```

type CreateLicenseOutput struct {

    // Amazon Resource Name (ARN) of the license.
    LicenseArn *string

    // License status.
    Status types.LicenseStatus

    // License version.
    Version *string

    // Metadata pertaining to the operation's result.
    ResultMetadata middleware.Metadata

    noSmithyDocumentSerde
}

func (c *Client) addOperationCreateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
    if err := stack.Serialize.Add(&setOperationInputMiddleware{ }, middleware.After); err != nil {
        return err
    }
    err = stack.Serialize.Add(&awsAwsjson11_serializeOpCreateLicense{ }, middleware.After)
    if err != nil {
        return err
    }
    err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCreateLicense{ }, middleware.After)
    if err != nil {
        return err
    }
    if err := addProtocolFinalizerMiddlewares(stack, options, "CreateLicense"); err != nil {
        return fmt.Errorf("add protocol finalizers: %v", err)
    }

    if
    err = addLegacyEndpointContextSetter(stack, options); err != nil {
        return err
    }
    if err = addSetLoggerMiddleware(stack, options); err != nil {
        return err
    }
    if err = addClientRequestID(stack); err != nil {
        return err
    }
    if err = addComputeContentLength(stack); err != nil {
        return err
    }
    if err = addResolveEndpointMiddleware(stack, options); err != nil {

```

```

return err
}
if err = addComputePayloadSHA256(stack); err != nil {
return err
}
if err = addRetry(stack, options); err != nil {
return err
}
if err = addRawResponseToMetadata(stack); err != nil {
return err
}
if err = addRecordResponseTiming(stack); err != nil {
return err
}
if err = addClientUserAgent(stack, options); err != nil {
return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
return
err
}
if err = addOpCreateLicenseValidationMiddleware(stack); err != nil {
return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCreateLicense(options.Region),
middleware.Before); err != nil {
return err
}
if err = addRecursionDetection(stack); err != nil {
return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
return err
}

```

```

    }
    return nil
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
    return &awsmiddleware.RegisterServiceMetadata{
        Region:    region,
        ServiceID: ServiceID,
        OperationName: "CreateLicense",
    }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
    "context"
    "fmt"
    awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
    "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
    "github.com/aws/smithy-go/middleware"
    smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Gets detailed information about the specified license.
func (c *Client) GetLicense(ctx context.Context, params *GetLicenseInput, optFns ...func(*Options))
(*GetLicenseOutput, error) {
    if params == nil {
        params = &GetLicenseInput{}
    }

    result, metadata, err := c.invokeOperation(ctx, "GetLicense", params, optFns,
c.addOperationGetLicenseMiddlewares)
    if err != nil {
        return nil, err
    }

    out := result.(*GetLicenseOutput)
    out.ResultMetadata = metadata
    return out, nil
}

type GetLicenseInput struct {

    // Amazon Resource Name (ARN) of the license.
    //
    // This member is required.
    LicenseArn *string

```

```

// License version.
Version *string

noSmithyDocumentSerde
}

type
GetLicenseOutput struct {

// License details.
License *types.License

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationGetLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
if err := stack.Serialize.Add(&setOperationInputMiddleware{ }, middleware.After); err != nil {
return err
}
err = stack.Serialize.Add(&awsAwsjson11_serializeOpGetLicense{ }, middleware.After)
if err != nil {
return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpGetLicense{ }, middleware.After)
if err != nil {
return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "GetLicense"); err != nil {
return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addLegacyEndpointContextSetter(stack, options); err != nil {
return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
return err
}
if err = addClientRequestID(stack); err
!= nil {
return err
}
if err = addComputeContentLength(stack); err != nil {
return err
}
}

```

```

if err = addResolveEndpointMiddleware(stack, options); err != nil {
    return err
}
if err = addComputePayloadSHA256(stack); err != nil {
    return err
}
if err = addRetry(stack, options); err != nil {
    return err
}
if err = addRawResponseToMetadata(stack); err != nil {
    return err
}
if err = addRecordResponseTiming(stack); err != nil {
    return err
}
if err = addClientUserAgent(stack, options); err != nil {
    return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
    return err
}
if err = addOpGetLicenseValidationMiddleware(stack); err != nil {
    return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opGetLicense(options.Region), middleware.Before);
err != nil {
    return err
}
if err = addRecursionDetection(stack); err != nil {
    return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
    return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
    return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
    return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
    return err
}

```

```

}
return nil
}

func newServiceMetadataMiddleware_opGetLicense(region string) *awsmiddleware.RegisterServiceMetadata {
return &awsmiddleware.RegisterServiceMetadata{
Region:    region,
ServiceID: ServiceID,
OperationName: "GetLicense",
}
}
DeleteLicense
Initialize stack step
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
Serialize stack step
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
RecursionDetection
Finalize stack step
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
Retry
RetryMetricsHeader
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
RecordResponseTiming
RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

```



```

import (
    "context"
    "fmt"
    awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
    "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
    "github.com/aws/smithy-go/middleware"
    smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists the licenses for your account.
func (c *Client) ListLicenses(ctx context.Context, params *ListLicensesInput, optFns ...func(*Options))
(*ListLicensesOutput, error) {
    if params == nil {
        params = &ListLicensesInput{}
    }

    result, metadata, err := c.invokeOperation(ctx, "ListLicenses", params, optFns,
c.addOperationListLicensesMiddlewares)
    if err != nil {
        return nil, err
    }

    out := result.(*ListLicensesOutput)
    out.ResultMetadata = metadata
    return out, nil
}

type ListLicensesInput struct {

    // Filters to scope the results. The following filters are supported:
    // - Beneficiary
    // - ProductSKU
    // - Fingerprint
    // - Status
    Filters []types.Filter

    //
    Amazon Resource Names (ARNs) of the licenses.
    LicenseArns []string

    // Maximum number of results to return in a single call.
    MaxResults *int32

    // Token for the next set of results.
    NextToken *string

    noSmithyDocumentSerde

```

```

}

type ListLicensesOutput struct {

    // License details.
    Licenses []types.License

    // Token for the next set of results.
    NextToken *string

    // Metadata pertaining to the operation's result.
    ResultMetadata middleware.Metadata

    noSmithyDocumentSerde
}

func (c *Client) addOperationListLicensesMiddlewares(stack *middleware.Stack, options Options) (err error) {
    if err := stack.Serialize.Add(&setOperationInputMiddleware{ }, middleware.After); err != nil {
        return err
    }
    err = stack.Serialize.Add(&awsAwsjson11_serializeOpListLicenses{ }, middleware.After)
    if err != nil {
        return err
    }
    err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListLicenses{ }, middleware.After)
    if err != nil {
        return err
    }
    if err := addProtocolFinalizerMiddlewares(stack,
        options, "ListLicenses"); err != nil {
        return fmt.Errorf("add protocol finalizers: %v", err)
    }

    if err = addLegacyEndpointContextSetter(stack, options); err != nil {
        return err
    }
    if err = addSetLoggerMiddleware(stack, options); err != nil {
        return err
    }
    if err = addClientRequestID(stack); err != nil {
        return err
    }
    if err = addComputeContentLength(stack); err != nil {
        return err
    }
    if err = addResolveEndpointMiddleware(stack, options); err != nil {
        return err
    }
}

```

```

if err = addComputePayloadSHA256(stack); err != nil {
    return err
}
if err = addRetry(stack, options); err != nil {
    return err
}
if err = addRawResponseToMetadata(stack); err != nil {
    return err
}
if err = addRecordResponseTiming(stack); err != nil {
    return err
}
if err = addClientUserAgent(stack, options); err != nil {
    return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack);
err != nil {
    return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
    return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListLicenses(options.Region), middleware.Before);
err != nil {
    return err
}
if err = addRecursionDetection(stack); err != nil {
    return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
    return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
    return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
    return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
    return err
}
return nil
}

```

```

func newServiceMetadataMiddleware_opListLicenses(region string) *awsmiddleware.RegisterServiceMetadata {

```

```
return &awsmiddleware.RegisterServiceMetadata{
    Region:    region,
    ServiceID: ServiceID,
    OperationName: "ListLicenses",
}
}
```

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ListReceivedLicenses

Initialize stack step

RegisterServiceMetadata

legacyEndpointContextSetter

SetLogger

Serialize stack step

setOperationInput

ResolveEndpoint

OperationSerializer

Build stack step

ClientRequestID

ComputeContentLength

UserAgent

RecursionDetection

Finalize stack step  
ResolveAuthScheme  
GetIdentity  
ResolveEndpointV2  
disableHTTPS  
ComputePayloadHash  
Retry  
RetryMetricsHeader  
setLegacyContextSigningOptions  
Signing  
Deserialize stack step  
AddRawResponseToMetadata  
ErrorCloseResponseBody  
CloseResponseBody  
ResponseErrorWrapper  
RequestIDRetriever  
OperationDeserializer  
RecordResponseTiming  
RequestResponseLogger

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```
package grafana
```

```
import (  
    "context"  
    "fmt"  
    awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"  
    "github.com/aws/aws-sdk-go-v2/service/grafana/types"  
    "github.com/aws/smithy-go/middleware"  
    smithyhttp "github.com/aws/smithy-go/transport/http"
```

```

)

// Removes the Grafana Enterprise license from a workspace.
func (c *Client) DisassociateLicense(ctx context.Context, params *DisassociateLicenseInput, optFns
...func(*Options)) (*DisassociateLicenseOutput, error) {
    if params == nil {
        params = &DisassociateLicenseInput{}
    }

    result, metadata, err := c.invokeOperation(ctx, "DisassociateLicense", params, optFns,
c.addOperationDisassociateLicenseMiddlewares)
    if err != nil {
        return nil, err
    }

    out := result.(*DisassociateLicenseOutput)
    out.ResultMetadata = metadata
    return out, nil
}

type DisassociateLicenseInput struct {

    // The type of license to remove from the workspace.
    //
    // This member is required.
    LicenseType types.LicenseType

    //
    // The ID of the workspace to remove the Grafana Enterprise license from.
    //
    // This member is required.
    WorkspaceId *string

    noSmithyDocumentSerde
}

type DisassociateLicenseOutput struct {

    // A structure containing information about the workspace.
    //
    // This member is required.
    Workspace *types.WorkspaceDescription

    // Metadata pertaining to the operation's result.
    ResultMetadata middleware.Metadata

    noSmithyDocumentSerde
}

```

```

func (c *Client) addOperationDisassociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
    if err := stack.Serialize.Add(&setOperationInputMiddleware{ }, middleware.After); err != nil {
        return err
    }
    err = stack.Serialize.Add(&awsRestjson1_serializeOpDisassociateLicense{ }, middleware.After)
    if err != nil {
        return err
    }
    err = stack.Deserialize.Add(&awsRestjson1_deserializeOpDisassociateLicense{ }, middleware.After)
    if err != nil {
        return err
    }
    if err := addProtocolFinalizerMiddlewares(stack, options, "DisassociateLicense");
    err != nil {
        return fmt.Errorf("add protocol finalizers: %v", err)
    }

    if err = addLegacyEndpointContextSetter(stack, options); err != nil {
        return err
    }
    if err = addSetLoggerMiddleware(stack, options); err != nil {
        return err
    }
    if err = addClientRequestID(stack); err != nil {
        return err
    }
    if err = addComputeContentLength(stack); err != nil {
        return err
    }
    if err = addResolveEndpointMiddleware(stack, options); err != nil {
        return err
    }
    if err = addComputePayloadSHA256(stack); err != nil {
        return err
    }
    if err = addRetry(stack, options); err != nil {
        return err
    }
    if err = addRawResponseToMetadata(stack); err != nil {
        return err
    }
    if err = addRecordResponseTiming(stack); err != nil {
        return err
    }
    if err = addClientUserAgent(stack, options); err != nil {
        return err
    }

```

```

}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil
{
    return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
    return err
}
if err = addOpDisassociateLicenseValidationMiddleware(stack); err != nil {
    return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDisassociateLicense(options.Region),
middleware.Before); err != nil {
    return err
}
if err = addRecursionDetection(stack); err != nil {
    return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
    return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
    return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
    return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
    return err
}
return nil
}

```

```

func newServiceMetadataMiddleware_opDisassociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
return &awsmiddleware.RegisterServiceMetadata{
    Region:    region,
    ServiceID: ServiceID,
    OperationName: "DisassociateLicense",
}
}
// Code generated by smithy-go-codegen DO NOT EDIT.

```

```
package grafana
```

```

import (
    "context"
    "fmt"
    awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
    "github.com/aws/aws-sdk-go-v2/service/grafana/types"
    "github.com/aws/smithy-go/middleware"
    smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Assigns a Grafana Enterprise license to a workspace. Upgrading to Grafana
// Enterprise incurs additional fees. For more information, see Upgrade a
// workspace to Grafana Enterprise (https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-Grafana-Enterprise.html)
// .
func (c *Client) AssociateLicense(ctx context.Context, params *AssociateLicenseInput, optFns ...func(*Options))
(*AssociateLicenseOutput, error) {
    if params == nil {
        params = &AssociateLicenseInput{}
    }

    result, metadata, err := c.invokeOperation(ctx, "AssociateLicense", params, optFns,
c.addOperationAssociateLicenseMiddlewares)
    if err != nil {
        return nil, err
    }

    out := result.(*AssociateLicenseOutput)
    out.ResultMetadata
    = metadata
    return out, nil
}

type AssociateLicenseInput struct {

    // The type of license to associate with the workspace.
    //
    // This member is required.
    LicenseType types.LicenseType

    // The ID of the workspace to associate the license with.
    //
    // This member is required.
    WorkspaceId *string

    noSmithyDocumentSerde
}

type AssociateLicenseOutput struct {

```

```

// A structure containing data about the workspace.
//
// This member is required.
Workspace *types.WorkspaceDescription

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationAssociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
if err := stack.Serialize.Add(&setOperationInputMiddleware{ }, middleware.After); err != nil {
return err
}
err = stack.Serialize.Add(&awsRestjson1_serializeOpAssociateLicense{ }, middleware.After)
if err != nil {
return err
}
err = stack.Deserialize.Add(&awsRestjson1_deserializeOpAssociateLicense{ },
middleware.After)
if err != nil {
return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "AssociateLicense"); err != nil {
return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addLegacyEndpointContextSetter(stack, options); err != nil {
return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
return err
}
if err = addClientRequestID(stack); err != nil {
return err
}
if err = addComputeContentLength(stack); err != nil {
return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
return err
}
if err = addComputePayloadSHA256(stack); err != nil {
return err
}
if err = addRetry(stack, options); err != nil {

```

```

return err
}
if err = addRawResponseToMetadata(stack); err != nil {
return err
}
if err = addRecordResponseTiming(stack); err != nil {
return err
}
if err = addClientUserAgent(stack, options); err != nil {
return err
}
if
err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
return err
}
if err = addOpAssociateLicenseValidationMiddleware(stack); err != nil {
return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opAssociateLicense(options.Region),
middleware.Before); err != nil {
return err
}
if err = addRecursionDetection(stack); err != nil {
return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
return err
}
return nil
}

func newServiceMetadataMiddleware_opAssociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata

```

```

{
return &awsmiddleware.RegisterServiceMetadata{
  Region:    region,
  ServiceID: ServiceID,
  OperationName: "AssociateLicense",
}
}
{
  "smithy": "2.0",
  "shapes": {
    "com.amazonaws.licenseanagerusersubscriptions#AccessDeniedException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>You don't have sufficient access to perform this action.</p>",
        "smithy.api#error": "client"
      }
    },
    "com.amazonaws.licenseanagerusersubscriptions#ActiveDirectoryIdentityProvider": {
      "type": "structure",
      "members": {
        "DirectoryId": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The directory ID for an Active Directory identity provider.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation":
"<p>Details about an Active Directory identity provider.</p>"
      }
    },
    "com.amazonaws.licenseanagerusersubscriptions#AssociateUser": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licenseanagerusersubscriptions#AssociateUserRequest"
      },
      "output": {
        "target": "com.amazonaws.licenseanagerusersubscriptions#AssociateUserResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licenseanagerusersubscriptions#AccessDeniedException"
        }
      ]
    }
  }
}

```



```

    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ConflictException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#InternalServerErrorException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ResourceNotFoundException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ServiceQuotaExceededException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ThrottlingException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Associates the user to an EC2 instance to utilize user-based
subscriptions.</p>\n    <note>\n      <p>Your estimated bill for charges on the number of users and related
costs will take 48\n      hours to appear for billing periods that haven't closed (marked as <b>Pending</b> billing
status) in Amazon Web Services Billing. For more information, see <a
href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your\n
monthly charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p>\n    </note>",
    "smithy.api#http": {
      "code": 200,
      "method": "POST",
      "uri": "/user/AssociateUser"
    },
    "smithy.api#idempotent": {}
  }
},
"com.amazonaws.licenseanagerusersubscriptions#AssociateUserRequest": {
  "type": "structure",
  "members": {
    "Username": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>",
        "smithy.api#required": {}
      }
    },
    "InstanceId": {
      "target": "smithy.api#String",
      "traits": {

```

```

    "smithy.api#documentation": "<p>The ID of the
EC2 instance, which provides user-based subscriptions.</p>",
    "smithy.api#required": {}
  }
},
"IdentityProvider": {
  "target": "com.amazonaws.licenseanagerusersubscriptions#IdentityProvider",
  "traits": {
    "smithy.api#documentation": "<p>The identity provider of the user.</p>",
    "smithy.api#required": {}
  }
},
"Domain": {
  "target": "smithy.api#String",
  "traits": {
    "smithy.api#documentation": "<p>The domain name of the user.</p>"
  }
}
},
"com.amazonaws.licenseanagerusersubscriptions#AssociateUserResponse": {
  "type": "structure",
  "members": {
    "InstanceUserSummary": {
      "target": "com.amazonaws.licenseanagerusersubscriptions#InstanceUserSummary",
      "traits": {
        "smithy.api#documentation": "<p>Metadata that describes the associate user operation.</p>",
        "smithy.api#required": {}
      }
    }
  }
},
"com.amazonaws.licenseanagerusersubscriptions#BoxInteger": {
  "type": "integer"
},
"com.amazonaws.licenseanagerusersubscriptions#ConflictException": {
  "type": "structure",
  "members": {
    "message": {
      "target": "smithy.api#String"
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>The request couldn't be completed because it conflicted with the current
state of the\n resource.</p>",
    "smithy.api#error": "server"
  }
},

```

```

"com.amazonaws.licenseanagerusersubscriptions#DeregisterIdentityProvider":
{
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licenseanagerusersubscriptions#DeregisterIdentityProviderRequest"
  },
  "output": {
    "target": "com.amazonaws.licenseanagerusersubscriptions#DeregisterIdentityProviderResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ConflictException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#InternalServerError"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ResourceNotFoundException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ServiceQuotaExceededException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ThrottlingException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Deregisters the identity provider from providing user-based
subscriptions.</p>",
    "smithy.api#http": {
      "code": 200,
      "method": "POST",
      "uri": "/identity-provider/DeregisterIdentityProvider"
    },
    "smithy.api#idempotent": {}
  }
},
"com.amazonaws.licenseanagerusersubscriptions#DeregisterIdentityProviderRequest": {
  "type": "structure",
  "members": {
    "IdentityProvider": {
      "target": "com.amazonaws.licenseanagerusersubscriptions#IdentityProvider",

```

```

    "traits": {
      "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
      "smithy.api#required": {}
    }
  },
  "Product": {
    "target": "smithy.api#String",
    "traits": {
      "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
      "smithy.api#required": {}
    }
  }
},
"com.amazonaws.licenseanagerusersubscriptions#DeregisterIdentityProviderResponse": {
  "type": "structure",
  "members": {
    "IdentityProviderSummary": {
      "target": "com.amazonaws.licenseanagerusersubscriptions#IdentityProviderSummary",
      "traits": {
        "smithy.api#documentation":
"<p>Metadata that describes the results of an identity provider operation.</p>",
        "smithy.api#required": {}
      }
    }
  }
},
"com.amazonaws.licenseanagerusersubscriptions#DisassociateUser": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licenseanagerusersubscriptions#DisassociateUserRequest"
  },
  "output": {
    "target": "com.amazonaws.licenseanagerusersubscriptions#DisassociateUserResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ConflictException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#InternalServerErrorException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ResourceNotFoundException"
    }
  ],

```

```

    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ServiceQuotaExceededException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ThrottlingException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Disassociates the user from an EC2 instance providing user-based
subscriptions.</p>",
    "smithy.api#http": {
      "code": 200,
      "method": "POST",
      "uri": "/user/DisassociateUser"
    },
    "smithy.api#idempotent": {}
  }
},
"com.amazonaws.licenseanagerusersubscriptions#DisassociateUserRequest": {
  "type": "structure",
  "members": {
    "Username": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>",
        "smithy.api#required": {}
      }
    },
    "InstanceId": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
        "smithy.api#required": {}
      }
    },
    "IdentityProvider": {
      "target": "com.amazonaws.licenseanagerusersubscriptions#IdentityProvider",
      "traits": {
        "smithy.api#documentation":
"<p>An object that specifies details for the identity provider.</p>",
        "smithy.api#required": {}
      }
    }
  },

```

```

    "Domain": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>The domain name of the user.</p>"
      }
    }
  },
  "com.amazonaws.licenseanagerusersubscriptions#DisassociateUserResponse": {
    "type": "structure",
    "members": {
      "InstanceUserSummary": {
        "target": "com.amazonaws.licenseanagerusersubscriptions#InstanceUserSummary",
        "traits": {
          "smithy.api#documentation": "<p>Metadata that describes the associate user operation.</p>",
          "smithy.api#required": {}
        }
      }
    }
  },
  "com.amazonaws.licenseanagerusersubscriptions#Filter": {
    "type": "structure",
    "members": {
      "Attribute": {
        "target": "smithy.api#String",
        "traits": {
          "smithy.api#documentation": "<p>The name of an attribute to use as a filter.</p>"
        }
      },
      "Operation": {
        "target": "smithy.api#String",
        "traits": {
          "smithy.api#documentation": "<p>The type of search (For example, eq, geq, leq)</p>"
        }
      },
      "Value": {
        "target": "smithy.api#String",
        "traits": {
          "smithy.api#documentation": "<p>Value of the filter.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#documentation": "<p>A filter name and value pair that is used
to return more specific results from a describe\n operation. Filters can be used to match a set of resources by
specific criteria, such as tags,\n attributes, or IDs.</p>"
    }
  }
}

```

```

    },
    "com.amazonaws.licenseanagerusersubscriptions#FilterList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licenseanagerusersubscriptions#Filter"
      }
    },
    "com.amazonaws.licenseanagerusersubscriptions#IdentityProvider": {
      "type": "union",
      "members": {
        "ActiveDirectoryIdentityProvider": {
          "target": "com.amazonaws.licenseanagerusersubscriptions#ActiveDirectoryIdentityProvider",
          "traits": {
            "smithy.api#documentation": "<p>An object that details an Active Directory identity provider.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation":
        "<p>Details about an identity provider.</p>"
      }
    },
    "com.amazonaws.licenseanagerusersubscriptions#IdentityProviderSummary": {
      "type": "structure",
      "members": {
        "IdentityProvider": {
          "target": "com.amazonaws.licenseanagerusersubscriptions#IdentityProvider",
          "traits": {
            "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
            "smithy.api#required": {}
          }
        },
        "Settings": {
          "target": "com.amazonaws.licenseanagerusersubscriptions#Settings",
          "traits": {
            "smithy.api#documentation": "<p>An object that details the registered identity providers product
related configuration\n settings such as the subnets to provision VPC endpoints.</p>",
            "smithy.api#required":
            {}
          }
        }
      },
      "Product": {
        "target": "smithy.api#String",
        "traits": {
          "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
          "smithy.api#required": {}
        }
      }
    },
  },

```

```

"Status": {
  "target": "smithy.api#String",
  "traits": {
    "smithy.api#documentation": "<p>The status of an identity provider.</p>",
    "smithy.api#required": {}
  }
},
"FailureMessage": {
  "target": "smithy.api#String",
  "traits": {
    "smithy.api#documentation": "<p>The failure message associated with an identity provider.</p>"
  }
},
"traits": {
  "smithy.api#documentation":
"<p>Describes an identity provider.</p>"
},
"com.amazonaws.licenseanagerusersubscriptions#IdentityProviderSummaryList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licenseanagerusersubscriptions#IdentityProviderSummary"
  }
},
"com.amazonaws.licenseanagerusersubscriptions#InstanceSummary": {
  "type": "structure",
  "members": {
    "InstanceId": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
        "smithy.api#required": {}
      }
    },
    "Status": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>The status
of an EC2 instance resource.</p>",
        "smithy.api#required": {}
      }
    },
    "Products": {
      "target": "com.amazonaws.licenseanagerusersubscriptions#StringList",
      "traits": {
        "smithy.api#documentation": "<p>A list of provided user-based subscription products.</p>",

```



```

        "smithy.api#required": {}
    }
},
"LastStatusCheckDate": {
    "target": "smithy.api#String",
    "traits": {
        "smithy.api#documentation": "<p>The date of the last status check.</p>"
    }
},
"StatusMessage": {
    "target": "smithy.api#String",
    "traits": {
        "smithy.api#documentation": "<p>The status message for an EC2 instance.</p>"
    }
}
},
"traits": {
    "smithy.api#documentation": "<p>Describes an EC2 instance providing user-based subscriptions.</p>"
}
},
"com.amazonaws.licenseanagerusersubscriptions#InstanceSummaryList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licenseanagerusersubscriptions#InstanceSummary"
    }
},
"com.amazonaws.licenseanagerusersubscriptions#InstanceUserSummary": {
    "type": "structure",
    "members": {
        "Username": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>",
                "smithy.api#required": {}
            }
        },
        "InstanceId": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
                "smithy.api#required": {}
            }
        },
        "IdentityProvider": {
            "target": "com.amazonaws.licenseanagerusersubscriptions#IdentityProvider",

```

```

    "traits": {
      "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
      "smithy.api#required": {}
    }
  },
  "Status": {
    "target": "smithy.api#String",
    "traits": {
      "smithy.api#documentation": "<p>The status of a user associated with an EC2 instance.</p>",
      "smithy.api#required": {}
    }
  },
  "StatusMessage": {
    "target": "smithy.api#String",
    "traits": {
      "smithy.api#documentation": "<p>The status message for users of an EC2 instance.</p>"
    }
  },
  "Domain": {
    "target": "smithy.api#String",
    "traits": {
      "smithy.api#documentation": "<p>The domain name of the user.</p>"
    }
  },
  "AssociationDate": {
    "target": "smithy.api#String",
    "traits": {
      "smithy.api#documentation": "<p>The date a user was associated with an EC2 instance.</p>"
    }
  },
  "DisassociationDate": {
    "target": "smithy.api#String",
    "traits": {
      "smithy.api#documentation": "<p>The date a user was disassociated from an EC2 instance.</p>"
    }
  }
},
  "traits": {
    "smithy.api#documentation": "<p>Describes users of an EC2 instance providing user-based
subscriptions.</p>"
  }
},
  "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList": {
    "type": "list",
    "member": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary"
    }
  }
}

```

```

    },
    "com.amazonaws.licenseanagerusersubscriptions#InternalServerError": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>An exception occurred with the service.</p>",
        "smithy.api#error": "server"
      }
    },
    "com.amazonaws.licenseanagerusersubscriptions#LicenseManagerUserSubscriptions": {
      "type": "service",

      "version": "2018-05-10",
      "operations": [
        {
          "target": "com.amazonaws.licenseanagerusersubscriptions#AssociateUser"
        },
        {
          "target": "com.amazonaws.licenseanagerusersubscriptions#DeregisterIdentityProvider"
        },
        {
          "target": "com.amazonaws.licenseanagerusersubscriptions#DisassociateUser"
        },
        {
          "target": "com.amazonaws.licenseanagerusersubscriptions#ListIdentityProviders"
        },
        {
          "target": "com.amazonaws.licenseanagerusersubscriptions#ListInstances"
        },
        {
          "target": "com.amazonaws.licenseanagerusersubscriptions#ListProductSubscriptions"
        },
        {
          "target": "com.amazonaws.licenseanagerusersubscriptions#ListUserAssociations"
        }
      ],
      {
        "target": "com.amazonaws.licenseanagerusersubscriptions#RegisterIdentityProvider"
      },
      {
        "target": "com.amazonaws.licenseanagerusersubscriptions#StartProductSubscription"
      },
      {
        "target": "com.amazonaws.licenseanagerusersubscriptions#StopProductSubscription"
      }
    }
  }

```

```

    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings"
    }
  ],
  "traits": {
    "aws.api#service": {
      "sdkId": "License Manager User Subscriptions",
      "arnNamespace": "license-manager-user-subscriptions",
      "cloudTrailEventSource": "license-manager-user-subscriptions.amazonaws.com"
    },
    "aws.auth#sigv4": {
      "name": "license-manager-user-subscriptions"
    },
    "aws.protocols#restJson1": {},
    "smithy.api#cors": {
      "additionalAllowedHeaders": [
        "*",
        "content-type",
        "x-amz-content-sha256",
        "x-amz-user-agent",
        "x-amzn-platform-id",
        "x-amzn-trace-id",
        "content-length",
        "x-api-key",
        "authorization",
        "x-amz-date",
        "x-amz-security-token",
        "Access-Control-Allow-Headers",
        "Access-Control-Allow-Methods",
        "Access-Control-Allow-Origin"
      ],
      "additionalExposedHeaders": [
        "x-amzn-errortype",
        "x-amzn-requestid",
        "x-amzn-trace-id"
      ]
    }
  ]
},
"smithy.api#documentation": "<p>With License Manager, you can create user-based subscriptions to utilize licensed software with a per user subscription fee on Amazon EC2 instances.</p>",
"smithy.api#title": "AWS License Manager User Subscriptions",
"smithy.rules#endpointRuleSet": {
  "version": "1.0",
  "parameters": {
    "Region": {
      "builtIn": "AWS::Region",
      "required": false,

```

```

    "documentation": "The AWS region used to dispatch the request.",
    "type": "String"
  },
  "UseDualStack": {
    "builtIn": "AWS::UseDualStack",
    "required": true,
    "default": false,
    "documentation": "When true, use the dual-stack
endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
    "type": "Boolean"
  },
  "UseFIPS": {
    "builtIn": "AWS::UseFIPS",
    "required": true,
    "default": false,
    "documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the
configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
    "type": "Boolean"
  },
  "Endpoint": {
    "builtIn": "SDK::Endpoint",
    "required": false,
    "documentation": "Override the endpoint used to send this request",
    "type": "String"
  }
},
"rules": [
  {
    "conditions": [
      {
        "fn": "isSet",
        "argv": [
          {
            "ref": "Endpoint"
          }
        ]
      }
    ]
  },
  {
    "fn": "booleanEquals",
    "argv": [
      {
        "ref": "UseFIPS"
      }
    ]
  }
]

```

```

        },
        true
    ]
}
],
"error": "Invalid Configuration: FIPS and custom endpoint are not supported",
"type": "error"
},
{
"conditions": [
{
"fn": "booleanEquals",
"argv": [
{
"ref": "UseDualStack"
},
true
]
}
],
"error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
"type": "error"
},
{
"conditions": [],
"endpoint": {
"url": {
"ref": "Endpoint"
},
"properties": {},
"headers": {}
},
"type": "endpoint"
}
]
},
{
"conditions": [
{
"fn": "isSet",
"argv": [
{
"ref": "Region"
}
]
}
]
}

```

```

    }
  ],
  "type": "tree",
  "rules": [
    {
      "conditions": [
        {
          "fn": "aws.partition",
          "argv": [
            {
              "ref": "Region"
            }
          ],
          "assign": "PartitionResult"
        }
      ],
      "type": "tree",
    }
  ],
  "rules": [
    {
      "conditions": [
        {
          "fn": "booleanEquals",
          "argv": [
            {
              "ref": "UseFIPS"
            },
            true
          ]
        },
        {
          "fn": "booleanEquals",
          "argv": [
            {
              "ref": "UseDualStack"
            },
            true
          ]
        }
      ],
      "type": "tree",
      "rules": [
        {
          "conditions": [
            {
              "fn": "booleanEquals",
              "argv": [

```

```

        true,
        {
            "fn": "getAttr",
            "argv": [
                {
                    "ref": "PartitionResult"
                },
                "supportsFIPS"
            ]
        }
    ],
    {
        "fn": "booleanEquals",
        "argv": [
            true,
            {
                "fn": "getAttr",
                "argv": [
                    {
                        "ref": "PartitionResult"
                    },
                    "supportsDualStack"
                ]
            }
        ]
    },
    "type": "tree",
    "rules": [
        {
            "conditions": [],
            "endpoint": {
                "url": "https://license-manager-user-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                "properties": {},
                "headers": {}
            },
            "type": "endpoint"
        }
    ],
    {
        "conditions": [],
        "error": "FIPS and DualStack are enabled, but this partition does not support one or

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both",

```
        "type": "error"
      }
    ]
  },
  {
    "conditions": [
      {
        "fn": "booleanEquals",
        "argv": [
          {
            "ref": "UseFIPS"
          },
          true
        ]
      }
    ]
  },
  "type": "tree",

"rules": [
  {
    "conditions": [
      {
        "fn": "booleanEquals",
        "argv": [
          true,
          {
            "fn": "getAttr",
            "argv": [
              {
                "ref": "PartitionResult"
              },
              "supportsFIPS"
            ]
          }
        ]
      }
    ]
  },
  "type": "tree",
  "rules": [
    {
      "conditions": [],
      "endpoint": {
        "url": "https://license-manager-user-subscriptions-
fips.{Region}.{PartitionResult#dnsSuffix}",
        "properties": {},
        "headers": {}
      }
    }
  ]
}
```

```

    },
    {
      "type": "endpoint"
    }
  ],
  },
  {
    "conditions": [],
    "error": "FIPS is enabled but this partition does not support FIPS",
    "type": "error"
  }
]
},
{
  "conditions": [
    {
      "fn": "booleanEquals",
      "argv": [
        {
          "ref": "UseDualStack"
        },
        true
      ]
    }
  ],
  "type": "tree",
  "rules": [
    {
      "conditions": [
        {
          "fn": "booleanEquals",
          "argv": [
            true,
            {
              "fn": "getAttr",
              "argv": [
                {
                  "ref": "PartitionResult"
                },
                "supportsDualStack"
              ]
            }
          ]
        }
      ]
    }
  ],
  "type": "tree",
  "rules": [

```

```

        {
            "conditions": [],
            "endpoint": {
                "url": "https://license-manager-user-
subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                "properties": {},
                "headers": {}
            },
            "type": "endpoint"
        }
    ],
},
{
    "conditions": [],
    "error": "DualStack is enabled but this partition does
not support DualStack",
    "type": "error"
}
]
},
{
    "conditions": [],
    "endpoint": {
        "url": "https://license-manager-user-
subscriptions.{Region}.{PartitionResult#dnsSuffix}",
        "properties": {},
        "headers": {}
    },
    "type": "endpoint"
}
]
}
]
},
{
    "conditions":
[],
    "error": "Invalid Configuration: Missing Region",
    "type": "error"
}
]
},
"smithy.rules#endpointTests": {
    "testCases": [
        {
            "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
            "expect": {

```

```

        "endpoint": {
            "url": "https://license-manager-user-subscriptions-fips.us-east-1.api.aws"
        }
    },
    "params": {
        "Region": "us-east-1",
        "UseFIPS": true,
        "UseDualStack": true
    }
},
{
    "documentation":
    "For region us-east-1 with FIPS enabled and DualStack disabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager-user-subscriptions-fips.us-east-1.amazonaws.com"
        }
    },
    "params": {
        "Region": "us-east-1",
        "UseFIPS": true,
        "UseDualStack": false
    }
},
{
    "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager-user-subscriptions.us-east-1.api.aws"
        }
    },
    "params": {
        "Region": "us-east-1",
        "UseFIPS": false,
        "UseDualStack": true
    }
},
{
    "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager-user-subscriptions.us-east-1.amazonaws.com"
        }
    },
    "params": {
        "Region": "us-east-1",
        "UseFIPS": false,

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```

        "UseDualStack": false
    }
},
{
    "documentation": "For region cn-north-1 with
FIPS enabled and DualStack enabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager-user-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
        }
    },
    "params": {
        "Region": "cn-north-1",
        "UseFIPS": true,
        "UseDualStack": true
    }
},
{
    "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager-user-subscriptions-fips.cn-north-1.amazonaws.com.cn"
        }
    },
    "params": {
        "Region": "cn-north-1",
        "UseFIPS": true,
        "UseDualStack": false
    }
},
{
    "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager-user-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
        }
    },
    "params": {
        "Region": "cn-north-1",
        "UseFIPS": false,
        "UseDualStack": true
    }
},
{
    "documentation": "For region cn-north-1

```

with FIPS disabled and DualStack disabled",

```
    "expect": {
      "endpoint": {
        "url": "https://license-manager-user-subscriptions.cn-north-1.amazonaws.com.cn"
      }
    },
    "params": {
      "Region": "cn-north-1",
      "UseFIPS": false,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.api.aws"
      }
    },
    "params": {
      "Region": "us-gov-east-1",
      "UseFIPS": true,
      "UseDualStack": true
    }
  },
  {
    "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.amazonaws.com"
      }
    },
    "params": {
      "Region": "us-gov-east-1",
      "UseFIPS": true,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For region us-gov-east-1
with FIPS disabled and DualStack enabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-user-subscriptions.us-gov-east-1.api.aws"
      }
    },
    "params": {
```

```

        "Region": "us-gov-east-1",
        "UseFIPS": false,
        "UseDualStack": true
    }
},
{
    "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager-user-subscriptions.us-gov-east-1.amazonaws.com"
        }
    },
    "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": false,
        "UseDualStack": false
    }
},
{
    "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
    "expect": {
        "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
    },
    "params": {
        "Region": "us-iso-east-1",
        "UseFIPS": true,
        "UseDualStack": true
    }
},
{
    "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager-user-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
        }
    },
    "params": {
        "Region": "us-iso-east-1",
        "UseFIPS": true,
        "UseDualStack": false
    }
},
{
    "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
    "expect": {
        "error": "DualStack is enabled but this partition does not support DualStack"
    }
}

```

```

    },
    "params": {
      "Region": "us-iso-east-1",
      "UseFIPS": false,
      "UseDualStack":
true
    }
  },
  {
    "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-user-subscriptions.us-iso-east-1.c2s.ic.gov"
      }
    },
    "params": {
      "Region": "us-iso-east-1",
      "UseFIPS": false,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
    "expect": {
      "error": "FIPS and DualStack are enabled, but
this partition does not support one or both"
    },
    "params": {
      "Region": "us-isob-east-1",
      "UseFIPS": true,
      "UseDualStack": true
    }
  },
  {
    "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-user-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
      }
    },
    "params": {
      "Region": "us-isob-east-1",
      "UseFIPS": true,
      "UseDualStack": false
    }
  },
},
{

```



```

"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
"expect": {
  "error": "DualStack is enabled but this partition does not support DualStack"
},
"params": {
  "Region": "us-isob-east-1",
  "UseFIPS": false,
  "UseDualStack": true
}
},
{
"documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
"expect": {
  "endpoint": {
    "url": "https://license-manager-user-subscriptions.us-isob-east-1.sc2s.sgov.gov"
  }
},
"params": {
  "Region": "us-isob-east-1",
  "UseFIPS": false,
  "UseDualStack": false
}
},
{
"documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
"expect": {
  "endpoint": {
    "url": "https://example.com"
  }
},
"params": {
  "Region": "us-east-1",
  "UseFIPS": false,
  "UseDualStack": false,
  "Endpoint": "https://example.com"
}
},
{

```

```

"documentation": "For custom endpoint with region not set and fips disabled and dualstack disabled",
"expect": {
  "endpoint": {
    "url": "https://example.com"
  }
},
"params": {
  "UseFIPS": false,
  "UseDualStack": false,

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```

        "Endpoint": "https://example.com"
    }
},
{
    "documentation": "For custom endpoint with fips enabled and dualstack disabled",
    "expect": {
        "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
    },
    "params": {
        "Region": "us-east-1",
        "UseFIPS": true,
        "UseDualStack": false,
        "Endpoint": "https://example.com"
    }
},
{
    "documentation": "For custom endpoint with fips disabled and dualstack enabled",
    "expect": {
        "error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
    },
    "params": {
        "Region": "us-east-1",
        "UseFIPS": false,
        "UseDualStack": true,
        "Endpoint": "https://example.com"
    }
},
{
    "documentation": "Missing region",
    "expect": {
        "error": "Invalid Configuration: Missing Region"
    }
}
],
"version": "1.0"
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse"
    },
    "errors": [
        {

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```

    "target": "com.amazonaws.licenseanagerusersubscriptions#AccessDeniedException"
  },
  {
    "target": "com.amazonaws.licenseanagerusersubscriptions#ConflictException"
  },
  {
    "target": "com.amazonaws.licenseanagerusersubscriptions#InternalServerError"
  },
  {
    "target": "com.amazonaws.licenseanagerusersubscriptions#ResourceNotFoundException"
  },
  {
    "target": "com.amazonaws.licenseanagerusersubscriptions#ServiceQuotaExceededException"
  },
  {
    "target": "com.amazonaws.licenseanagerusersubscriptions#ThrottlingException"
  },
  {
    "target": "com.amazonaws.licenseanagerusersubscriptions#ValidationException"
  }
],
"traits": {
  "smithy.api#documentation": "<p>Lists the identity providers for user-based subscriptions.</p>",
  "smithy.api#http": {
    "code": 200,
    "method": "POST",
    "uri": "/identity-provider/ListIdentityProviders"
  },
  "smithy.api#paginated":
{
  "inputToken": "NextToken",
  "outputToken": "NextToken",
  "pageSize": "MaxResults",
  "items": "IdentityProviderSummaries"
}
}
},
"com.amazonaws.licenseanagerusersubscriptions#ListIdentityProvidersRequest": {
  "type": "structure",
  "members": {
    "MaxResults": {
      "target": "com.amazonaws.licenseanagerusersubscriptions#BoxInteger",
      "traits": {
        "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
      }
    },
    "NextToken": {
      "target": "smithy.api#String",

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```

        "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
        }
    },
    "com.amazonaws.licenseanagerusersubscriptions#ListIdentityProvidersResponse":
{
    "type": "structure",
    "members": {
        "IdentityProviderSummaries": {
            "target": "com.amazonaws.licenseanagerusersubscriptions#IdentityProviderSummaryList",
            "traits": {
                "smithy.api#documentation": "<p>Metadata that describes the list identity providers operation.</p>",
                "smithy.api#required": {}
            }
        },
        "NextToken": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "com.amazonaws.licenseanagerusersubscriptions#ListInstances": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licenseanagerusersubscriptions#ListInstancesRequest"
        },
        "output": {
            "target": "com.amazonaws.licenseanagerusersubscriptions#ListInstancesResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licenseanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licenseanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licenseanagerusersubscriptions#InternalServerErrorException"
            },
            {
                "target": "com.amazonaws.licenseanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licenseanagerusersubscriptions#ServiceQuotaExceededException"
            }
        ]
    }
}

```

```

    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ThrottlingException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Lists the EC2 instances providing user-based subscriptions.</p>",
    "smithy.api#http": {
      "code": 200,
      "method": "POST",
      "uri": "/instance/ListInstances"
    },
    "smithy.api#paginated": {
      "inputToken": "NextToken",
      "outputToken": "NextToken",
      "pageSize": "MaxResults",
      "items": "InstanceSummaries"
    }
  }
},
"com.amazonaws.licenseanagerusersubscriptions#ListInstancesRequest": {
  "type": "structure",
  "members": {
    "MaxResults": {
      "target": "com.amazonaws.licenseanagerusersubscriptions#BoxInteger",
      "traits": {
        "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
      }
    },
    "NextToken": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>Token for the next set of results.</p>"
      }
    },
    "Filters": {
      "target": "com.amazonaws.licenseanagerusersubscriptions#FilterList",
      "traits": {
        "smithy.api#documentation": "<p>An array of structures that you can use to filter the results to those that match one or\n    more sets of key-value pairs that you specify.</p>"
      }
    }
  }
},
"com.amazonaws.licenseanagerusersubscriptions#ListInstancesResponse": {

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```

    "type":
"structure",
  "members": {
    "InstanceSummaries": {
      "target": "com.amazonaws.licenseanagerusersubscriptions#InstanceSummaryList",
      "traits": {
        "smithy.api#documentation": "<p>Metadata that describes the list instances operation.</p>"
      }
    },
    "NextToken": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>Token for the next set of results.</p>"
      }
    }
  }
},
"com.amazonaws.licenseanagerusersubscriptions#ListProductSubscriptions": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licenseanagerusersubscriptions#ListProductSubscriptionsRequest"
  },
  "output": {
    "target": "com.amazonaws.licenseanagerusersubscriptions#ListProductSubscriptionsResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ConflictException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#InternalServerErrorException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ResourceNotFoundException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ServiceQuotaExceededException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ThrottlingException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ValidationException"
    }
  ]
},

```

```

    "traits": {
      "smithy.api#documentation": "<p>Lists the user-based subscription products available from an identity
provider.</p>",
      "smithy.api#http": {
        "code": 200,
        "method": "POST",
        "uri": "/user/ListProductSubscriptions"
      },
      "smithy.api#paginated": {
        "inputToken": "NextToken",
        "outputToken": "NextToken",
        "pageSize": "MaxResults",
        "items": "ProductUserSummaries"
      }
    }
  },
  "com.amazonaws.licenseanagerusersubscriptions#ListProductSubscriptionsRequest": {
    "type": "structure",
    "members": {
      "Product": {
        "target": "smithy.api#String",
        "traits": {
          "smithy.api#documentation": "<p>The name
of the user-based subscription product.</p>",
          "smithy.api#required": {}
        }
      },
      "IdentityProvider": {
        "target": "com.amazonaws.licenseanagerusersubscriptions#IdentityProvider",
        "traits": {
          "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
          "smithy.api#required": {}
        }
      },
      "MaxResults": {
        "target": "com.amazonaws.licenseanagerusersubscriptions#BoxInteger",
        "traits": {
          "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
        }
      },
      "Filters": {
        "target": "com.amazonaws.licenseanagerusersubscriptions#FilterList",
        "traits": {
          "smithy.api#documentation": "<p>An array of structures that you can use to filter the results to those that match
one or\n more sets of key-value pairs that you specify.</p>"
        }
      }
    }
  },

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```

    "NextToken": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>Token for the next set of results.</p>"
      }
    }
  },
  "com.amazonaws.licenseanagerusersubscriptions#ListProductSubscriptionsResponse": {
    "type": "structure",
    "members": {
      "ProductUserSummaries": {
        "target": "com.amazonaws.licenseanagerusersubscriptions#ProductUserSummaryList",
        "traits": {
          "smithy.api#documentation": "<p>Metadata that describes the list product subscriptions
operation.</p>"
        }
      }
    },

    "NextToken": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>Token for the next set of results.</p>"
      }
    }
  },
  "com.amazonaws.licenseanagerusersubscriptions#ListUserAssociations": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ListUserAssociationsRequest"
    },
    "output": {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ListUserAssociationsResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licenseanagerusersubscriptions#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licenseanagerusersubscriptions#ConflictException"
      },
      {
        "target":
"com.amazonaws.licenseanagerusersubscriptions#InternalServerErrorException"
      },
      {
        "target": "com.amazonaws.licenseanagerusersubscriptions#ResourceNotFoundException"
      }
    ]
  }
}

```



```

    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ServiceQuotaExceededException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ThrottlingException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Lists user associations for an identity provider.</p>",
    "smithy.api#http": {
      "code": 200,
      "method": "POST",
      "uri": "/user/ListUserAssociations"
    },
    "smithy.api#paginated":
  {
    "inputToken": "NextToken",
    "outputToken": "NextToken",
    "pageSize": "MaxResults",
    "items": "InstanceUserSummaries"
  }
  },
  "com.amazonaws.licenseanagerusersubscriptions#ListUserAssociationsRequest": {
    "type": "structure",
    "members": {
      "InstanceId": {
        "target": "smithy.api#String",
        "traits": {
          "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
          "smithy.api#required": {}
        }
      },
      "IdentityProvider": {
        "target": "com.amazonaws.licenseanagerusersubscriptions#IdentityProvider",
        "traits": {
          "smithy.api#documentation": "<p>An object that specifies details for the identity
provider.</p>",
          "smithy.api#required": {}
        }
      },
      "MaxResults": {
        "target": "com.amazonaws.licenseanagerusersubscriptions#BoxInteger",

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```

    "traits": {
      "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
    }
  },
  "Filters": {
    "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
    "traits": {
      "smithy.api#documentation": "<p>An array of structures that you can use to filter the results to those
that match one or\n    more sets of key-value pairs that you specify.</p>"
    }
  },
  "NextToken": {
    "target": "smithy.api#String",
    "traits": {
      "smithy.api#documentation": "<p>Token for
the next set of results.</p>"
    }
  }
},
"com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse": {
  "type": "structure",
  "members": {
    "InstanceUserSummaries": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList",
      "traits": {
        "smithy.api#documentation": "<p>Metadata that describes the list user association operation.</p>"
      }
    },
    "NextToken": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>Token for the next set of results.</p>"
      }
    }
  }
},
"com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary": {
  "type": "structure",
  "members": {
    "Username": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>The user name from the identity provider of the user.</p>",
        "smithy.api#required": {}
      }
    }
  },

```

```

"Product": {
  "target": "smithy.api#String",
  "traits": {
    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
    "smithy.api#required": {}
  }
},
"IdentityProvider": {
  "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
  "traits": {
    "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
    "smithy.api#required": {}
  }
},
"Status": {
  "target": "smithy.api#String",
  "traits": {
    "smithy.api#documentation": "<p>The status of a product for a user.</p>",
    "smithy.api#required": {}
  }
},
"StatusMessage": {
  "target": "smithy.api#String",
  "traits": {
    "smithy.api#documentation": "<p>The status message for a product for a user.</p>"
  }
},
"Domain": {
  "target": "smithy.api#String",
  "traits": {
    "smithy.api#documentation": "<p>The domain name of the user.</p>"
  }
},
"SubscriptionStartDate": {
  "target": "smithy.api#String",
  "traits": {
    "smithy.api#documentation": "<p>The
start date of a subscription.</p>"
  }
},
"SubscriptionEndDate": {
  "target": "smithy.api#String",
  "traits": {
    "smithy.api#documentation": "<p>The end date of a subscription.</p>"
  }
}
},

```

```

"traits": {
  "smithy.api#documentation": "<p>The summary of the user-based subscription products for a user.</p>"
}
},
"com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary"
  }
},
"com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerError"
    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Registers an identity provider for user-based subscriptions.</p>",
    "smithy.api#http": {
      "code": 200,
      "method": "POST",
      "uri": "/identity-provider/RegisterIdentityProvider"
    }
  },

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```

    "smithy.api#idempotent": {}
  }
},
"com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest": {
  "type": "structure",
  "members": {
    "IdentityProvider": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
      "traits": {
        "smithy.api#documentation": "<p>An object that specifies details for the identity
provider.</p>",
        "smithy.api#required": {}
      }
    },
    "Product": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
        "smithy.api#required": {}
      }
    },
    "Settings": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
      "traits": {
        "smithy.api#documentation": "<p>The registered identity providers product related configuration
settings such as the\n  subnets to provision VPC endpoints.</p>"
      }
    }
  }
},
"com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse": {
  "type": "structure",
  "members": {
    "IdentityProviderSummary": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
      "traits": {
        "smithy.api#documentation": "<p>Metadata that describes the results of an identity provider
operation.</p>",
        "smithy.api#required": {}
      }
    }
  }
},
"com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException": {
  "type": "structure",
  "members": {
    "message": {

```

```

        "target": "smithy.api#String"
    }
},
"traits": {
    "smithy.api#documentation": "<p>The resource couldn't be found.</p>",
    "smithy.api#error": "client",
    "smithy.api#httpError": 404
}
},
"com.amazonaws.licensemanagerusersubscriptions#SecurityGroup": {
    "type": "string",
"traits": {
    "smithy.api#length": {
        "min": 5,
        "max": 200
    },
    "smithy.api#pattern": "^sg-([0-9a-z]{8})([0-9a-z]{17})$"
}
},
"com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException": {
    "type": "structure",
    "members": {
        "message": {
            "target": "smithy.api#String"
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>The request failed because a service quota is exceeded.</p>",
        "smithy.api#error": "client"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#Settings": {
    "type": "structure",
    "members": {
        "Subnets": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
            "traits": {
                "smithy.api#documentation":
"<p>The subnets defined for the registered identity provider.</p>",
                "smithy.api#length": {
                    "min": 1
                },
                "smithy.api#required": {}
            }
        }
    },
    "SecurityGroupId": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",

```

```

    "traits": {
      "smithy.api#documentation": "<p>A security group ID that allows inbound TCP port 1688
communication between resources in your VPC and the VPC endpoint for activation servers.</p>",
      "smithy.api#required": {}
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>The registered identity providers product related configuration settings
such as the subnets to provision VPC endpoints, and the security group ID that
is associated with the VPC endpoints. The security group should permit inbound TCP port 1688
communication from resources in the VPC.</p>"
  }
},
"com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerErrorException"
    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Starts a product subscription for a user with the specified identity
provider.</p>\n <note>\n <p>Your estimated bill for charges on the number of users and related costs

```

will take 48\n hours to appear for billing periods that haven't closed (marked as <b>Pending</b> billing status) in Amazon Web Services Billing.

For more information, see <a

href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your\n monthly charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p>\n </note>

```
"smithy.api#http": {
  "code": 200,
  "method": "POST",
  "uri": "/user/StartProductSubscription"
}
},
"com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest": {
  "type": "structure",
  "members": {
    "Username": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>The user name from the identity provider of the user.</p>",
        "smithy.api#required": {}
      }
    },
    "IdentityProvider": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
      "traits": {
        "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
        "smithy.api#required": {}
      }
    },
    "Product": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
        "smithy.api#required": {}
      }
    },
    "Domain": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>The domain name of the user.</p>"
      }
    }
  }
},
"com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse": {
  "type": "structure",
  "members": {
    "ProductUserSummary": {
```



```

        "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
        "traits": {
            "smithy.api#documentation": "<p>Metadata that describes the start product subscription
operation.</p>",
            "smithy.api#required": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerErrorException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Stops a product subscription for a user with the specified identity
provider.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/StopProductSubscription"
            }
        }
    }
}

```

```

    }
  },
  "com.amazonaws.licenseanagerusersubscriptions#StopProductSubscriptionRequest": {
    "type": "structure",
    "members": {
      "Username": {
        "target": "smithy.api#String",
        "traits": {
          "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>",
          "smithy.api#required": {}
        }
      },
      "IdentityProvider": {
        "target": "com.amazonaws.licenseanagerusersubscriptions#IdentityProvider",
        "traits": {
          "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
          "smithy.api#required": {}
        }
      }
    }
  },
  "Product": {
    "target": "smithy.api#String",
    "traits": {
      "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
      "smithy.api#required": {}
    }
  },
  "Domain": {
    "target": "smithy.api#String",
    "traits": {
      "smithy.api#documentation": "<p>The domain name of the user.</p>"
    }
  }
},
"com.amazonaws.licenseanagerusersubscriptions#StopProductSubscriptionResponse": {
  "type": "structure",
  "members": {
    "ProductUserSummary": {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ProductUserSummary",
      "traits": {
        "smithy.api#documentation":
"<p>Metadata that describes the start product subscription operation.</p>",
        "smithy.api#required": {}
      }
    }
  }
}

```

```

},
"com.amazonaws.licensemanagerusersubscriptions#StringList": {
  "type": "list",
  "member": {
    "target": "smithy.api#String"
  }
},
"com.amazonaws.licensemanagerusersubscriptions#Subnet": {
  "type": "string",
  "traits": {
    "smithy.api#pattern": "subnet-[a-z0-9]{8,17}"
  }
},
"com.amazonaws.licensemanagerusersubscriptions#Subnets": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanagerusersubscriptions#Subnet"
  }
},
"com.amazonaws.licensemanagerusersubscriptions#ThrottlingException": {
  "type": "structure",
  "members": {
    "message": {
      "target": "smithy.api#String"
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>The request was denied because of request throttling. Retry the request.</p>",
    "smithy.api#error": "client"
  }
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerErrorException"
    }
  ]
}

```

```

    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ThrottlingException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Updates additional product configuration settings for the registered
identity\n  provider.</p>",
    "smithy.api#http": {
      "code": 200,
      "method": "POST",
      "uri": "/identity-provider/UpdateIdentityProviderSettings"
    },
    "smithy.api#idempotent": {}
  }
},
"com.amazonaws.licenseanagerusersubscriptions#UpdateIdentityProviderSettingsRequest": {
  "type": "structure",
  "members": {
    "IdentityProvider": {
      "target": "com.amazonaws.licenseanagerusersubscriptions#IdentityProvider",
      "traits": {
        "smithy.api#required": {}
      }
    },
    "Product": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
        "smithy.api#required": {}
      }
    },
    "UpdateSettings": {
      "target": "com.amazonaws.licenseanagerusersubscriptions#UpdateSettings",
      "traits": {
        "smithy.api#documentation": "<p>Updates the registered identity providers product related
configuration settings. You can\n  update any combination of settings in a single operation such as the:</p>\n
<ul>\n  <li>\n    <p>Subnets which you want to add to provision VPC endpoints.</p>\n    </li>\n  <li>\n    <p>Subnets which you want to remove the VPC endpoints from.</p>\n    </li>\n  <li>\n    <p>Security group ID which permits traffic to the VPC endpoints.</p>\n    </li>\n  </ul>",
        "smithy.api#required": {}
      }
    }
  }
},

```

```

"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse": {
  "type": "structure",
  "members": {
    "IdentityProviderSummary": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
      "traits": {
        "smithy.api#required": {}
      }
    }
  }
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateSettings": {
  "type": "structure",
  "members": {
    "AddSubnets": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
      "traits": {
        "smithy.api#documentation": "<p>The ID of one or more subnets in which License Manager will
create a VPC endpoint for products that\n    require connectivity to activation servers.</p>",
        "smithy.api#required": {}
      }
    },
    "RemoveSubnets": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
      "traits": {
        "smithy.api#documentation": "<p>The ID of one or more subnets to remove.</p>",
        "smithy.api#required": {}
      }
    },
    "SecurityGroupId": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
      "traits": {
        "smithy.api#documentation": "<p>A security group ID
that allows inbound TCP port 1688 communication between resources in\n    your VPC and the VPC endpoints for
activation servers.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>Updates the registered identity providers product related configuration
settings such as\n    the subnets to provision VPC endpoints.</p>"
  }
},
"com.amazonaws.licensemanagerusersubscriptions#ValidationException": {
  "type": "structure",
  "members": {
    "message": {

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```

        "target": "smithy.api#String"
    }
},
"traits": {
    "smithy.api#documentation": "<p>A parameter is not valid.</p>",
    "smithy.api#error": "client"
}
}
}
{
"smithy": "2.0",
"metadata": {
    "suppressions": [
        {
            "id": "HttpMethodSemantics",
            "namespace": "*"
        },
        {
            "id": "HttpStatusCodeSemantics",
            "namespace": "*"
        },
        {
            "id": "PaginatedTrait",
            "namespace": "*"
        },
        {
            "id": "HttpHeaderTrait",
            "namespace": "*"
        },
        {
            "id": "HttpUriConflict",
            "namespace": "*"
        },
        {
            "id": "Service",
            "namespace": "*"
        }
    ]
},
"shapes": {
    "com.amazonaws.licensemanager#AWSLicenseManager": {
        "type": "service",
        "version": "2018-08-01",
        "operations": [
            {
                "target": "com.amazonaws.licensemanager#AcceptGrant"
            },

```

```

{
  "target": "com.amazonaws.licensemanager#CheckInLicense"
},
{
  "target": "com.amazonaws.licensemanager#CheckoutBorrowLicense"
},
{
  "target": "com.amazonaws.licensemanager#CheckoutLicense"
},
{
  "target": "com.amazonaws.licensemanager#CreateGrant"
},
{
  "target": "com.amazonaws.licensemanager#CreateGrantVersion"
},
{
  "target": "com.amazonaws.licensemanager#CreateLicense"
},
{
  "target": "com.amazonaws.licensemanager#CreateLicenseConfiguration"
},
{
  "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource"
},
{
  "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator"
},
{
  "target": "com.amazonaws.licensemanager#CreateLicenseVersion"
},
{
  "target": "com.amazonaws.licensemanager#CreateToken"
},
{
  "target": "com.amazonaws.licensemanager#DeleteGrant"
},
{
  "target": "com.amazonaws.licensemanager#DeleteLicense"
},
{
  "target": "com.amazonaws.licensemanager#DeleteLicenseConfiguration"
},
{
  "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator"
},
{
  "target": "com.amazonaws.licensemanager#DeleteToken"
}

```

```

    },
    {
      "target": "com.amazonaws.licensemanager#ExtendLicenseConsumption"
    }
  },
  {
    "target": "com.amazonaws.licensemanager#GetAccessToken"
  },
  {
    "target": "com.amazonaws.licensemanager#GetGrant"
  },
  {
    "target": "com.amazonaws.licensemanager#GetLicense"
  },
  {
    "target": "com.amazonaws.licensemanager#GetLicenseConfiguration"
  },
  {
    "target": "com.amazonaws.licensemanager#GetLicenseConversionTask"
  },
  {
    "target": "com.amazonaws.licensemanager#GetLicenseManagerReportGenerator"
  },
  {
    "target": "com.amazonaws.licensemanager#GetLicenseUsage"
  },
  {
    "target": "com.amazonaws.licensemanager#GetServiceSettings"
  },
  {
    "target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration"
  },
  {
    "target": "com.amazonaws.licensemanager#ListDistributedGrants"
  },
  {
    "target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations"
  },
  {
    "target": "com.amazonaws.licensemanager#ListLicenseConfigurations"
  },
  {
    "target": "com.amazonaws.licensemanager#ListLicenseConversionTasks"
  },
  {
    "target": "com.amazonaws.licensemanager#ListLicenseManagerReportGenerators"
  },
  {

```



```

    "target": "com.amazonaws.licensemanager#ListLicenses"
  },
  {
    "target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResource"
  },
  {
    "target": "com.amazonaws.licensemanager#ListLicenseVersions"
  },
  {
    "target": "com.amazonaws.licensemanager#ListReceivedGrants"
  },
  {
    "target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganization"
  },
  {
    "target": "com.amazonaws.licensemanager#ListReceivedLicenses"
  },
  {
    "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganization"
  },
  {
    "target": "com.amazonaws.licensemanager#ListResourceInventory"
  },
  {
    "target": "com.amazonaws.licensemanager#ListTagsForResource"
  },
  {
    "target": "com.amazonaws.licensemanager#ListTokens"
  },
  {
    "target": "com.amazonaws.licensemanager#ListUsageForLicenseConfiguration"
  },
  {
    "target": "com.amazonaws.licensemanager#RejectGrant"
  },
  {
    "target": "com.amazonaws.licensemanager#TagResource"
  },
  {
    "target": "com.amazonaws.licensemanager#UntagResource"
  },
  {
    "target": "com.amazonaws.licensemanager#UpdateLicenseConfiguration"
  },
  {
    "target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator"
  },
  },

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    {
      "target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource"
    },
    {
      "target": "com.amazonaws.licensemanager#UpdateServiceSettings"
    }
  ],
  "traits": {
    "aws.api#service": {
      "sdkId": "License Manager",
      "arnNamespace": "license-manager",
      "cloudFormationName": "LicenseManager",
      "cloudTrailEventSource": "licensemanager.amazonaws.com",
      "endpointPrefix": "license-manager"
    },
    "aws.auth#sigv4": {
      "name": "license-manager"
    },
    "aws.protocols#awsJson1_1": {},
    "smithy.api#documentation": "<p>License Manager makes it easier to manage licenses from software vendors across multiple Amazon Web Services accounts and on-premises servers.</p>",
    "smithy.api#title": "AWS License Manager",
    "smithy.api#xmlNamespace": {
      "uri": "https://license-manager.amazonaws.com/doc/2018_08_01"
    },
    "smithy.rules#endpointRuleSet": {
      "version": "1.0",
      "parameters": {
        "Region": {
          "builtIn": "AWS::Region",
          "required": false,
          "documentation": "The AWS region used to dispatch the request.",
          "type": "String"
        }
      },
      "UseDualStack": {
        "builtIn": "AWS::UseDualStack",
        "required": true,
        "default": false,
        "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
        "type": "Boolean"
      },
      "UseFIPS": {
        "builtIn": "AWS::UseFIPS",
        "required": true,
        "default": false,
        "documentation": "When true, send

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this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",

```
    "type": "Boolean"
  },
  "Endpoint": {
    "builtIn": "SDK::Endpoint",
    "required": false,
    "documentation": "Override the endpoint used to send this request",
    "type": "String"
  }
},
"rules": [
  {
    "conditions": [
      {
        "fn": "isSet",
        "argv": [
          {
            "ref": "Endpoint"
          }
        ]
      }
    ]
  }
],
"type": "tree",
"rules": [
  {
    "conditions": [
      {
        "fn": "booleanEquals",
        "argv": [
          {
            "ref": "UseFIPS"
          },
          true
        ]
      }
    ]
  }
],
"error": "Invalid Configuration: FIPS and custom endpoint are not supported",
"type": "error"
},
{
  "conditions": [
    {
      "fn": "booleanEquals",
      "argv": [
        {
```

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        "ref": "UseDualStack"
    },
    true
]
}
],
"error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
"type": "error"
},
{
    "conditions": [],
    "endpoint": {
        "url": {
            "ref": "Endpoint"
        },
        "properties": {},
        "headers": {}
    },
    "type": "endpoint"
}
]
},
{
    "conditions": [
        {
            "fn": "isSet",
            "argv": [
                {
                    "ref": "Region"
                }
            ]
        }
    ]
},
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"rules": [
    {
        "conditions": [
            {
                "fn": "aws.partition",
                "argv": [
                    {
                        "ref": "Region"
                    }
                ]
            },
            "assign": "PartitionResult"
        }
    ],
    "type": "tree",

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"rules": [
  {
    "conditions": [
      {
        "fn": "booleanEquals",
        "argv": [
          {
            "ref": "UseFIPS"
          },
          true
        ]
      },
      {
        "fn": "booleanEquals",
        "argv": [
          {
            "ref": "UseDualStack"
          },
          true
        ]
      }
    ],
    "type": "tree",
    "rules": [
      {
        "conditions": [
          {
            "fn": "booleanEquals",
            "argv": [
              true,
              {
                "fn": "getAttr",
                "argv": [
                  {
                    "ref": "PartitionResult"
                  },
                  "supportsFIPS"
                ]
              }
            ]
          }
        ]
      }
    ],
    "fn": "booleanEquals",
    "argv": [
      true,
      {

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        "fn": "getAttr",
        "argv": [
            {
                "ref": "PartitionResult"
            },
        ],
    "supportsDualStack"
        ]
    }
    ]
    }
    ],
    "type": "tree",
    "rules": [
        {
            "conditions": [],
            "endpoint": {
                "url": "https://license-manager-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                "properties": {},
                "headers": {}
            },
            "type": "endpoint"
        }
    ],
    {
        "conditions": [],
        "error": "FIPS and DualStack are enabled, but this partition does not support one or
both",
        "type": "error"
    }
    ],
    },
    {
        "conditions": [
            {
                "fn": "booleanEquals",
                "argv": [
                    {
                        "ref": "UseFIPS"
                    },
                ],
                true
            }
        ]
    }
    ],
    ],

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"type": "tree",
"rules": [
  {
    "conditions": [
      {
        "fn": "booleanEquals",
        "argv": [
          true,
          {
            "fn": "getAttr",
            "argv": [
              {
                "ref": "PartitionResult"
              },
              "supportsFIPS"
            ]
          }
        ]
      }
    ],
    "type": "tree",
    "rules": [
      {
        "conditions": [],
        "endpoint": {
          "url": "https://license-manager-fips.{Region}.{PartitionResult#dnsSuffix}",
          "properties": {},
          "headers": {}
        },
        "type": "endpoint"
      }
    ],
    "error": "FIPS is enabled but this
partition does not support FIPS",
    "type": "error"
  }
],
{
  "conditions": [
    {
      "fn": "booleanEquals",
      "argv": [

```

```

        {
            "ref": "UseDualStack"
        },
        true
    ]
}
],
"type": "tree",
"rules": [
    {
        "conditions": [
            {
                "fn": "booleanEquals",
                "argv": [
                    true,
                    {
                        "fn": "getAttr",
                        "argv": [
                            {
                                "ref": "PartitionResult"
                            },
                        ],
                    }
                ],
            }
        ],
        "supportsDualStack"
    }
]
}
],
"type": "tree",
"rules": [
    {
        "conditions": [],
        "endpoint": {
            "url": "https://license-
manager.{Region}.{PartitionResult#dualStackDnsSuffix}",
            "properties": {},
            "headers": {}
        },
    },
    {
        "type": "endpoint"
    }
]
},
{
    "conditions": [],
    "error": "DualStack is enabled but this partition does not support DualStack",
    "type": "error"
}

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        ]
      },
      {
        "conditions": [],
        "endpoint": {
          "url": "https://license-manager.{Region}.{PartitionResult#dnsSuffix}",
          "properties": {},
          "headers": {}
        },
        "type": "endpoint"
      }
    ]
  }
]
},
{
  "conditions": [],
  "error": "Invalid Configuration: Missing Region",
  "type": "error"
}
]
},
"smithy.rules#endpointTests": {
  "testCases": [
    {
      "documentation": "For region af-south-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint":
{
          "url": "https://license-manager.af-south-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "af-south-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region ap-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.ap-east-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "ap-east-1",
        "UseFIPS": false,

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        "UseDualStack": false
    }
},
{
    "documentation": "For region ap-northeast-1 with FIPS disabled and DualStack disabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager.ap-northeast-1.amazonaws.com"
        }
    },
    "params": {
        "Region": "ap-northeast-1",
        "UseFIPS": false,
        "UseDualStack": false
    }
},
{
    "documentation": "For region ap-northeast-2 with FIPS disabled and DualStack disabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager.ap-northeast-2.amazonaws.com"
        }
    },
    "params": {
        "Region": "ap-northeast-2",
        "UseFIPS": false,
        "UseDualStack": false
    }
},
{
    "documentation": "For region ap-northeast-3 with FIPS disabled and DualStack disabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager.ap-northeast-3.amazonaws.com"
        }
    },
    "params": {
        "Region": "ap-northeast-3",
        "UseFIPS": false,
        "UseDualStack": false
    }
},
{
    "documentation": "For region ap-south-1 with FIPS disabled and DualStack disabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager.ap-south-1.amazonaws.com"

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```

    }
  },
  "params": {
    "Region": "ap-south-1",
    "UseFIPS": false,
    "UseDualStack": false
  }
},
{
  "documentation": "For region ap-southeast-1 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager.ap-southeast-1.amazonaws.com"
    }
  }
}

},
"params": {
  "Region": "ap-southeast-1",
  "UseFIPS": false,
  "UseDualStack": false
}
},
{
  "documentation": "For region ap-southeast-2 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager.ap-southeast-2.amazonaws.com"
    }
  }
},
"params": {
  "Region": "ap-southeast-2",
  "UseFIPS": false,
  "UseDualStack": false
}
},
{
  "documentation": "For region ap-southeast-3 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager.ap-southeast-3.amazonaws.com"
    }
  }
},
"params": {
  "Region": "ap-southeast-3",
  "UseFIPS": false,
  "UseDualStack": false
}
}

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```

    },
    {
      "documentation": "For region ca-central-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.ca-central-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "ca-central-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region eu-central-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.eu-central-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "eu-central-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region eu-north-1 with FIPS
disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.eu-north-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "eu-north-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region eu-south-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.eu-south-1.amazonaws.com"
        }
      }
    }

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```

    },
    "params": {
      "Region":
"eu-south-1",
      "UseFIPS": false,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For region eu-west-1 with FIPS disabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager.eu-west-1.amazonaws.com"
      }
    },
    "params": {
      "Region": "eu-west-1",
      "UseFIPS": false,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For region eu-west-2 with FIPS disabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager.eu-west-2.amazonaws.com"
      }
    },
    "params": {
      "Region": "eu-west-2",
      "UseFIPS": false,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For region eu-west-3 with FIPS disabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager.eu-west-3.amazonaws.com"
      }
    },
    "params": {
      "Region": "eu-west-3",
      "UseFIPS": false,
      "UseDualStack": false
    }
  }
}

```

```

    },
    {
      "documentation": "For region me-south-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.me-south-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "me-south-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region sa-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.sa-east-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "sa-east-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.us-east-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
  },
  {
    "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-fips.us-east-1.amazonaws.com"
      }
    },
  },

```

```

    "params": {
      "Region": "us-east-1",
      "UseFIPS": true,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For region us-east-2 with FIPS disabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager.us-east-2.amazonaws.com"
      }
    }
  },
  {
    "params": {
      "Region": "us-east-2",
      "UseFIPS": false,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For region us-east-2 with FIPS enabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-fips.us-east-2.amazonaws.com"
      }
    }
  },
  {
    "params": {
      "Region": "us-east-2",
      "UseFIPS": true,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For region
us-west-1 with FIPS disabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager.us-west-1.amazonaws.com"
      }
    }
  },
  {
    "params": {
      "Region": "us-west-1",
      "UseFIPS": false,
      "UseDualStack": false
    }
  },
  {

```

```

        "documentation": "For region us-west-1 with FIPS enabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager-fips.us-west-1.amazonaws.com"
            }
        },
        "params": {

"Region": "us-west-1",
    "UseFIPS": true,
    "UseDualStack": false
    }
},
{
    "documentation": "For region us-west-2 with FIPS disabled and DualStack disabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager.us-west-2.amazonaws.com"
        }
    },
    "params": {
        "Region": "us-west-2",
        "UseFIPS": false,
        "UseDualStack": false
    }
},
{
    "documentation": "For region us-west-2 with FIPS enabled and DualStack disabled",

"expect": {
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        "url": "https://license-manager-fips.us-west-2.amazonaws.com"
    }
},
    "params": {
        "Region": "us-west-2",
        "UseFIPS": true,
        "UseDualStack": false
    }
},
{
    "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager-fips.us-east-1.api.aws"
        }
    },
    "params": {

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```

        "Region": "us-east-1",
        "UseFIPS": true,

        "UseDualStack": true
    },
    {
        "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager.us-east-1.api.aws"
            }
        },
        "params": {
            "Region": "us-east-1",
            "UseFIPS": false,
            "UseDualStack": true
        }
    },
    {
        "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url":
"https://license-manager.cn-north-1.amazonaws.com.cn"
            }
        },
        "params": {
            "Region": "cn-north-1",
            "UseFIPS": false,
            "UseDualStack": false
        }
    },
    {
        "documentation": "For region cn-northwest-1 with FIPS disabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager.cn-northwest-1.amazonaws.com.cn"
            }
        },
        "params": {
            "Region": "cn-northwest-1",
            "UseFIPS": false,
            "UseDualStack": false
        }
    }
},
{

```

```

    "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-fips.cn-north-1.api.amazonwebservices.com.cn"
      }
    },
    "params": {
      "Region": "cn-north-1",
      "UseFIPS": true,
      "UseDualStack": true
    }
  },
  {
    "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-fips.cn-north-1.amazonaws.com.cn"
      }
    },
    "params": {
      "Region": "cn-north-1",
      "UseFIPS": true,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager.cn-north-1.api.amazonwebservices.com.cn"
      }
    },
    "params": {
      "Region": "cn-north-1",
      "UseFIPS": false,
      "UseDualStack": true
    }
  },
  {
    "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager.us-gov-east-1.amazonaws.com"
      }
    },
    "params": {
      "Region": "us-gov-east-1",

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```

        "UseFIPS": false,
        "UseDualStack": false
    }
},
{
    "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager-fips.us-gov-east-1.amazonaws.com"
        }
    },
    "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": true,
        "UseDualStack": false
    }
},
{
    "documentation": "For region us-gov-west-1 with FIPS disabled and DualStack disabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager.us-gov-west-1.amazonaws.com"
        }
    },
    "params": {
        "Region": "us-gov-west-1",
        "UseFIPS": false,
        "UseDualStack": false
    }
},
{
    "documentation":
    "For region us-gov-west-1 with FIPS enabled and DualStack disabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager-fips.us-gov-west-1.amazonaws.com"
        }
    },
    "params": {
        "Region": "us-gov-west-1",
        "UseFIPS": true,
        "UseDualStack": false
    }
},
{
    "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
    "expect": {
        "endpoint": {

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```

        "url": "https://license-manager-fips.us-gov-east-1.api.aws"
    }
},
"params": {
    "Region": "us-gov-east-1",
    "UseFIPS": true,
    "UseDualStack": true
}
},
{
    "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager.us-gov-east-1.api.aws"
        }
    },
    "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": false,
        "UseDualStack": true
    }
},
{
    "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack
disabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager.us-iso-east-1.c2s.ic.gov"
        }
    },
    "params": {
        "Region": "us-iso-east-1",
        "UseFIPS": false,
        "UseDualStack": false
    }
},
{
    "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
    "expect": {
        "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
    },
    "params": {
        "Region": "us-iso-east-1",
        "UseFIPS": true,
        "UseDualStack": true
    }
},
}

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```

{
  "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager-fips.us-iso-east-1.c2s.ic.gov"
    }
  },
  "params": {
    "Region": "us-iso-east-1",
    "UseFIPS": true,
    "UseDualStack": false
  }
},
{
  "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
  "expect": {
    "error": "DualStack is enabled
but this partition does not support DualStack"
  },
  "params": {
    "Region": "us-iso-east-1",
    "UseFIPS": false,
    "UseDualStack": true
  }
},
{
  "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager.us-isob-east-1.sc2s.sgov.gov"
    }
  },
  "params": {
    "Region": "us-isob-east-1",
    "UseFIPS": false,
    "UseDualStack": false
  }
},
{
  "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
  "expect": {
    "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
  },
  "params": {
    "Region": "us-isob-east-1",
    "UseFIPS": true,
    "UseDualStack": true
  }
}

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    }
  },
  {
    "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-fips.us-isob-east-1.sc2s.sgov.gov"
      }
    },
  },
  "params": {
    "Region": "us-isob-east-1",
    "UseFIPS": true,
    "UseDualStack": false
  }
},
{
  "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
  "expect": {
    "error": "DualStack is enabled but this partition does not support DualStack"
  },
  "params": {
    "Region": "us-isob-east-1",
    "UseFIPS": false,
    "UseDualStack": true
  }
},
{
  "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
  "expect": {
    "endpoint": {
      "url": "https://example.com"
    }
  },
  "params": {
    "Region": "us-east-1",
    "UseFIPS": false,
    "UseDualStack": false,
    "Endpoint": "https://example.com"
  }
},
{
  "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
  "expect": {
    "endpoint": {
      "url": "https://example.com"
    }
  }
}

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    }
  },
  "params": {
    "UseFIPS": false,

"UseDualStack": false,
    "Endpoint": "https://example.com"
  }
},
{
  "documentation": "For custom endpoint with fips enabled and dualstack disabled",
  "expect": {
    "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
  },
  "params": {
    "Region": "us-east-1",
    "UseFIPS": true,
    "UseDualStack": false,
    "Endpoint": "https://example.com"
  }
},
{
  "documentation": "For custom endpoint with fips disabled and dualstack enabled",
  "expect": {
    "error":
"Invalid Configuration: Dualstack and custom endpoint are not supported"
  },
  "params": {
    "Region": "us-east-1",
    "UseFIPS": false,
    "UseDualStack": true,
    "Endpoint": "https://example.com"
  }
},
{
  "documentation": "Missing region",
  "expect": {
    "error": "Invalid Configuration: Missing Region"
  }
}
],
"version": "1.0"
}
},
"com.amazonaws.licensemanager#AcceptGrant": {
  "type": "operation",
  "input": {

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    "target": "com.amazonaws.licensemanager#AcceptGrantRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#AcceptGrantResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    },
    {
      "target": "com.amazonaws.licensemanager#ValidationException"
    }
  ]
},
"traits": {
  "smithy.api#documentation": "<p>Accepts the specified grant.</p>"
}
},
"com.amazonaws.licensemanager#AcceptGrantRequest": {
  "type": "structure",
  "members": {
    "GrantArn": {
      "target": "com.amazonaws.licensemanager#Arn",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
        "smithy.api#required": {}
      }
    }
  },
  "traits": {
    "smithy.api#input": {}
  }
}

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    },
    "com.amazonaws.licensemanager#AcceptGrantResponse": {
      "type": "structure",
      "members": {
        "GrantArn": {
          "target": "com.amazonaws.licensemanager#Arn",
          "traits": {
            "smithy.api#documentation": "<p>Grant
ARN.</p>"
          }
        },
        "Status": {
          "target": "com.amazonaws.licensemanager#GrantStatus",
          "traits": {
            "smithy.api#documentation": "<p>Grant status.</p>"
          }
        },
        "Version": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Grant version.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#AccessDeniedException": {
      "type": "structure",
      "members": {
        "Message": {
          "target": "com.amazonaws.licensemanager#Message"
        }
      },
      "traits": {
        "aws.protocols#awsQueryError": {}
      }
    },
    "code": "ServiceAccessDenied",
    "httpResponseCode": 401
  },
  "smithy.api#documentation": "<p>Access to resource denied.</p>",
  "smithy.api#error": "client",
  "smithy.api#httpError": 401
}
},
"com.amazonaws.licensemanager#ActivationOverrideBehavior": {
  "type": "enum",

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"members": {
  "DISTRIBUTED_GRANTS_ONLY": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "DISTRIBUTED_GRANTS_ONLY"
    }
  },
  "ALL_GRANTS_PERMITTED_BY_ISSUER": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "ALL_GRANTS_PERMITTED_BY_ISSUER"
    }
  }
},
"com.amazonaws.licensemanager#AllowedOperation": {
  "type": "enum",
  "members": {
    "CREATE_GRANT": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "CreateGrant"
      }
    },
    "CHECKOUT_LICENSE": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "CheckoutLicense"
      }
    },
    "CHECKOUT_BORROW_LICENSE": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "CheckoutBorrowLicense"
      }
    },
    "CHECK_IN_LICENSE": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "CheckInLicense"
      }
    },
    "EXTEND_CONSUMPTION_LICENSE": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "ExtendConsumptionLicense"
      }
    }
  }
}

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    }
  },
  "LIST_PURCHASED_LICENSES": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "ListPurchasedLicenses"
    }
  },
  "CREATE_TOKEN": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "CreateToken"
    }
  }
},
"com.amazonaws.licensemanager#AllowedOperationList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanager#AllowedOperation"
  },
  "traits": {
    "smithy.api#length": {
      "min": 1,
      "max":
7
    }
  }
},
"com.amazonaws.licensemanager#Arn": {
  "type": "string",
  "traits": {
    "smithy.api#length": {
      "min": 0,
      "max": 2048
    },
    "smithy.api#pattern": "^arn:aws(-(cn|us-gov|iso-b|iso-c|iso-d)?:[A-Za-z0-9][A-Za-z0-9_/.-]{0,62}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9][A-Za-z0-9:/+=,@.-]{0,1023})$"
  }
},
"com.amazonaws.licensemanager#ArnList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanager#Arn"
  }
},
"com.amazonaws.licensemanager#AuthorizationException": {
  "type": "structure",

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"members": {
  "Message": {
    "target": "com.amazonaws.licensemanager#Message"
  }
},
"traits": {
  "aws.protocols#awsQueryError":
{
  "code": "AuthorizationFailure",
  "httpResponseCode": 403
},
  "smithy.api#documentation": "<p>The Amazon Web Services user account does not have permission to
perform the action. Check the IAM\n      policy associated with this account.</p>",
  "smithy.api#error": "client",
  "smithy.api#httpError": 403
}
},
"com.amazonaws.licensemanager#AutomatedDiscoveryInformation": {
  "type": "structure",
  "members": {
    "LastRunTime": {
      "target": "com.amazonaws.licensemanager#DateTime",
      "traits": {
        "smithy.api#documentation": "<p>Time that automated discovery last ran.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>Describes automated discovery.</p>"
  }
},
"com.amazonaws.licensemanager#Boolean": {
  "type": "boolean",
  "traits": {
    "smithy.api#default": false
  }
},
"com.amazonaws.licensemanager#BorrowConfiguration": {
  "type": "structure",
  "members": {
    "AllowEarlyCheckIn": {
      "target": "com.amazonaws.licensemanager#BoxBoolean",
      "traits": {
        "smithy.api#documentation": "<p>Indicates whether early check-ins are allowed.</p>",
        "smithy.api#required": {}
      }
    }
  },
}

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    "MaxTimeToLiveInMinutes": {
      "target": "com.amazonaws.licensemanager#BoxInteger",
      "traits": {
        "smithy.api#documentation": "<p>Maximum time for the borrow configuration, in minutes.</p>",
        "smithy.api#required": {}
      }
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>Details about a borrow configuration.</p>"
  }
},
"com.amazonaws.licensemanager#BoxBoolean": {
  "type": "boolean"
},
"com.amazonaws.licensemanager#BoxInteger": {
  "type": "integer"
},
"com.amazonaws.licensemanager#BoxLong": {
  "type": "long"
},
"com.amazonaws.licensemanager#CheckInLicense": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#CheckInLicenseRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#CheckInLicenseResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    }
  ],
  {
    "target": "com.amazonaws.licensemanager#ConflictException"
  },
  {
    "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
  },
  {
    "target": "com.amazonaws.licensemanager#RateLimitExceededException"
  },
  {

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        "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
    },
    {
        "target": "com.amazonaws.licensemanager#ServerInternalException"
    },
    {
        "target": "com.amazonaws.licensemanager#ValidationException"
    }
],
"traits": {
    "smithy.api#documentation": "<p>Checks in the specified license. Check in a license when it is no longer
in use.</p>"
}
},
"com.amazonaws.licensemanager#CheckInLicenseRequest":
{
    "type": "structure",
    "members": {
        "LicenseConsumptionToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>License consumption token.</p>",
                "smithy.api#required": {}
            }
        },
        "Beneficiary": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>License beneficiary.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#CheckInLicenseResponse": {
    "type": "structure",
    "members": {},
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#CheckoutBorrowLicense":
{
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest"
    }
}

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    },
    "output": {
      "target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#EntitlementNotAllowedException"
      },
      {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
      },
      {
        "target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
      },
      {
        "target":
"com.amazonaws.licensemanager#RateLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#RedirectException"
      },
      {
        "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
      },
      {
        "target": "com.amazonaws.licensemanager#ServerInternalException"
      },
      {
        "target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
      },
      {
        "target": "com.amazonaws.licensemanager#ValidationException"
      }
    ],
    "traits": {
      "smithy.api#documentation": "<p>Checks out the specified license for offline use.</p>"
    }
  },
  "com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest": {
    "type": "structure",
    "members":

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{
  "LicenseArn": {
    "target": "com.amazonaws.licensemanager#Arn",
    "traits": {
      "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license. The license must use the borrow consumption configuration.</p>",
      "smithy.api#required": {}
    }
  },
  "Entitlements": {
    "target": "com.amazonaws.licensemanager#EntitlementDataList",
    "traits": {
      "smithy.api#documentation": "<p>License entitlements. Partial checkouts are not supported.</p>",
      "smithy.api#required": {}
    }
  },
  "DigitalSignatureMethod": {
    "target": "com.amazonaws.licensemanager#DigitalSignatureMethod",
    "traits": {
      "smithy.api#documentation": "<p>Digital signature method. The possible value is JSON Web Signature (JWS) algorithm PS384.<br>For more information, see <a href=\"https://tools.ietf.org/html/rfc7518#section-3.5\">RFC 7518 Digital Signature with RSASSA-PSS</a>.</p>",
      "smithy.api#required": {}
    }
  },
  "NodeId": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Node ID.</p>"
    }
  },
  "CheckoutMetadata": {
    "target": "com.amazonaws.licensemanager#MetadataList",
    "traits": {
      "smithy.api#documentation": "<p>Information about constraints.</p>"
    }
  },
  "ClientToken": {
    "target": "com.amazonaws.licensemanager#ClientToken",
    "traits": {
      "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
      "smithy.api#required": {}
    }
  },
  "traits": {
    "smithy.api#input": {}
  }
}

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    }
  },
  "com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse": {
    "type": "structure",
    "members": {
      "LicenseArn": {
        "target": "com.amazonaws.licensemanager#Arn",
        "traits": {
          "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
        }
      },
      "LicenseConsumptionToken": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>License consumption token.</p>"
        }
      },
      "EntitlementsAllowed": {
        "target": "com.amazonaws.licensemanager#EntitlementDataList",
        "traits": {
          "smithy.api#documentation": "<p>Allowed license entitlements.</p>"
        }
      },
      "NodeId": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Node ID.</p>"
        }
      },
      "SignedToken": {
        "target": "com.amazonaws.licensemanager#SignedToken",
        "traits": {
          "smithy.api#documentation": "<p>Signed token.</p>"
        }
      },
      "IssuedAt": {
        "target": "com.amazonaws.licensemanager#ISO8601DateTime",
        "traits": {
          "smithy.api#documentation": "<p>Date and time at which the license checkout
is issued.</p>"
        }
      },
      "Expiration": {
        "target": "com.amazonaws.licensemanager#ISO8601DateTime",
        "traits": {
          "smithy.api#documentation": "<p>Date and time at which the license checkout expires.</p>"
        }
      }
    }
  }
}

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    },
    "CheckoutMetadata": {
      "target": "com.amazonaws.licensemanager#MetadataList",
      "traits": {
        "smithy.api#documentation": "<p>Information about constraints.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#CheckoutLicense": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#CheckoutLicenseRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#CheckoutLicenseResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#RedirectException"
    },
    {
      "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
    },
    {
      "target":
"com.amazonaws.licensemanager#ServerInternalException"
    },
    {
      "target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
    }
  ]
}

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    },
    {
      "target": "com.amazonaws.licensemanager#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Checks out the specified license.</p>\n    <note>\n    <p>If the
account that created the license is the same that is performing the check out, you must\n    specify the account
as the beneficiary.</p>\n    </note>"
  }
},
"com.amazonaws.licensemanager#CheckoutLicenseRequest": {
  "type": "structure",
  "members": {
    "ProductSKU": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Product
SKU.</p>",
        "smithy.api#required": {}
      }
    },
    "CheckoutType": {
      "target": "com.amazonaws.licensemanager#CheckoutType",
      "traits": {
        "smithy.api#documentation": "<p>Checkout type.</p>",
        "smithy.api#required": {}
      }
    },
    "KeyFingerprint": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Key fingerprint identifying the license.</p>",
        "smithy.api#required": {}
      }
    },
    "Entitlements": {
      "target": "com.amazonaws.licensemanager#EntitlementDataList",
      "traits": {
        "smithy.api#documentation": "<p>License entitlements.</p>",
        "smithy.api#required": {}
      }
    },
    "ClientToken": {
      "target": "com.amazonaws.licensemanager#ClientToken",
      "traits": {
        "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the

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idempotency of the request.</p>",
    "smithy.api#required": {}
  }
},
"Beneficiary": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>License beneficiary.</p>"
  }
},
"NodeId": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>Node ID.</p>"
  }
}
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CheckoutLicenseResponse": {
  "type": "structure",
  "members": {
    "CheckoutType": {
      "target": "com.amazonaws.licensemanager#CheckoutType",
      "traits": {
        "smithy.api#documentation": "<p>Checkout type.</p>"
      }
    },
    "LicenseConsumptionToken": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>License consumption token.</p>"
      }
    },
    "EntitlementsAllowed": {
      "target": "com.amazonaws.licensemanager#EntitlementDataList",
      "traits": {
        "smithy.api#documentation": "<p>Allowed license entitlements.</p>"
      }
    },
    "SignedToken": {
      "target": "com.amazonaws.licensemanager#SignedToken",
      "traits": {
        "smithy.api#documentation": "<p>Signed token.</p>"
      }
    }
  }
}

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    },
    "NodeId": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Node ID.</p>"
      }
    },
    "IssuedAt": {
      "target": "com.amazonaws.licensemanager#ISO8601DateTime",
      "traits": {
        "smithy.api#documentation": "<p>Date and time at which the license checkout is issued.</p>"
      }
    },
    "Expiration": {
      "target": "com.amazonaws.licensemanager#ISO8601DateTime",
      "traits": {
        "smithy.api#documentation": "<p>Date and
time at which the license checkout expires.</p>"
      }
    },
    "LicenseArn": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the checkout license.</p>"
      }
    },
    "traits": {
      "smithy.api#output": {}
    },
    "com.amazonaws.licensemanager#CheckoutType": {
      "type": "enum",
      "members": {
        "PROVISIONAL": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "PROVISIONAL"
          }
        },
        "PERPETUAL": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "PERPETUAL"
          }
        }
      }
    },
  },

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"com.amazonaws.licensemanager#ClientRequestToken": {
  "type": "string",
  "traits": {
    "smithy.api#length": {
      "min": 1,
      "max": 36
    }
  }
},
"com.amazonaws.licensemanager#ClientToken": {
  "type": "string",
  "traits": {
    "smithy.api#length": {
      "min": 0,
      "max": 2048
    },
    "smithy.api#pattern": "^\\S+$"
  }
},
"com.amazonaws.licensemanager#ConflictException": {
  "type": "structure",
  "members": {
    "Message": {
      "target": "com.amazonaws.licensemanager#Message"
    }
  },
  "traits": {
    "aws.protocols#awsQueryError": {
      "code": "ConflictException",
      "httpResponseCode":
409
    },
    "smithy.api#documentation": "<p>There was a conflict processing the request. Try your request
again.</p>",
    "smithy.api#error": "client",
    "smithy.api#httpError": 409
  }
},
"com.amazonaws.licensemanager#ConsumedLicenseSummary": {
  "type": "structure",
  "members": {
    "ResourceType": {
      "target": "com.amazonaws.licensemanager#ResourceType",
      "traits": {
        "smithy.api#documentation": "<p>Resource type of the resource consuming a license.</p>"
      }
    }
  },
  "ConsumedLicenses": {

```

```

        "target": "com.amazonaws.licensemanager#BoxLong",
        "traits": {
            "smithy.api#documentation": "<p>Number of licenses consumed by the resource.</p>"
        }
    },
},

"traits": {
    "smithy.api#documentation": "<p>Details about license consumption.</p>"
},
},
"com.amazonaws.licensemanager#ConsumedLicenseSummaryList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ConsumedLicenseSummary"
    }
},
"com.amazonaws.licensemanager#ConsumptionConfiguration": {
    "type": "structure",
    "members": {
        "RenewType": {
            "target": "com.amazonaws.licensemanager#RenewType",
            "traits": {
                "smithy.api#documentation": "<p>Renewal frequency.</p>"
            }
        },
        "ProvisionalConfiguration": {
            "target": "com.amazonaws.licensemanager#ProvisionalConfiguration",
            "traits": {
                "smithy.api#documentation": "<p>Details about a provisional configuration.</p>"
            }
        },
        "BorrowConfiguration": {
            "target": "com.amazonaws.licensemanager#BorrowConfiguration",
            "traits": {
                "smithy.api#documentation": "<p>Details about a borrow configuration.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Details about a consumption configuration.</p>"
    }
},
"com.amazonaws.licensemanager#CreateGrant": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#CreateGrantRequest"
    },
},

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"output": {
  "target": "com.amazonaws.licensemanager#CreateGrantResponse"
},
"errors": [
  {
    "target": "com.amazonaws.licensemanager#AccessDeniedException"
  },
  {
    "target":
"com.amazonaws.licensemanager#AuthorizationException"
  },
  {
    "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
  },
  {
    "target": "com.amazonaws.licensemanager#RateLimitExceededException"
  },
  {
    "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
  },
  {
    "target": "com.amazonaws.licensemanager#ServerInternalException"
  },
  {
    "target": "com.amazonaws.licensemanager#ValidationException"
  }
],
"traits": {
  "smithy.api#documentation": "<p>Creates a grant for the specified license. A grant shares the use of
license\n entitlements with a specific Amazon Web Services account, an organization, or an\n
organizational unit (OU). For more
information, see <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/granted-
licenses.html\">Granted licenses in License Manager</a> in the <i>License Manager User Guide</i>.</p>"
}
},
"com.amazonaws.licensemanager#CreateGrantRequest": {
  "type": "structure",
  "members": {
    "ClientToken": {
      "target": "com.amazonaws.licensemanager#ClientToken",
      "traits": {
        "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the
idempotency of the request.</p>",
        "smithy.api#required": {}
      }
    }
  },
  "GrantName": {
    "target": "com.amazonaws.licensemanager#String",

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    "traits": {
      "smithy.api#documentation": "<p>Grant name.</p>",
      "smithy.api#required": {}
    }
  },
  "LicenseArn": {
    "target": "com.amazonaws.licensemanager#Arn",
    "traits": {
      "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
      "smithy.api#required": {}
    }
  },
  "Principals": {
    "target": "com.amazonaws.licensemanager#PrincipalArnList",
    "traits": {
      "smithy.api#documentation": "<p>The grant principals. You can specify one of the following as an Amazon Resource Name (ARN):</p>\n  <ul>\n    <li>\n      <p>An Amazon Web Services account, which includes only the account specified.</p>\n    </li>\n    <ul>\n      <li>\n        <p>An organizational unit (OU), which includes all accounts in the OU.</p>\n      </li>\n    </ul>\n    <li>\n      <p>An organization, which will include all accounts across your organization.</p>\n    </li>\n  </ul>",
      "smithy.api#required": {}
    }
  },
  "HomeRegion": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Home Region of the grant.</p>",
      "smithy.api#required": {}
    }
  },
  "AllowedOperations": {
    "target": "com.amazonaws.licensemanager#AllowedOperationList",
    "traits": {
      "smithy.api#documentation": "<p>Allowed operations for the grant.</p>",
      "smithy.api#required": {}
    }
  }
},
"traits": {
  "smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateGrantResponse": {
  "type": "structure",

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"members": {
  "GrantArn": {
    "target": "com.amazonaws.licensemanager#Arn",
    "traits": {
      "smithy.api#documentation": "<p>Grant ARN.</p>"
    }
  },
  "Status": {
    "target": "com.amazonaws.licensemanager#GrantStatus",
    "traits": {
      "smithy.api#documentation": "<p>Grant status.</p>"
    }
  },
  "Version": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Grant version.</p>"
    }
  }
},
"traits": {
  "smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CreateGrantVersion":
{
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#CreateGrantVersionRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#CreateGrantVersionResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
    }
  ]
}

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    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    },
    {
      "target": "com.amazonaws.licensemanager#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Creates a new version of the specified grant. For more information, see\n    <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/granted-licenses.html\">Granted licenses in License Manager</a> in the <i>License Manager User Guide</i>.</p>"
  }
},
"com.amazonaws.licensemanager#CreateGrantVersionRequest": {
  "type": "structure",
  "members": {
    "ClientToken": {
      "target": "com.amazonaws.licensemanager#ClientToken",
      "traits": {
        "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
      }
    }
  }
},
"smithy.api#required": {}
},
"GrantArn": {
  "target": "com.amazonaws.licensemanager#Arn",
  "traits": {
    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
    "smithy.api#required": {}
  }
},
"GrantName": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>Grant name.</p>"
  }
},
"AllowedOperations": {
  "target": "com.amazonaws.licensemanager#AllowedOperationList",
  "traits": {
    "smithy.api#documentation": "<p>Allowed operations for the grant.</p>"
  }
},
"Status": {
  "target": "com.amazonaws.licensemanager#GrantStatus",

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    "traits": {
      "smithy.api#documentation": "<p>Grant status.</p>"
    }
  },
  "StatusReason": {
    "target": "com.amazonaws.licensemanager#StatusReasonMessage",
    "traits": {
      "smithy.api#documentation": "<p>Grant status reason.</p>"
    }
  },
  "SourceVersion": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Current version of the grant.</p>"
    }
  },
  "Options": {
    "target": "com.amazonaws.licensemanager#Options",
    "traits": {
      "smithy.api#documentation": "<p>The options specified for the grant.</p>"
    }
  }
},
"traits": {
  "smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateGrantVersionResponse": {
  "type": "structure",
  "members": {
    "GrantArn": {
      "target": "com.amazonaws.licensemanager#Arn",
      "traits": {
        "smithy.api#documentation": "<p>Grant ARN.</p>"
      }
    },
    "Status": {
      "target": "com.amazonaws.licensemanager#GrantStatus",
      "traits": {
        "smithy.api#documentation": "<p>Grant status.</p>"
      }
    },
    "Version": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>New version of the grant.</p>"
      }
    }
  }
}

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    },
    "traits":
  {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#CreateLicense": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#CreateLicenseRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#CreateLicenseResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#RedirectException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    },
    {
      "target": "com.amazonaws.licensemanager#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Creates a license.</p>"
  }
},
"com.amazonaws.licensemanager#CreateLicenseConfiguration": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#CreateLicenseConfigurationRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#CreateLicenseConfigurationResponse"
  }
}

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    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
      },
      {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ServerInternalException"
      }
    ],
    "traits": {
      "smithy.api#documentation": "<p>Creates a license configuration.</p>\n    <p>A license configuration is an abstraction of a customer license agreement that can be\n    consumed and enforced by License Manager. Components include specifications for the license\n    type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n    Dedicated Instance, Dedicated Host, or all of these), license affinity to host (how long a \n    license must be associated with a host), and the number of licenses purchased and used.</p>"
    }
  },
  "com.amazonaws.licensemanager#CreateLicenseConfigurationRequest": {
    "type": "structure",
    "members": {
      "Name": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Name of the license configuration.</p>",
          "smithy.api#required": {}
        }
      },
      "Description": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Description of the license configuration.</p>"
        }
      },
      "LicenseCountingType": {
        "target": "com.amazonaws.licensemanager#LicenseCountingType",

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    "traits": {
      "smithy.api#documentation": "<p>Dimension used to track the license inventory.</p>",
      "smithy.api#required": {}
    }
  },
  "LicenseCount": {
    "target": "com.amazonaws.licensemanager#BoxLong",
    "traits": {
      "smithy.api#documentation": "<p>Number of licenses managed by the license configuration.</p>"
    }
  },
  "LicenseCountHardLimit": {
    "target": "com.amazonaws.licensemanager#BoxBoolean",
    "traits": {
      "smithy.api#documentation": "<p>Indicates whether hard or soft license enforcement is used.
Exceeding a hard limit\n      blocks the launch of new instances.</p>"
    }
  },
  "LicenseRules": {
    "target":
"com.amazonaws.licensemanager#StringList",
    "traits": {
      "smithy.api#documentation": "<p>License rules. The syntax is #name=value (for example,
#allowedTenancy=EC2-DedicatedHost). The available rules \n      vary by dimension, as follows.</p>\n
<ul>\n      <li>\n          <p>\n              <code>Cores</code> dimension: <code>allowedTenancy</code> |\n
              <code>licenseAffinityToHost</code> |\n              <code>maximumCores</code> |
              <code>minimumCores</code>\n          </p>\n          </li>\n          <li>\n          <p>\n              <code>Instances</code> dimension: <code>allowedTenancy</code> |\n              <code>maximumCores</code> |
              <code>minimumCores</code> |\n              <code>maximumSockets</code> | <code>minimumSockets</code> |\n              <code>maximumVcpus</code> | <code>minimumVcpus</code>\n          </p>\n          </li>\n          <li>\n          <p>\n              <code>Sockets</code> dimension: <code>allowedTenancy</code> |\n              <code>licenseAffinityToHost</code> |\n              <code>maximumSockets</code> |
              <code>minimumSockets</code>\n          </p>\n          </li>\n          <li>\n          <p>\n              <code>vCPUs</code> dimension: <code>allowedTenancy</code> |\n              <code>honorVcpuOptimization</code> |\n              <code>maximumVcpus</code> |
              <code>minimumVcpus</code>\n          </p>\n          </li>\n        </ul>\n      <p>The unit for
<code>licenseAffinityToHost</code> is days and the range is 1 to 180. The possible \n      values for
<code>allowedTenancy</code> are <code>EC2-Default</code>, <code>EC2-DedicatedHost</code>, and \n
<code>EC2-DedicatedInstance</code>. The possible values for <code>honorVcpuOptimization</code> are \n
<code>True</code> and <code>False</code>.</p>"
    }
  },
  "Tags": {
    "target": "com.amazonaws.licensemanager#TagList",
    "traits": {
      "smithy.api#documentation": "<p>Tags to add to the license configuration.</p>"
    }
  }
}

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    }
  },
  "DisassociateWhenNotFound": {
    "target": "com.amazonaws.licensemanager#BoxBoolean",
    "traits": {
      "smithy.api#documentation": "<p>When true, disassociates a resource when software is
uninstalled.</p>"
    }
  },
  "ProductInformationList": {
    "target": "com.amazonaws.licensemanager#ProductInformationList",
    "traits": {
      "smithy.api#documentation": "<p>Product information.</p>"
    }
  }
},
"traits": {
  "smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseConfigurationResponse":
{
  "type": "structure",
  "members": {
    "LicenseConfigurationArn": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {

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    "target": "com.amazonaws.licensemanager#AuthorizationException"
  },
  {
    "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
  },
  {
    "target": "com.amazonaws.licensemanager#RateLimitExceededException"
  },
  {
    "target": "com.amazonaws.licensemanager#ServerInternalException"
  },
  {
    "target": "com.amazonaws.licensemanager#ValidationException"
  }
],
"traits": {
  "smithy.api#documentation": "<p>Creates a new license conversion task.</p>"
}
},
"com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest": {
  "type": "structure",
  "members": {
    "ResourceArn": {
      "target": "com.amazonaws.licensemanager#Arn",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource you are converting the license type for.</p>",
        "smithy.api#required": {}
      }
    },
    "SourceLicenseContext": {
      "target": "com.amazonaws.licensemanager#LicenseConversionContext",
      "traits": {
        "smithy.api#documentation": "<p>Information that identifies the license type you are converting from. \n\n    For the structure of the source license, see <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/conversion-procedures.html#conversion-cli\">Convert a license type using the CLI </a> in the <i>License Manager User Guide</i>.</p>",
        "smithy.api#required": {}
      }
    },
    "DestinationLicenseContext": {
      "target": "com.amazonaws.licensemanager#LicenseConversionContext",
      "traits": {
        "smithy.api#documentation": "<p>Information that identifies the license type you are converting to. For the structure of the destination license, see <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/conversion-procedures.html#conversion-cli\">Convert a license type using the CLI </a> in

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the *<i>License Manager User Guide</i>.</p>*

```
    "smithy.api#required": {}
  }
},
"traits": {
  "smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse": {
  "type": "structure",
  "members": {
    "LicenseConversionTaskId": {
      "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",

"traits": {
  "smithy.api#documentation": "<p>The ID of the created license type conversion task.</p>"
}
},
"traits": {
  "smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
    }
  ],
}
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    {
      "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    },
    {
      "target": "com.amazonaws.licensemanager#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Creates a report generator.</p>"
  }
},
"com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest": {
  "type": "structure",
  "members": {
    "ReportGeneratorName":
  {
    "target": "com.amazonaws.licensemanager#ReportGeneratorName",
    "traits": {
      "smithy.api#documentation": "<p>Name of the report generator.</p>",
      "smithy.api#required": {}
    }
  },
  "Type": {
    "target": "com.amazonaws.licensemanager#ReportTypeList",
    "traits": {
      "smithy.api#documentation": "<p>Type of reports to generate. The following report types an be generated:</p>\n
      <ul>\n
        <li>\n
          <p>License configuration report - Reports the number and details of consumed licenses for a license configuration.</p>\n
        </li>\n
        <li>\n
          <p>Resource report - Reports the tracked licenses and resource consumption for a license configuration.</p>\n
        </li>\n
      </ul>",
      "smithy.api#required": {}
    }
  }
},
  "ReportContext": {
    "target": "com.amazonaws.licensemanager#ReportContext",
    "traits": {
      "smithy.api#documentation": "<p>Defines the type of license configuration the report generator tracks.</p>",
      "smithy.api#required": {}
    }
  },
  "ReportFrequency": {
    "target": "com.amazonaws.licensemanager#ReportFrequency",
    "traits": {

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    "smithy.api#documentation": "<p>Frequency by which reports are generated. Reports can be
generated daily, monthly, or weekly.</p>",
    "smithy.api#required": {}
  }
},
"ClientToken": {
  "target": "com.amazonaws.licensemanager#ClientRequestToken",
  "traits": {
    "smithy.api#documentation": "<p>Unique,
case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
    "smithy.api#required": {}
  }
},
"Description": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>Description of the report generator.</p>"
  }
},
"Tags": {
  "target": "com.amazonaws.licensemanager#TagList",
  "traits": {
    "smithy.api#documentation": "<p>Tags to add to the report generator.</p>"
  }
}
},
"traits": {
  "smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse": {
  "type": "structure",
  "members": {
    "LicenseManagerReportGeneratorArn":
{
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the new report
generator.</p>"
  }
}
},
"traits": {
  "smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseRequest": {
  "type": "structure",

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"members": {
  "LicenseName": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>License name.</p>",
      "smithy.api#required": {}
    }
  },
  "ProductName": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Product
name.</p>",
      "smithy.api#required": {}
    }
  },
  "ProductSKU": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Product SKU.</p>",
      "smithy.api#required": {}
    }
  },
  "Issuer": {
    "target": "com.amazonaws.licensemanager#Issuer",
    "traits": {
      "smithy.api#documentation": "<p>License issuer.</p>",
      "smithy.api#required": {}
    }
  },
  "HomeRegion": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Home Region for the license.</p>",
      "smithy.api#required": {}
    }
  }
},
"Validity": {
  "target": "com.amazonaws.licensemanager#DatetimeRange",
  "traits": {
    "smithy.api#documentation": "<p>Date and time range during which the license is valid, in ISO8601-
UTC format.</p>",
    "smithy.api#required": {}
  }
},
"Entitlements": {
  "target": "com.amazonaws.licensemanager#EntitlementList",

```

```

    "traits": {
      "smithy.api#documentation": "<p>License entitlements.</p>",
      "smithy.api#required": {}
    }
  },
  "Beneficiary": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>License beneficiary.</p>",
      "smithy.api#required": {}
    }
  },
  "ConsumptionConfiguration": {
    "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
    "traits": {
      "smithy.api#documentation": "<p>Configuration for consumption of the license. Choose a provisional configuration for workloads\n      running with continuous connectivity. Choose a borrow configuration for workloads with offline\n      usage.</p>",
      "smithy.api#required": {}
    }
  },
  "LicenseMetadata": {
    "target": "com.amazonaws.licensemanager#MetadataList",
    "traits": {
      "smithy.api#documentation": "<p>Information about the license.</p>"
    }
  },
  "ClientToken": {
    "target": "com.amazonaws.licensemanager#ClientToken",
    "traits": {
      "smithy.api#documentation":
"<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
      "smithy.api#required": {}
    }
  },
  "traits": {
    "smithy.api#input": {}
  }
},
"com.amazonaws.licensemanager#CreateLicenseResponse": {
  "type": "structure",
  "members": {
    "LicenseArn": {
      "target": "com.amazonaws.licensemanager#Arn",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
      }
    }
  }
}

```

```

    },
    "Status": {
      "target": "com.amazonaws.licensemanager#LicenseStatus",
      "traits": {
        "smithy.api#documentation": "<p>License status.</p>"
      }
    },
    "Version": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>License version.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#CreateLicenseVersion": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#CreateLicenseVersionRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#CreateLicenseVersionResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#ConflictException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#RedirectException"
    },
    {
      "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    }
  ],

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    {
      "target": "com.amazonaws.licensemanager#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Creates a new version of the specified license.</p>"
  }
},
"com.amazonaws.licensemanager#CreateLicenseVersionRequest": {
  "type": "structure",
  "members": {
    "LicenseArn": {
      "target":
"com.amazonaws.licensemanager#Arn",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
        "smithy.api#required": {}
      }
    },
    "LicenseName": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>License name.</p>",
        "smithy.api#required": {}
      }
    },
    "ProductName": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Product name.</p>",
        "smithy.api#required": {}
      }
    },
    "Issuer": {
      "target": "com.amazonaws.licensemanager#Issuer",
      "traits": {
        "smithy.api#documentation": "<p>License issuer.</p>",
        "smithy.api#required": {}
      }
    },
    "HomeRegion": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Home Region of the license.</p>",
        "smithy.api#required": {}
      }
    }
  },

```



```

"Validity": {
  "target": "com.amazonaws.licensemanager#DatetimeRange",
  "traits": {
    "smithy.api#documentation": "<p>Date and time range during which the license is valid, in ISO8601-
UTC format.</p>",
    "smithy.api#required": {}
  }
},
"LicenseMetadata": {
  "target": "com.amazonaws.licensemanager#MetadataList",
  "traits": {
    "smithy.api#documentation": "<p>Information about the license.</p>"
  }
},
"Entitlements": {
  "target": "com.amazonaws.licensemanager#EntitlementList",
  "traits": {
    "smithy.api#documentation": "<p>License entitlements.</p>",
    "smithy.api#required": {}
  }
},
"ConsumptionConfiguration": {
  "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
  "traits": {
    "smithy.api#documentation": "<p>Configuration for consumption of the license. Choose a provisional
configuration for workloads\n      running with continuous connectivity. Choose a borrow configuration for
workloads with offline\n      usage.</p>",
    "smithy.api#required": {}
  }
},
"Status": {
  "target": "com.amazonaws.licensemanager#LicenseStatus",
  "traits": {
    "smithy.api#documentation": "<p>License status.</p>",
    "smithy.api#required": {}
  }
},
"ClientToken": {
  "target": "com.amazonaws.licensemanager#ClientToken",
  "traits": {
    "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the
idempotency of the request.</p>",
    "smithy.api#required": {}
  }
},
"SourceVersion": {
  "target": "com.amazonaws.licensemanager#String",

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```

        "traits": {
            "smithy.api#documentation": "<p>Current version of the license.</p>"
        }
    },
    "traits": {
"smithy.api#input": {}
    },
    "com.amazonaws.licensemanager#CreateLicenseVersionResponse": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>License ARN.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>New version of the license.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#LicenseStatus",
                "traits": {
                    "smithy.api#documentation": "<p>License status.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output":
        }
    },
    "com.amazonaws.licensemanager#CreateToken": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateTokenRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateTokenResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            }
        ]
    }
}

```

```

    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#RedirectException"
    },
    {
      "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
    },
  ],
  {
    "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
  },
  {
    "target": "com.amazonaws.licensemanager#ServerInternalException"
  },
  {
    "target": "com.amazonaws.licensemanager#ValidationException"
  }
],
"traits": {
  "smithy.api#documentation": "<p>Creates a long-lived token.</p>\n    <p>A refresh token is a JWT token used to get an access token. With an access token,\n    you can call AssumeRoleWithWebIdentity to get role credentials that you can use to \n    call License Manager to manage the specified license.</p>"
}
},
"com.amazonaws.licensemanager#CreateTokenRequest": {
  "type": "structure",
  "members": {
    "LicenseArn": {
      "target": "com.amazonaws.licensemanager#Arn",
      "traits":
    {
      "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license. The ARN is mapped to the aud claim of the\n    JWT token.</p>",
      "smithy.api#required": {}
    }
},
    "RoleArns": {
      "target": "com.amazonaws.licensemanager#ArnList",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the IAM roles to embed in the token. \n    License Manager does not check whether the roles are in use.</p>"
      }
}
}
}

```

```

    },
    "ExpirationInDays": {
      "target": "com.amazonaws.licensemanager#Integer",
      "traits": {
        "smithy.api#documentation": "<p>Token expiration, in days, counted from token creation. The
default is 365 days.</p>"
      }
    },
    "TokenProperties": {
      "target": "com.amazonaws.licensemanager#MaxSize3StringList",
      "traits": {
        "smithy.api#documentation": "<p>Data specified by the caller to be included in the JWT token. The
data is mapped\n      to the amr claim of the JWT token.</p>"
      }
    },
    "ClientToken": {
      "target": "com.amazonaws.licensemanager#ClientToken",
      "traits": {
        "smithy.api#documentation": "<p>Idempotency token, valid for 10 minutes.</p>",
        "smithy.api#required": {}
      }
    }
  },
  "traits": {
    "smithy.api#input": {}
  }
},
"com.amazonaws.licensemanager#CreateTokenResponse": {
  "type": "structure",
  "members": {
    "TokenId": {
      "target": "com.amazonaws.licensemanager#String",

      "traits": {
        "smithy.api#documentation": "<p>Token ID.</p>"
      }
    },
    "TokenType": {
      "target": "com.amazonaws.licensemanager#TokenType",
      "traits": {
        "smithy.api#documentation": "<p>Token type.</p>"
      }
    }
  },
  "Token": {
    "target": "com.amazonaws.licensemanager#TokenString",
    "traits": {
      "smithy.api#documentation": "<p>Refresh token, encoded as a JWT token.</p>"
    }
  }
}

```

```

    }
  },
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#DateTime": {
  "type": "timestamp"
},
"com.amazonaws.licensemanager#DatetimeRange": {
  "type": "structure",
  "members": {
    "Begin": {
      "target": "com.amazonaws.licensemanager#ISO8601DateTime",
      "traits": {
        "smithy.api#documentation": "<p>Start of the time range.</p>",
        "smithy.api#required": {}
      }
    },
    "End": {
      "target": "com.amazonaws.licensemanager#ISO8601DateTime",
      "traits": {
        "smithy.api#documentation": "<p>End of the time range.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>Describes a time range, in ISO8601-UTC format.</p>"
  }
},
"com.amazonaws.licensemanager#DeleteGrant": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#DeleteGrantRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#DeleteGrantResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    }
  ],

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```

    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    },
    {
      "target": "com.amazonaws.licensemanager#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Deletes
the specified grant.</p>"
  }
},
"com.amazonaws.licensemanager#DeleteGrantRequest": {
  "type": "structure",
  "members": {
    "GrantArn": {
      "target": "com.amazonaws.licensemanager#Arn",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
        "smithy.api#required": {}
      }
    },
    "StatusReason": {
      "target": "com.amazonaws.licensemanager#StatusReasonMessage",
      "traits": {
        "smithy.api#documentation": "<p>The Status reason for the delete request.</p>"
      }
    },
    "Version": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Current version of the
grant.</p>",
        "smithy.api#required": {}
      }
    }
  },
  "traits": {
    "smithy.api#input": {}
  }
},
"com.amazonaws.licensemanager#DeleteGrantResponse": {

```

```

"type": "structure",
"members": {
  "GrantArn": {
    "target": "com.amazonaws.licensemanager#Arn",
    "traits": {
      "smithy.api#documentation": "<p>Grant ARN.</p>"
    }
  },
  "Status": {
    "target": "com.amazonaws.licensemanager#GrantStatus",
    "traits": {
      "smithy.api#documentation": "<p>Grant status.</p>"
    }
  },
  "Version": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation":
"<p>Grant version.</p>"
    }
  },
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#DeleteLicense": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#DeleteLicenseRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#DeleteLicenseResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#ConflictException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    }
  ]
}

```

```

    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#RedirectException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    },
    {
      "target": "com.amazonaws.licensemanager#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Deletes the specified license.</p>"
  }
},
"com.amazonaws.licensemanager#DeleteLicenseConfiguration": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse"
  }
},

"errors": [
  {
    "target": "com.amazonaws.licensemanager#AccessDeniedException"
  },
  {
    "target": "com.amazonaws.licensemanager#AuthorizationException"
  },
  {
    "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
  },
  {
    "target": "com.amazonaws.licensemanager#RateLimitExceededException"
  },
  {
    "target": "com.amazonaws.licensemanager#ServerInternalException"
  }
],
"traits": {
  "smithy.api#documentation": "<p>Deletes the specified license configuration.</p>\n    <p>You cannot delete a license configuration that is in use.</p>"
}

```



```

    },
    "com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest": {
      "type": "structure",
      "members":
    {
      "LicenseConfigurationArn": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>ID of the license configuration.</p>",
          "smithy.api#required": {}
        }
      }
    }
  },
  "traits": {
    "smithy.api#input": {}
  }
},
"com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse": {
  "type": "structure",
  "members": {},
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
    }
  ],

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    {
      "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    },
    {
      "target": "com.amazonaws.licensemanager#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Deletes the specified report generator.</p>\n    <p>This action deletes the report generator, which stops it from generating future reports.\n    The action cannot be reversed. It has no effect on the previous reports from this generator.</p>"
  }
},
"com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest": {
  "type": "structure",
  "members": {
    "LicenseManagerReportGeneratorArn": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator to be deleted.</p>",
        "smithy.api#required": {}
      }
    }
  },
  "traits": {
    "smithy.api#input": {}
  }
},
"com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse": {
  "type": "structure",
  "members": {},
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#DeleteLicenseRequest": {
  "type": "structure",
  "members": {
    "LicenseArn": {
      "target": "com.amazonaws.licensemanager#Arn",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
        "smithy.api#required": {}
      }
    }
  }
}

```

```

    }
  },
  "SourceVersion": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Current version of the license.</p>",
      "smithy.api#required":
    }
  }
},
"traits": {
  "smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#DeleteLicenseResponse": {
  "type": "structure",
  "members": {
    "Status": {
      "target": "com.amazonaws.licensemanager#LicenseDeletionStatus",
      "traits": {
        "smithy.api#documentation": "<p>License status.</p>"
      }
    },
    "DeletionDate": {
      "target": "com.amazonaws.licensemanager#ISO8601DateTime",
      "traits": {
        "smithy.api#documentation": "<p>Date when the license is deleted.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#DeleteToken": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#DeleteTokenRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#DeleteTokenResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {

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```

        "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
        "target": "com.amazonaws.licensemanager#RedirectException"
    },
    {
        "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
    },
    {
        "target": "com.amazonaws.licensemanager#ServerInternalException"
    },
    {
        "target": "com.amazonaws.licensemanager#ValidationException"
    }
],
"traits": {
    "smithy.api#documentation": "<p>Deletes the specified token. Must be called in the license home
Region.</p>"
}
},
"com.amazonaws.licensemanager#DeleteTokenRequest": {
    "type": "structure",
    "members": {
        "TokenId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token ID.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#DeleteTokenResponse": {
    "type": "structure",
    "members": {},
    "traits": {
        "smithy.api#output": {}
    }
}
},
"com.amazonaws.licensemanager#DigitalSignatureMethod": {

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```

"type": "enum",
"members": {
  "JWT_PS384": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "JWT_PS384"
    }
  }
},
"com.amazonaws.licensemanager#Entitlement": {
  "type": "structure",
  "members": {
    "Name": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Entitlement name.</p>",
        "smithy.api#required": {}
      }
    },
    "Value": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Entitlement resource. Use only
if the unit is None.</p>"
      }
    },
    "MaxCount": {
      "target": "com.amazonaws.licensemanager#Long",
      "traits": {
        "smithy.api#documentation": "<p>Maximum entitlement count. Use if the unit is not None.</p>"
      }
    },
    "Overage": {
      "target": "com.amazonaws.licensemanager#BoxBoolean",
      "traits": {
        "smithy.api#documentation": "<p>Indicates whether overages are allowed.</p>"
      }
    },
    "Unit": {
      "target": "com.amazonaws.licensemanager#EntitlementUnit",
      "traits": {
        "smithy.api#documentation": "<p>Entitlement unit.</p>",
        "smithy.api#required": {}
      }
    },
    "AllowCheckIn": {
      "target":

```

```

"com.amazonaws.licensemanager#BoxBoolean",
  "traits": {
    "smithy.api#documentation": "<p>Indicates whether check-ins are allowed.</p>"
  }
},
"traits": {
  "smithy.api#documentation": "<p>Describes a resource entitled for use with a license.</p>"
},
"com.amazonaws.licensemanager#EntitlementData": {
  "type": "structure",
  "members": {
    "Name": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Entitlement data name.</p>",
        "smithy.api#required": {}
      }
    },
    "Value": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Entitlement
data value.</p>"
      }
    },
    "Unit": {
      "target": "com.amazonaws.licensemanager#EntitlementDataUnit",
      "traits": {
        "smithy.api#documentation": "<p>Entitlement data unit.</p>",
        "smithy.api#required": {}
      }
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>Data associated with an entitlement resource.</p>"
  }
},
"com.amazonaws.licensemanager#EntitlementDataList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanager#EntitlementData"
  }
},
"com.amazonaws.licensemanager#EntitlementDataUnit": {
  "type": "enum",
  "members": {

```

```

"COUNT": {
  "target": "smithy.api#Unit",
  "traits": {

"smithy.api#enumValue": "Count"
  }
},
"NONE": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "None"
  }
},
"SECONDS": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "Seconds"
  }
},
"MICROSECONDS": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "Microseconds"
  }
},
"MILLISECONDS": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "Milliseconds"
  }
},
"BYTES": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "Bytes"
  }
},
"KILOBYTES": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "Kilobytes"
  }
},
"MEGABYTES": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "Megabytes"
  }
}

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```

    },
    "GIGABYTES": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "Gigabytes"
      }
    },
    "TERABYTES": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "Terabytes"
      }
    },
    "BITS":
  {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Bits"
    }
  },
  "KILOBITS": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Kilobits"
    }
  },
  "MEGABITS": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Megabits"
    }
  },
  "GIGABITS": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Gigabits"
    }
  },
  "TERABITS": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Terabits"
    }
  }
},
"PERCENT": {
  "target": "smithy.api#Unit",
  "traits": {

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    "smithy.api#enumValue": "Percent"
  }
},
"BYTES_PER_SECOND": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "Bytes/Second"
  }
},
"KILOBYTES_PER_SECOND": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "Kilobytes/Second"
  }
},
"MEGABYTES_PER_SECOND": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "Megabytes/Second"
  }
},
"GIGABYTES_PER_SECOND": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "Gigabytes/Second"
  }
},
"TERABYTES_PER_SECOND": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "Terabytes/Second"
  }
},
"BITS_PER_SECOND": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "Bits/Second"
  }
},
"KILOBITS_PER_SECOND": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "Kilobits/Second"
  }
},
"MEGABITS_PER_SECOND": {
  "target": "smithy.api#Unit",
  "traits": {

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        "smithy.api#enumValue":
"Megabits/Second"
    }
  },
  "GIGABITS_PER_SECOND": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Gigabits/Second"
    }
  },
  "TERABITS_PER_SECOND": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Terabits/Second"
    }
  },
  "COUNT_PER_SECOND": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Count/Second"
    }
  }
},
"com.amazonaws.licensemanager#EntitlementList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanager#Entitlement"
  }
},
"com.amazonaws.licensemanager#EntitlementNotAllowedException":
{
  "type": "structure",
  "members": {
    "Message": {
      "target": "com.amazonaws.licensemanager#Message"
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>The entitlement is not allowed.</p>",
    "smithy.api#error": "client",
    "smithy.api#httpError": 400
  }
},
"com.amazonaws.licensemanager#EntitlementUnit": {
  "type": "enum",
  "members": {
    "COUNT": {

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    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Count"
    }
  },
  "NONE": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "None"
    }
  },
  "SECONDS":
{
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "Seconds"
  }
},
  "MICROSECONDS": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Microseconds"
    }
  },
  "MILLISECONDS": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Milliseconds"
    }
  },
  "BYTES": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Bytes"
    }
  },
  "KILOBYTES": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Kilobytes"
    }
  },
  "MEGABYTES": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Megabytes"
    }
  },
},

```

```

"GIGABYTES": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "Gigabytes"
  }
},
"TERABYTES": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "Terabytes"
  }
},
"BITS": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "Bits"
  }
},
"KILOBITS": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "Kilobits"
  }
},
"MEGABITS": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "Megabits"
  }
},
"GIGABITS": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "Gigabits"
  }
},
"TERABITS": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "Terabits"
  }
},
"PERCENT": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "Percent"
  }
}

```

```

    },
    "BYTES_PER_SECOND": {
      "target":
"smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "Bytes/Second"
      }
    },
    "KILOBYTES_PER_SECOND": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "Kilobytes/Second"
      }
    },
    "MEGABYTES_PER_SECOND": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "Megabytes/Second"
      }
    },
    "GIGABYTES_PER_SECOND": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "Gigabytes/Second"
      }
    },
    "TERABYTES_PER_SECOND": {
      "target": "smithy.api#Unit",
      "traits": {
"smithy.api#enumValue": "Terabytes/Second"
      }
    },
    "BITS_PER_SECOND": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "Bits/Second"
      }
    },
    "KILOBITS_PER_SECOND": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "Kilobits/Second"
      }
    },
    "MEGABITS_PER_SECOND": {
      "target": "smithy.api#Unit",
      "traits": {

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        "smithy.api#enumValue": "Megabits/Second"
    }
},
"GIGABITS_PER_SECOND": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Gigabits/Second"
    }
},

"TERABITS_PER_SECOND": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Terabits/Second"
    }
},
"COUNT_PER_SECOND": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Count/Second"
    }
}
},
"com.amazonaws.licensemanager#EntitlementUsage": {
    "type": "structure",
    "members": {
        "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Entitlement usage name.</p>",
                "smithy.api#required": {}
            }
        },
        "ConsumedValue": {
            "target": "com.amazonaws.licensemanager#String",

            "traits": {
                "smithy.api#documentation": "<p>Resource usage consumed.</p>",
                "smithy.api#required": {}
            }
        },
        "MaxCount": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Maximum entitlement usage count.</p>"
            }
        }
    },
},

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```

    "Unit": {
      "target": "com.amazonaws.licensemanager#EntitlementDataUnit",
      "traits": {
        "smithy.api#documentation": "<p>Entitlement usage unit.</p>",
        "smithy.api#required": {}
      }
    },
    "traits": {
      "smithy.api#documentation": "<p>Usage associated with an entitlement resource.</p>"
    },
    "com.amazonaws.licensemanager#EntitlementUsageList":
  {
    "type": "list",
    "member": {
      "target": "com.amazonaws.licensemanager#EntitlementUsage"
    },
    "com.amazonaws.licensemanager#ExtendLicenseConsumption": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
          "target": "com.amazonaws.licensemanager#ValidationException"
        }
      ]
    }
  }

```

```

    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Extends the expiration date for license consumption.</p>"
  }
},
"com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest": {
  "type": "structure",
  "members": {
    "LicenseConsumptionToken": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>License consumption token.</p>",
        "smithy.api#required": {}
      }
    }
  },
  "DryRun": {
    "target": "com.amazonaws.licensemanager#Boolean",
    "traits": {
      "smithy.api#default": false,
      "smithy.api#documentation": "<p>Checks whether you have the required permissions for the action, without actually making the request. Provides an error response if you do not have the required permissions.</p>"
    }
  },
  "traits": {
    "smithy.api#input": {}
  }
},
"com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse": {
  "type": "structure",
  "members": {
    "LicenseConsumptionToken": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>License consumption token.</p>"
      }
    },
    "Expiration": {
      "target": "com.amazonaws.licensemanager#ISO8601DateTime",
      "traits": {
        "smithy.api#documentation": "<p>Date and time at which the license consumption expires.</p>"
      }
    }
  },
  "traits": {

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    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#FailedDependencyException": {
  "type": "structure",
  "members": {
    "Message": {
      "target": "com.amazonaws.licensemanager#Message"
    },
    "ErrorCode": {
      "target": "com.amazonaws.licensemanager#String"
    }
  },
  "traits": {
    "aws.protocols#awsQueryError": {
      "code": "FailedDependency",
      "httpResponseCode": 424
    },
    "smithy.api#documentation":
    "<p>A dependency required to run the API is missing.</p>",
    "smithy.api#error": "client",
    "smithy.api#httpError": 424
  }
},
"com.amazonaws.licensemanager#Filter": {
  "type": "structure",
  "members": {
    "Name": {
      "target": "com.amazonaws.licensemanager#FilterName",
      "traits": {
        "smithy.api#documentation": "<p>Name of the filter. Filter names are case-sensitive.</p>"
      }
    },
    "Values": {
      "target": "com.amazonaws.licensemanager#FilterValues",
      "traits": {
        "smithy.api#documentation": "<p>The value of the filter, which is case-sensitive. You can only specify one value for the filter.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>A filter name and value pair that is used to return more specific results from a\n      describe operation. Filters can be used to match a set of resources by specific criteria,\n      such as tags, attributes, or IDs.</p>"
  }
},
"com.amazonaws.licensemanager#FilterLimitExceededException": {

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```

"type": "structure",
"members": {
  "Message": {
    "target": "com.amazonaws.licensemanager#Message"
  }
},
"traits": {
  "aws.protocols#awsQueryError": {
    "code": "FilterLimitExceeded",
    "httpResponseCode": 400
  },
  "smithy.api#documentation": "<p>The request uses too many filters or too many filter values.</p>",
  "smithy.api#error": "client",
  "smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#FilterList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanager#Filter"
  }
},
"com.amazonaws.licensemanager#FilterName": {
  "type": "string"
},
"com.amazonaws.licensemanager#FilterValue": {
  "type": "string"
},
"com.amazonaws.licensemanager#FilterValues": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanager#FilterValue",
    "traits": {
      "smithy.api#xmlName": "item"
    }
  }
},
"com.amazonaws.licensemanager#Filters": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanager#Filter",
    "traits": {
      "smithy.api#xmlName": "item"
    }
  }
},
"com.amazonaws.licensemanager#GetAccessToken": {
  "type": "operation",

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"input": {
  "target": "com.amazonaws.licensemanager#GetAccessTokenRequest"
},
"output": {
  "target": "com.amazonaws.licensemanager#GetAccessTokenResponse"
},
"errors": [
  {
    "target": "com.amazonaws.licensemanager#AccessDeniedException"
  },
  {
    "target": "com.amazonaws.licensemanager#AuthorizationException"
  },
  {
    "target": "com.amazonaws.licensemanager#RateLimitExceededException"
  },
  {
    "target": "com.amazonaws.licensemanager#ServerInternalException"
  },
  {
    "target": "com.amazonaws.licensemanager#ValidationException"
  }
],
"traits": {
  "smithy.api#documentation": "<p>Gets a temporary access token to use with
AssumeRoleWithWebIdentity. Access
tokens\n    are valid for one hour.</p>"
}
},
"com.amazonaws.licensemanager#GetAccessTokenRequest": {
  "type": "structure",
  "members": {
    "Token": {
      "target": "com.amazonaws.licensemanager#TokenString",
      "traits": {
        "smithy.api#documentation": "<p>Refresh token, encoded as a JWT token.</p>",
        "smithy.api#required": {}
      }
    },
    "TokenProperties": {
      "target": "com.amazonaws.licensemanager#MaxSize3StringList",
      "traits": {
        "smithy.api#documentation": "<p>Token properties to validate against those present in the JWT
token.</p>"
      }
    }
  },
  "traits": {

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    "smithy.api#input": {}
  }
},
"com.amazonaws.licensemanager#GetAccessTokenResponse":
{
  "type": "structure",
  "members": {
    "AccessToken": {
      "target": "com.amazonaws.licensemanager#TokenString",
      "traits": {
        "smithy.api#documentation": "<p>Temporary access token.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#GetGrant": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#GetGrantRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#GetGrantResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    },
    {
      "target": "com.amazonaws.licensemanager#ValidationException"
    }
  ]
}

```

```

    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Gets detailed information about the specified grant.</p>"
  }
},
"com.amazonaws.licensemanager#GetGrantRequest": {
  "type": "structure",
  "members": {
    "GrantArn": {
      "target": "com.amazonaws.licensemanager#Arn",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
        "smithy.api#required": {}
      }
    }
  },
  "Version": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Grant version.</p>"
    }
  }
},
"traits": {
  "smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetGrantResponse": {
  "type": "structure",
  "members": {
    "Grant": {
      "target": "com.amazonaws.licensemanager#Grant",
      "traits": {
        "smithy.api#documentation": "<p>Grant details.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#GetLicense": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#GetLicenseRequest"
  },
  "output": {

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```

    "target": "com.amazonaws.licensemanager#GetLicenseResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    }
  ],
  {
    "target": "com.amazonaws.licensemanager#ValidationException"
  }
],
"traits": {
  "smithy.api#documentation": "<p>Gets detailed information about the specified license.</p>"
}
},
"com.amazonaws.licensemanager#GetLicenseConfiguration": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#GetLicenseConfigurationRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#GetLicenseConfigurationResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    }
  ],

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```

    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Gets detailed information about the specified license
configuration.</p>"
  }
},
"com.amazonaws.licensemanager#GetLicenseConfigurationRequest": {
  "type": "structure",
  "members": {
    "LicenseConfigurationArn": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
        "smithy.api#required": {}
      }
    }
  },
  "traits":
{
  "smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetLicenseConfigurationResponse": {
  "type": "structure",
  "members": {
    "LicenseConfigurationId": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Unique ID for the license configuration.</p>"
      }
    },
    "LicenseConfigurationArn": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
      }
    },
    "Name": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Name of the license configuration.</p>"
      }
    },
    "Description": {

```

```

    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Description of the license configuration.</p>"
    }
  },
  "LicenseCountingType": {
    "target": "com.amazonaws.licensemanager#LicenseCountingType",
    "traits": {
      "smithy.api#documentation": "<p>Dimension for which the licenses are counted.</p>"
    }
  },
  "LicenseRules": {
    "target": "com.amazonaws.licensemanager#StringList",
    "traits": {
      "smithy.api#documentation": "<p>License rules.</p>"
    }
  },
  "LicenseCount": {
    "target": "com.amazonaws.licensemanager#BoxLong",

    "traits": {
      "smithy.api#documentation": "<p>Number of available licenses.</p>"
    }
  },
  "LicenseCountHardLimit": {
    "target": "com.amazonaws.licensemanager#BoxBoolean",
    "traits": {
      "smithy.api#documentation": "<p>Sets the number of available licenses as a hard limit.</p>"
    }
  },
  "ConsumedLicenses": {
    "target": "com.amazonaws.licensemanager#BoxLong",
    "traits": {
      "smithy.api#documentation": "<p>Number of licenses assigned to resources.</p>"
    }
  },
  "Status": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>License configuration status.</p>"
    }
  }
},
"OwnerAccountId": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>Account ID of the owner of the license configuration.</p>"
  }
}

```



```

    },
    "ConsumedLicenseSummaryList": {
      "target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
      "traits": {
        "smithy.api#documentation": "<p>Summaries of the licenses consumed by resources.</p>"
      }
    },
    "ManagedResourceSummaryList": {
      "target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
      "traits": {
        "smithy.api#documentation": "<p>Summaries of the managed resources.</p>"
      }
    },
    "Tags": {
      "target": "com.amazonaws.licensemanager#TagList",
      "traits": {
        "smithy.api#documentation": "<p>Tags for the license configuration.</p>"
      }
    },
    "ProductInformationList": {
      "target": "com.amazonaws.licensemanager#ProductInformationList",
      "traits": {
        "smithy.api#documentation": "<p>Product information.</p>"
      }
    },
    "AutomatedDiscoveryInformation": {
      "target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
      "traits": {
        "smithy.api#documentation": "<p>Automated discovery information.</p>"
      }
    },
    "DisassociateWhenNotFound": {
      "target": "com.amazonaws.licensemanager#BoxBoolean",
      "traits": {
        "smithy.api#documentation": "<p>When
true, disassociates a resource when software is uninstalled.</p>"
      }
    },
    "traits": {
      "smithy.api#output": {}
    },
    "com.amazonaws.licensemanager#GetLicenseConversionTask": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#GetLicenseConversionTaskRequest"
      },
    },

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```

"output": {
  "target": "com.amazonaws.licensemanager#GetLicenseConversionTaskResponse"
},
"errors": [
  {
    "target": "com.amazonaws.licensemanager#AccessDeniedException"
  },
  {
    "target": "com.amazonaws.licensemanager#AuthorizationException"
  },
  {
    "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
  },
  {
    "target": "com.amazonaws.licensemanager#RateLimitExceededException"
  },
  {
    "target": "com.amazonaws.licensemanager#ServerInternalException"
  }
],
"traits": {
  "smithy.api#documentation": "<p>Gets information about the specified license type conversion task.</p>"
}
},
"com.amazonaws.licensemanager#GetLicenseConversionTaskRequest": {
  "type": "structure",
  "members": {
    "LicenseConversionTaskId": {
      "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
      "traits": {
        "smithy.api#documentation": "<p>ID of the license type conversion task to retrieve information on.</p>",
        "smithy.api#required": {}
      }
    }
  },
  "traits": {
    "smithy.api#input": {}
  }
},
"com.amazonaws.licensemanager#GetLicenseConversionTaskResponse": {
  "type": "structure",
  "members": {
    "LicenseConversionTaskId": {
      "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
      "traits": {
        "smithy.api#documentation": "<p>ID of the license type conversion task.</p>"
      }
    }
  }
}

```

```

    }
  },
  "ResourceArn": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the resources the license
conversion task is associated with.</p>"
    }
  },
  "SourceLicenseContext": {
    "target": "com.amazonaws.licensemanager#LicenseConversionContext",
    "traits": {
      "smithy.api#documentation": "<p>Information
about the license type converted from.</p>"
    }
  },
  "DestinationLicenseContext": {
    "target": "com.amazonaws.licensemanager#LicenseConversionContext",
    "traits": {
      "smithy.api#documentation": "<p>Information about the license type converted to.</p>"
    }
  },
  "StatusMessage": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>The status message for the conversion task.</p>"
    }
  },
  "Status": {
    "target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
    "traits": {
      "smithy.api#documentation": "<p>Status of the license type conversion task.</p>"
    }
  },
  "StartTime": {
    "target": "com.amazonaws.licensemanager#DateTime",
    "traits": {
      "smithy.api#documentation": "<p>Time at which the license type conversion task was started .</p>"
    }
  },
  "LicenseConversionTime": {
    "target": "com.amazonaws.licensemanager#DateTime",
    "traits": {
      "smithy.api#documentation": "<p>Amount of time to complete the license type conversion.</p>"
    }
  },
  "EndTime": {

```

```

        "target": "com.amazonaws.licensemanager#DateTime",
        "traits": {
            "smithy.api#documentation": "<p>Time at which the license type conversion task was
completed.</p>"
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#GetLicenseManagerReportGenerator":
{
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {

```

```

    "smithy.api#documentation": "<p>Gets information about the specified report generator.</p>"
  }
},
"com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest": {
  "type": "structure",
  "members": {
    "LicenseManagerReportGeneratorArn": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator.</p>",
        "smithy.api#required":
      }
    }
  },
  "traits": {
    "smithy.api#input": {}
  }
},
"com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse": {
  "type": "structure",
  "members": {
    "ReportGenerator": {
      "target": "com.amazonaws.licensemanager#ReportGenerator",
      "traits": {
        "smithy.api#documentation": "<p>A report generator that creates periodic reports about your license configurations.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#GetLicenseRequest": {
  "type": "structure",
  "members": {
    "LicenseArn": {
      "target": "com.amazonaws.licensemanager#Arn",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
        "smithy.api#required": {}
      }
    }
  },
  "Version": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {

```

```

        "smithy.api#documentation": "<p>License version.</p>"
    }
}
},
"traits": {
    "smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetLicenseResponse": {
    "type": "structure",
    "members": {
        "License": {
            "target": "com.amazonaws.licensemanager#License",
            "traits": {
                "smithy.api#documentation": "<p>License details.</p>"
            }
        }
    }
},
"traits": {
    "smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#GetLicenseUsage": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#GetLicenseUsageRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#GetLicenseUsageResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {

```

```

"target": "com.amazonaws.licensemanager#ValidationException"
  }
],
"traits": {
  "smithy.api#documentation": "<p>Gets detailed information about the usage of the specified license.</p>"
}
},
"com.amazonaws.licensemanager#GetLicenseUsageRequest": {
  "type": "structure",
  "members": {
    "LicenseArn": {
      "target": "com.amazonaws.licensemanager#Arn",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
        "smithy.api#required": {}
      }
    }
  },
  "traits": {
    "smithy.api#input": {}
  }
},
"com.amazonaws.licensemanager#GetLicenseUsageResponse": {
  "type": "structure",
  "members": {
    "LicenseUsage": {
      "target":
"com.amazonaws.licensemanager#LicenseUsage",
      "traits": {
        "smithy.api#documentation": "<p>License usage details.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#GetServiceSettings": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#GetServiceSettingsRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#GetServiceSettingsResponse"
  },
  "errors": [
    {

```

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        "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
        "target": "com.amazonaws.licensemanager#ServerInternalException"
    }
],
"traits": {
    "smithy.api#documentation": "<p>Gets the License Manager settings for the current Region.</p>"
}
},
"com.amazonaws.licensemanager#GetServiceSettingsRequest": {
    "type": "structure",
    "members": {},
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#GetServiceSettingsResponse": {
    "type": "structure",
    "members": {
        "S3BucketArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Regional S3 bucket path for storing reports, license trail event data,
discovery data,\n    and so on.</p>"
            }
        }
    },
    "SnsTopicArn": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
            "smithy.api#documentation": "<p>SNS topic configured to receive notifications from License
Manager.</p>"
        }
    },
    "OrganizationConfiguration": {
        "target": "com.amazonaws.licensemanager#OrganizationConfiguration",
        "traits": {
            "smithy.api#documentation": "<p>Indicates whether Organizations is integrated with License
Manager for\n    cross-account discovery.</p>"
        }
    }
},

```



```

    "EnableCrossAccountsDiscovery": {
      "target": "com.amazonaws.licensemanager#BoxBoolean",
      "traits": {
        "smithy.api#documentation": "<p>Indicates whether cross-account discovery is enabled.</p>"
      }
    },
    "LicenseManagerResourceShareArn": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource share. The License Manager management account \n      provides member accounts with access to this share.</p>"
      }
    },
    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanager#Grant": {
    "type": "structure",
    "members": {
      "GrantArn": {
        "target": "com.amazonaws.licensemanager#Arn",
        "traits": {
          "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
          "smithy.api#required": {}
        }
      },
      "GrantName": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Grant name.</p>",
          "smithy.api#required": {}
        }
      },
      "ParentArn": {
        "target": "com.amazonaws.licensemanager#Arn",
        "traits": {
          "smithy.api#documentation": "<p>Parent ARN.</p>",
          "smithy.api#required": {}
        }
      },
      "LicenseArn": {
        "target": "com.amazonaws.licensemanager#Arn",
        "traits": {
          "smithy.api#documentation": "<p>License ARN.</p>",

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```

        "smithy.api#required": {}
    },
    "GranteePrincipalArn": {
        "target": "com.amazonaws.licensemanager#Arn",
        "traits": {}
    },
    "smithy.api#documentation": "<p>The grantee principal ARN.</p>",
    "smithy.api#required": {}
},
"HomeRegion": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
        "smithy.api#documentation": "<p>Home Region of the grant.</p>",
        "smithy.api#required": {}
    }
},
"GrantStatus": {
    "target": "com.amazonaws.licensemanager#GrantStatus",
    "traits": {
        "smithy.api#documentation": "<p>Grant status.</p>",
        "smithy.api#required": {}
    }
},
"StatusReason": {
    "target": "com.amazonaws.licensemanager#StatusReasonMessage",
    "traits": {
        "smithy.api#documentation": "<p>Grant status reason.</p>"
    }
},
"Version": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
        "smithy.api#documentation": "<p>Grant version.</p>",
        "smithy.api#required": {}
    }
},
"GrantedOperations": {
    "target": "com.amazonaws.licensemanager#AllowedOperationList",
    "traits": {
        "smithy.api#documentation": "<p>Granted operations.</p>",
        "smithy.api#required": {}
    }
},
"Options": {
    "target": "com.amazonaws.licensemanager#Options",
    "traits": {}
}

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```

        "smithy.api#documentation": "<p>The options specified for the grant.</p>"
    }
}
},
"traits": {
    "smithy.api#documentation":
"<p>Describes a grant.</p>"
}
},
"com.amazonaws.licensemanager#GrantList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#Grant"
    }
},
"com.amazonaws.licensemanager#GrantStatus": {
    "type": "enum",
    "members": {
        "PENDING_WORKFLOW": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PENDING_WORKFLOW"
            }
        },
        "PENDING_ACCEPT": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PENDING_ACCEPT"
            }
        },
        "REJECTED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "REJECTED"
            }
        }
    },
    "ACTIVE": {
        "target": "smithy.api#Unit",
        "traits": {
            "smithy.api#enumValue": "ACTIVE"
        }
    },
    "FAILED_WORKFLOW": {
        "target": "smithy.api#Unit",
        "traits": {
            "smithy.api#enumValue": "FAILED_WORKFLOW"
        }
    }
}
}

```

```

    },
    "DELETED": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "DELETED"
      }
    },
    "PENDING_DELETE": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "PENDING_DELETE"
      }
    },
    "DISABLED": {
      "target": "smithy.api#Unit",
      "traits":
{
      "smithy.api#enumValue": "DISABLED"
    }
    },
    "WORKFLOW_COMPLETED": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "WORKFLOW_COMPLETED"
      }
    }
  }
},
"com.amazonaws.licensemanager#GrantedLicense": {
  "type": "structure",
  "members": {
    "LicenseArn": {
      "target": "com.amazonaws.licensemanager#Arn",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
      }
    },
    "LicenseName": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>License name.</p>"
      }
    }
  },
  "ProductName": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Product name.</p>"
    }
  }
}

```

```

    }
  },
  "ProductSKU": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Product SKU.</p>"
    }
  },
  "Issuer": {
    "target": "com.amazonaws.licensemanager#IssuerDetails",
    "traits": {
      "smithy.api#documentation": "<p>Granted license issuer.</p>"
    }
  },
  "HomeRegion": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Home Region of the granted license.</p>"
    }
  },
  "Status": {
    "target": "com.amazonaws.licensemanager#LicenseStatus",
    "traits": {
      "smithy.api#documentation": "<p>Granted license status.</p>"
    }
  },
  "Validity": {
    "target": "com.amazonaws.licensemanager#DatetimeRange",
    "traits": {
      "smithy.api#documentation": "<p>Date and time range during which the granted license is valid, in ISO8601-UTC format.</p>"
    }
  },
  "Beneficiary": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Granted license beneficiary.</p>"
    }
  },
  "Entitlements": {
    "target": "com.amazonaws.licensemanager#EntitlementList",
    "traits": {
      "smithy.api#documentation": "<p>License entitlements.</p>"
    }
  },
  "ConsumptionConfiguration": {
    "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",

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    "traits": {
      "smithy.api#documentation": "<p>Configuration for consumption of the license.</p>"
    }
  },
  "LicenseMetadata": {
    "target": "com.amazonaws.licensemanager#MetadataList",
    "traits": {
      "smithy.api#documentation": "<p>Granted license metadata.</p>"
    }
  },
  "CreateTime": {
    "target": "com.amazonaws.licensemanager#ISO8601DateTime",
    "traits": {
      "smithy.api#documentation": "<p>Creation time of the granted license.</p>"
    }
  }
},
"Version": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>Version of the granted license.</p>"
  }
},
"ReceivedMetadata": {
  "target": "com.amazonaws.licensemanager#ReceivedMetadata",
  "traits": {
    "smithy.api#documentation": "<p>Granted license received metadata.</p>"
  }
}
},
"traits": {
  "smithy.api#documentation": "<p>Describes a license that is granted to a grantee.</p>"
}
},
"com.amazonaws.licensemanager#GrantedLicenseList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanager#GrantedLicense"
  }
},
"com.amazonaws.licensemanager#ISO8601DateTime":
{
  "type": "string",
  "traits": {
    "smithy.api#length": {
      "min": 0,
      "max": 50
    }
  },

```

```

    "smithy.api#pattern": "^(-?(?:[1-9][0-9]*)?[0-9]{4})-(1[0-2]|0[1-9])-(3[0-1]|0[1-9]|1-2)[0-9])T(2[0-3]|[0-1][0-9]):([0-5][0-9]):([0-5][0-9])(\\.[0-9]+)?(Z|[+-])(?:2[0-3]|[0-1][0-9]):[0-5][0-9])+$"
  }
},
"com.amazonaws.licensemanager#Integer": {
  "type": "integer"
},
"com.amazonaws.licensemanager#InvalidParameterValueException": {
  "type": "structure",
  "members": {
    "Message": {
      "target": "com.amazonaws.licensemanager#Message"
    }
  },
  "traits": {
    "aws.protocols#awsQueryError": {
      "code": "InvalidParameterValueProvided",
      "httpResponseCode": 400
    },
    "smithy.api#documentation":
    "<p>One or more parameter values are not valid.</p>",
    "smithy.api#error": "client",
    "smithy.api#httpError": 400
  }
},
"com.amazonaws.licensemanager#InvalidResourceStateException": {
  "type": "structure",
  "members": {
    "Message": {
      "target": "com.amazonaws.licensemanager#Message"
    }
  },
  "traits": {
    "aws.protocols#awsQueryError": {
      "code": "InvalidResourceState",
      "httpResponseCode": 400
    },
    "smithy.api#documentation": "<p>License Manager cannot allocate a license to a resource because of its
state. </p>\n    <p>For example, you cannot allocate a license to an instance in the process of shutting\n
down.</p>",
    "smithy.api#error": "client",
    "smithy.api#httpError": 400
  }
},
"com.amazonaws.licensemanager#InventoryFilter": {
  "type": "structure",
  "members": {

```

```

    "Name": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Name of the filter.</p>",
        "smithy.api#required": {}
      }
    },
    "Condition": {
      "target": "com.amazonaws.licensemanager#InventoryFilterCondition",
      "traits": {
        "smithy.api#documentation": "<p>Condition of the filter.</p>",
        "smithy.api#required": {}
      }
    },
    "Value": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Value of the filter.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>An inventory filter.</p>"
  }
},
"com.amazonaws.licensemanager#InventoryFilterCondition": {
  "type": "enum",
  "members": {
    "EQUALS": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "EQUALS"
      }
    },
    "NOT_EQUALS": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "NOT_EQUALS"
      }
    },
    "BEGINS_WITH": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "BEGINS_WITH"
      }
    },
    "CONTAINS": {

```



```

        "target": "smithy.api#Unit",
        "traits": {
            "smithy.api#enumValue": "CONTAINS"
        }
    }
},
"com.amazonaws.licensemanager#InventoryFilterList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#InventoryFilter"
    }
},
"com.amazonaws.licensemanager#Issuer": {
    "type": "structure",
    "members": {
        "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Issuer name.</p>",
                "smithy.api#required": {}
            }
        },
        "SignKey": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Asymmetric KMS key from Key Management Service. The KMS
key must have a key usage
of sign and verify, \n    and support the RSASSA-PSS SHA-256 signing algorithm.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Details about the issuer of a license.</p>"
    }
},
"com.amazonaws.licensemanager#IssuerDetails": {
    "type": "structure",
    "members": {
        "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Issuer name.</p>"
            }
        },
        "SignKey": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {

```

"smithy.api#documentation": "<p>Asymmetric KMS key from Key Management Service. The KMS key must have a key usage of sign and verify, \n and support the RSASSA-PSS SHA-256 signing algorithm.</p>"

```
    }
  },
  "KeyFingerprint": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Issuer key fingerprint.</p>"
    }
  }
},
"traits": {
  "smithy.api#documentation": "<p>Details associated with the issuer of a license.</p>"
}
},
"com.amazonaws.licensemanager#License": {
  "type": "structure",
  "members": {
    "LicenseArn": {
      "target": "com.amazonaws.licensemanager#Arn",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
      }
    },
    "LicenseName": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>License name.</p>"
      }
    },
    "ProductName": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Product name.</p>"
      }
    },
    "ProductSKU": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Product SKU.</p>"
      }
    },
    "Issuer": {
      "target": "com.amazonaws.licensemanager#IssuerDetails",
      "traits": {
        "smithy.api#documentation": "<p>License issuer.</p>"
      }
    }
  }
}
```

```

    }
  },
  "HomeRegion": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Home Region of the license.</p>"
    }
  },
  "Status": {
    "target": "com.amazonaws.licensemanager#LicenseStatus",
    "traits": {
      "smithy.api#documentation": "<p>License status.</p>"
    }
  },
  "Validity": {
    "target": "com.amazonaws.licensemanager#DatetimeRange",
    "traits": {
      "smithy.api#documentation": "<p>Date and time range during which the license is valid, in ISO8601-
UTC format.</p>"
    }
  },
  "Beneficiary": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>License beneficiary.</p>"
    }
  },
  "Entitlements": {
    "target": "com.amazonaws.licensemanager#EntitlementList",
    "traits": {
      "smithy.api#documentation": "<p>License entitlements.</p>"
    }
  },
  "ConsumptionConfiguration": {
    "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
    "traits": {
      "smithy.api#documentation": "<p>Configuration for consumption of the license.</p>"
    }
  },
  "LicenseMetadata": {
    "target": "com.amazonaws.licensemanager#MetadataList",
    "traits": {
      "smithy.api#documentation": "<p>License metadata.</p>"
    }
  },
  "CreateTime": {

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        "target": "com.amazonaws.licensemanager#ISO8601DateTime",
        "traits": {
            "smithy.api#documentation": "<p>License
creation time.</p>"
        }
    },
    "Version": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
            "smithy.api#documentation": "<p>License version.</p>"
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Software license that is managed in License Manager.</p>"
    }
},
"com.amazonaws.licensemanager#LicenseConfiguration": {
    "type": "structure",
    "members": {
        "LicenseConfigurationId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Unique ID of the license configuration.</p>"
            }
        },
        "LicenseConfigurationArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
            }
        },
        "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Name of the license configuration.</p>"
            }
        },
        "Description": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Description of the license configuration.</p>"
            }
        },
        "LicenseCountingType": {
            "target": "com.amazonaws.licensemanager#LicenseCountingType",
            "traits": {
                "smithy.api#documentation": "<p>Dimension to use to track the license inventory.</p>"
            }
        }
    }
}

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    }
  },
  "LicenseRules": {
    "target": "com.amazonaws.licensemanager#StringList",
    "traits": {
      "smithy.api#documentation": "<p>License rules.</p>"
    }
  },
  "LicenseCount": {
    "target": "com.amazonaws.licensemanager#BoxLong",
    "traits": {
      "smithy.api#documentation": "<p>Number of licenses managed by the license configuration.</p>"
    }
  },
  "LicenseCountHardLimit": {
    "target": "com.amazonaws.licensemanager#BoxBoolean",
    "traits": {
      "smithy.api#documentation": "<p>Number of available licenses as a hard limit.</p>"
    }
  },
  "DisassociateWhenNotFound": {
    "target": "com.amazonaws.licensemanager#BoxBoolean",
    "traits": {
      "smithy.api#documentation": "<p>When true, disassociates a resource when software is
uninstalled.</p>"
    }
  },
  "ConsumedLicenses": {
    "target": "com.amazonaws.licensemanager#BoxLong",
    "traits": {
      "smithy.api#documentation": "<p>Number of licenses consumed. </p>"
    }
  },
  "Status": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Status of the license configuration.</p>"
    }
  },
  "OwnerAccountId": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Account ID of the license configuration's owner.</p>"
    }
  },
  "ConsumedLicenseSummaryList": {
    "target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",

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    "traits": {
      "smithy.api#documentation": "<p>Summaries for licenses consumed by various resources.</p>"
    }
  },
  "ManagedResourceSummaryList": {
    "target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
    "traits": {
      "smithy.api#documentation": "<p>Summaries for managed resources.</p>"
    }
  },
  "ProductInformationList": {
    "target": "com.amazonaws.licensemanager#ProductInformationList",
    "traits": {
      "smithy.api#documentation": "<p>Product information.</p>"
    }
  },
  "AutomatedDiscoveryInformation": {
    "target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
    "traits": {
      "smithy.api#documentation": "<p>Automated discovery information.</p>"
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>A license configuration is an abstraction of a customer license agreement that can be consumed and enforced by License Manager. Components include specifications for the license type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, Dedicated Instance, Dedicated Host, or all of these), host affinity (how long a VM must be associated with a host), and the number of licenses purchased and used.</p>"
  },
  "com.amazonaws.licensemanager#LicenseConfigurationAssociation": {
    "type": "structure",
    "members": {
      "ResourceArn": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
        }
      },
      "ResourceType": {
        "target": "com.amazonaws.licensemanager#ResourceType",
        "traits": {
          "smithy.api#documentation": "<p>Type of server resource.</p>"
        }
      }
    }
  },

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    "ResourceOwnerId": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>ID of the Amazon Web Services account that owns the resource
consuming licenses.</p>"
      }
    },
    "AssociationTime": {
      "target": "com.amazonaws.licensemanager#DateTime",
      "traits": {
        "smithy.api#documentation": "<p>Time when the license configuration was associated with the resource.</p>"
      }
    },
    "AmiAssociationScope": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Scope of AMI associations. The possible value is <code>cross-
account</code>.</p>"
      }
    },
    "traits": {
      "smithy.api#documentation": "<p>Describes an association with a license configuration.</p>"
    }
  },
  "com.amazonaws.licensemanager#LicenseConfigurationAssociations": {
    "type": "list",
    "member": {
      "target": "com.amazonaws.licensemanager#LicenseConfigurationAssociation"
    }
  },
  "com.amazonaws.licensemanager#LicenseConfigurationStatus": {
    "type": "enum",
    "members":
  {
    "AVAILABLE": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "AVAILABLE"
      }
    },
    "DISABLED": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "DISABLED"
      }
    }
  }
}

```

```

    }
  },
  "com.amazonaws.licensemanager#LicenseConfigurationUsage": {
    "type": "structure",
    "members": {
      "ResourceArn": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
        }
      },
      "ResourceType": {
        "target": "com.amazonaws.licensemanager#ResourceType",
        "traits": {
          "smithy.api#documentation": "<p>Type of resource.</p>"
        }
      },
      "ResourceStatus": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Status of the resource.</p>"
        }
      },
      "ResourceOwnerId": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>ID of the account that owns the resource.</p>"
        }
      },
      "AssociationTime": {
        "target": "com.amazonaws.licensemanager#DateTime",
        "traits": {
          "smithy.api#documentation": "<p>Time when the license configuration was initially associated with the resource.</p>"
        }
      },
      "ConsumedLicenses": {
        "target": "com.amazonaws.licensemanager#BoxLong",
        "traits": {
          "smithy.api#documentation": "<p>Number of licenses consumed by the resource.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#documentation": "<p>Details about the usage of a resource associated with a license configuration.</p>"
    }
  }
}

```



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    }
  },
  "com.amazonaws.licensemanager#LicenseConfigurationUsageList": {
    "type": "list",
    "member": {
      "target": "com.amazonaws.licensemanager#LicenseConfigurationUsage"
    }
  },
  "com.amazonaws.licensemanager#LicenseConfigurations": {
    "type": "list",
    "member": {
      "target": "com.amazonaws.licensemanager#LicenseConfiguration"
    }
  },
  "com.amazonaws.licensemanager#LicenseConversionContext": {
    "type": "structure",
    "members": {
      "UsageOperation": {
        "target": "com.amazonaws.licensemanager#UsageOperation",
        "traits": {
          "smithy.api#documentation": "<p>The Usage operation value that corresponds to the license type you
are converting your resource from. For more information about which platforms correspond to which usage
operation values see <a href=\"https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/billing-info-
fields.html#billing-info\">Sample data: usage operation by platform\n  </a>\n  </p>"
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Information about a license type conversion task.</p>"
      }
    },
    "com.amazonaws.licensemanager#LicenseConversionTask": {
      "type": "structure",
      "members": {
        "LicenseConversionTaskId": {
          "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
          "traits": {
            "smithy.api#documentation": "<p>The ID of the license type conversion task.</p>"
          }
        },
        "ResourceArn": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource associated
with the license type\n  conversion task.</p>"
          }
        }
      }
    }
  }
}

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    },
    "SourceLicenseContext": {
      "target": "com.amazonaws.licensemanager#LicenseConversionContext",
      "traits": {
        "smithy.api#documentation": "<p>Information about the license type this conversion task converted
from.</p>"
      }
    },
    "DestinationLicenseContext": {
      "target":
"com.amazonaws.licensemanager#LicenseConversionContext",
      "traits": {
        "smithy.api#documentation": "<p>Information about the license type this conversion task converted
to.</p>"
      }
    },
    "Status": {
      "target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
      "traits": {
        "smithy.api#documentation": "<p>The status of the conversion task.</p>"
      }
    },
    "StatusMessage": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>The status message for the conversion task.</p>"
      }
    },
    "StartTime": {
      "target": "com.amazonaws.licensemanager#DateTime",
      "traits": {
        "smithy.api#documentation":
"<p>The time the conversion task was started at.</p>"
      }
    },
    "LicenseConversionTime": {
      "target": "com.amazonaws.licensemanager#DateTime",
      "traits": {
        "smithy.api#documentation": "<p>The time the usage operation value of the resource was
changed.</p>"
      }
    },
    "EndTime": {
      "target": "com.amazonaws.licensemanager#DateTime",
      "traits": {
        "smithy.api#documentation": "<p>The time the conversion task was completed.</p>"
      }
    }
  }
}

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    },
    "traits": {
      "smithy.api#documentation": "<p>Information about a license type conversion task.</p>"
    }
  },
  "com.amazonaws.licensemanager#LicenseConversionTaskId": {
    "type": "string",
    "traits": {
      "smithy.api#length": {
        "min": 0,
        "max": 50
      },
      "smithy.api#pattern": "^\\lct-[a-zA-Z0-9]*$"
    }
  },
  "com.amazonaws.licensemanager#LicenseConversionTaskStatus": {
    "type": "enum",
    "members": {
      "IN_PROGRESS": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "IN_PROGRESS"
        }
      },
      "SUCCEEDED": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "SUCCEEDED"
        }
      },
      "FAILED": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "FAILED"
        }
      }
    }
  },
  "com.amazonaws.licensemanager#LicenseConversionTasks":
  {
    "type": "list",
    "member": {
      "target": "com.amazonaws.licensemanager#LicenseConversionTask"
    }
  },
  "com.amazonaws.licensemanager#LicenseCountingType": {
    "type": "enum",

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"members": {
  "VCPU": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "vCPU"
    }
  },
  "INSTANCE": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Instance"
    }
  },
  "CORE": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Core"
    }
  },
  "SOCKET": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Socket"
    }
  }
},
"com.amazonaws.licensemanager#LicenseDeletionStatus": {
  "type": "enum",
  "members": {
    "PENDING_DELETE": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "PENDING_DELETE"
      }
    },
    "DELETED": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "DELETED"
      }
    }
  }
},
"com.amazonaws.licensemanager#LicenseList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanager#License"
  }
}

```

```

    }
  },
  "com.amazonaws.licensemanager#LicenseOperationFailure": {
    "type": "structure",
    "members": {
      "ResourceArn": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
        }
      },
      "ResourceType": {
        "target": "com.amazonaws.licensemanager#ResourceType",
        "traits": {
          "smithy.api#documentation": "<p>Resource type.</p>"
        }
      },
      "ErrorMessage": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Error message.</p>"
        }
      },
      "FailureTime": {
        "target": "com.amazonaws.licensemanager#DateTime",
        "traits": {
          "smithy.api#documentation": "<p>Failure time.</p>"
        }
      },
      "OperationName": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Name of the operation.</p>"
        }
      },
      "ResourceOwnerId": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>ID of the Amazon Web Services account that owns the
resource.</p>"
        }
      },
      "OperationRequestedBy": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>The requester is \"License Manager Automated Discovery\".</p>"
        }
      }
    }
  }
}

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    }
  },
  "MetadataList": {
    "target": "com.amazonaws.licensemanager#MetadataList",
    "traits": {
      "smithy.api#documentation": "<p>Reserved.</p>"
    }
  }
},
"traits": {
  "smithy.api#documentation": "<p>Describes the failure of a license operation.</p>"
}
},
"com.amazonaws.licensemanager#LicenseOperationFailureList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanager#LicenseOperationFailure"
  }
},
"com.amazonaws.licensemanager#LicenseSpecification": {
  "type": "structure",
  "members": {
    "LicenseConfigurationArn": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",

        "smithy.api#required": {}
      }
    },
    "AmiAssociationScope": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Scope of AMI associations. The possible value is <code>cross-
account</code>.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>Details for associating a license configuration with a resource.</p>"
  }
},
"com.amazonaws.licensemanager#LicenseSpecifications": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanager#LicenseSpecification"
  }
}

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    }
  },
  "com.amazonaws.licensemanager#LicenseStatus": {
    "type": "enum",
    "members": {
      "AVAILABLE": {
        "target": "smithy.api#Unit",

        "traits": {
          "smithy.api#enumValue": "AVAILABLE"
        }
      },
      "PENDING_AVAILABLE": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "PENDING_AVAILABLE"
        }
      },
      "DEACTIVATED": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "DEACTIVATED"
        }
      },
      "SUSPENDED": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "SUSPENDED"
        }
      },
      "EXPIRED": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "EXPIRED"
        }
      },
      "PENDING_DELETE": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "PENDING_DELETE"
        }
      },
      "DELETED": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "DELETED"
        }
      }
    }
  }
}

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    }
  },
  "com.amazonaws.licensemanager#LicenseUsage": {
    "type": "structure",
    "members": {
      "EntitlementUsages": {
        "target": "com.amazonaws.licensemanager#EntitlementUsageList",
        "traits": {
          "smithy.api#documentation": "<p>License entitlement usages.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#documentation": "<p>Describes the entitlement usage associated with a license.</p>"
    }
  },
  "com.amazonaws.licensemanager#LicenseUsageException": {
    "type": "structure",
    "members": {
      "Message": {
        "target": "com.amazonaws.licensemanager#Message"
      }
    },
    "traits": {
      "aws.protocols#awsQueryError": {
        "code": "LicenseUsageFailure",
        "httpResponseCode": 412
      },
      "smithy.api#documentation": "<p>You do not have enough licenses available to support a new resource launch.</p>",
      "smithy.api#error": "client",
      "smithy.api#httpError": 412
    }
  },
  "com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      }
    ]
  }
}

```



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    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Lists the resource associations for the
specified license configuration.</p>\n    <p>Resource associations need not consume licenses from a license
configuration. \n    For example, an AMI or a stopped instance might not consume a license (depending on \n
the license rules).</p>"
  }
},
"com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest": {
  "type": "structure",
  "members": {
    "LicenseConfigurationArn": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of a license configuration.</p>",
        "smithy.api#required": {}
      }
    },
    "MaxResults": {
      "target": "com.amazonaws.licensemanager#BoxInteger",
      "traits": {
        "smithy.api#documentation": "<p>Maximum number of results
to return in a single call.</p>"
      }
    },
    "NextToken": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Token for the next set of results.</p>"
      }
    }
  }
},

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```

    "traits": {
      "smithy.api#input": {}
    }
  },
  "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse": {
    "type": "structure",
    "members": {
      "LicenseConfigurationAssociations": {
        "target": "com.amazonaws.licensemanager#LicenseConfigurationAssociations",
        "traits": {
          "smithy.api#documentation": "<p>Information about the associations for the license
configuration.</p>"
        }
      },
      "NextToken": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Token for the next set of results.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanager#ListDistributedGrants": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#ListDistributedGrantsRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#ListDistributedGrantsResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
      },
      {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
      },
      {

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    "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
  },
  {
    "target": "com.amazonaws.licensemanager#ServerInternalException"
  },
  {
    "target": "com.amazonaws.licensemanager#ValidationException"
  }
],
"traits": {
  "smithy.api#documentation": "<p>Lists the grants distributed for the specified license.</p>"
}
},
"com.amazonaws.licensemanager#ListDistributedGrantsRequest": {
  "type": "structure",
  "members": {
    "GrantArns": {
      "target": "com.amazonaws.licensemanager#ArnList",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the grants.</p>"
      }
    },
    "Filters": {
      "target": "com.amazonaws.licensemanager#FilterList",
      "traits": {
        "smithy.api#documentation": "<p>Filters to scope the results. The following filters are supported:</p>\n
        <ul>\n
          <li>\n
            <p>\n
              <code>LicenseArn</code>\n
            </p>\n
          </li>\n
          <li>\n
            <p>\n
              <code>GrantStatus</code>\n
            </p>\n
          </li>\n
          <li>\n
            <p>\n
              <code>GranteePrincipalARN</code>\n
            </p>\n
          </li>\n
          <li>\n
            <p>\n
              <code>ProductSKU</code>\n
            </p>\n
          </li>\n
          <li>\n
            <p>\n
              <code>LicenseIssuerName</code>\n
            </p>\n
          </li>\n
        </ul>"
      }
    },
    "NextToken": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Token for the next set of results.</p>"
      }
    },
    "MaxResults": {
      "target": "com.amazonaws.licensemanager#MaxSize100",
      "traits": {
        "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
      }
    }
  }
},

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    "traits": {
      "smithy.api#input": {}
    }
  },
  "com.amazonaws.licensemanager#ListDistributedGrantsResponse": {
    "type": "structure",
    "members": {
      "Grants": {
        "target": "com.amazonaws.licensemanager#GrantList",

"traits": {
      "smithy.api#documentation": "<p>Distributed grant details.</p>"
    }
  },
  "NextToken": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Token for the next set of results.</p>"
    }
  }
},
"traits": {
  "smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse"
  },
  "errors": [
    {
"target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {

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        "target": "com.amazonaws.licensemanager#ServerInternalException"
    }
},
"traits": {
    "smithy.api#documentation": "<p>Lists the license configuration operations that failed.</p>"
}
},
"com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest": {
    "type": "structure",
    "members": {
        "LicenseConfigurationArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name of the license configuration.</p>",
                "smithy.api#required": {}
            }
        },
        "MaxResults": {
            "target": "com.amazonaws.licensemanager#BoxInteger",
            "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse":
{
    "type": "structure",
    "members": {
        "LicenseOperationFailureList": {
            "target": "com.amazonaws.licensemanager#LicenseOperationFailureList",
            "traits": {
                "smithy.api#documentation": "<p>License configuration operations that failed.</p>"
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    }
}

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    }
  },
  "traits": {
    "smithy.api#output": {}
  },
  "com.amazonaws.licensemanager#ListLicenseConfigurations": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#ListLicenseConfigurationsRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#ListLicenseConfigurationsResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
      },
      {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ServerInternalException"
      }
    ],
    "traits": {
      "smithy.api#documentation": "<p>Lists the license configurations
for your account.</p>"
    }
  },
  "com.amazonaws.licensemanager#ListLicenseConfigurationsRequest": {
    "type": "structure",
    "members": {
      "LicenseConfigurationArns": {
        "target": "com.amazonaws.licensemanager#StringList",
        "traits": {
          "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the license

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configurations.</p>"
    }
  },
  "MaxResults": {
    "target": "com.amazonaws.licensemanager#BoxInteger",
    "traits": {
      "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
    }
  },
  "NextToken": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Token for the next
set of results.</p>"
    }
  },
  "Filters": {
    "target": "com.amazonaws.licensemanager#Filters",
    "traits": {
      "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical
operators\n    are supported:</p>\n    <ul>\n      <li>\n        <p>\n
<code>licenseCountingType</code> - The dimension for which licenses are counted.\n          Possible values are
<code>vCPU</code> | <code>Instance</code> | <code>Core</code> | <code>Socket</code>.\n          Logical
operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n      </li>\n      <li>\n        <p>\n
<code>enforceLicenseCount</code> - A Boolean value that indicates whether hard license
enforcement is used. \n          Logical operators are <code>EQUALS</code> |
<code>NOT_EQUALS</code>.</p>\n    </li>\n    <li>\n      <p>\n
<code>usagelimitExceeded</code> - A Boolean value that
indicates whether the available licenses have been exceeded. \n          Logical operators are
<code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n    </li>\n  </ul>"
    }
  }
},
"traits": {
  "smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListLicenseConfigurationsResponse": {
  "type": "structure",
  "members": {
    "LicenseConfigurations": {
      "target": "com.amazonaws.licensemanager#LicenseConfigurations",
      "traits": {
        "smithy.api#documentation": "<p>Information about the license configurations.</p>"
      }
    },
    "NextToken": {
      "target": "com.amazonaws.licensemanager#String",

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    "traits": {
      "smithy.api#documentation": "<p>Token for the next set of results.</p>"
    }
  },
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#ListLicenseConversionTasks": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#ListLicenseConversionTasksRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#ListLicenseConversionTasksResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Lists the license type conversion tasks for your account.</p>"
  }
},
"com.amazonaws.licensemanager#ListLicenseConversionTasksRequest": {
  "type": "structure",
  "members": {
    "NextToken": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Token for the next set of results.</p>"
      }
    }
  },

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    "MaxResults": {
      "target": "com.amazonaws.licensemanager#BoxInteger",
      "traits": {

"smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
      }
    },
    "Filters": {
      "target": "com.amazonaws.licensemanager#Filters",
      "traits": {
        "smithy.api#documentation": "<p>\n    Filters to scope the results. Valid filters are
<code>ResourceArns</code> and <code>Status</code>.\n  </p>"
      }
    },
    "traits": {
      "smithy.api#input": {}
    }
  },
  "com.amazonaws.licensemanager#ListLicenseConversionTasksResponse": {
    "type": "structure",
    "members": {
      "LicenseConversionTasks": {
        "target": "com.amazonaws.licensemanager#LicenseConversionTasks",
        "traits": {
          "smithy.api#documentation": "<p>Information about the license configuration tasks for your
account.</p>"
        }
      },
      "NextToken": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Token for the next set of results.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanager#ListLicenseManagerReportGenerators": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse"
    },
  },

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"errors": [
  {
    "target": "com.amazonaws.licensemanager#AccessDeniedException"
  },
  {
    "target":
"com.amazonaws.licensemanager#AuthorizationException"
  },
  {
    "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
  },
  {
    "target": "com.amazonaws.licensemanager#RateLimitExceededException"
  },
  {
    "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
  },
  {
    "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
  },
  {
    "target": "com.amazonaws.licensemanager#ServerInternalException"
  },
  {
    "target": "com.amazonaws.licensemanager#ValidationException"
  }
],
"traits": {
  "smithy.api#documentation": "<p>Lists the report generators for your account.</p>"
}
},
"com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest":
{
  "type": "structure",
  "members": {
    "Filters": {
      "target": "com.amazonaws.licensemanager#FilterList",
      "traits": {
        "smithy.api#documentation": "<p>Filters to scope the results. The following filters are supported:
</p>\n  <ul>\n    <li>\n      <p>\n        <code>LicenseConfigurationArn</code>\n      </li>\n    </ul>"
      }
    },
    "NextToken": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Token for the next set of results.</p>"
      }
    }
  }
}

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    },
    "MaxResults": {
      "target": "com.amazonaws.licensemanager#MaxSize100",
      "traits":
    {
      "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
    }
  },
  "traits": {
    "smithy.api#input": {}
  }
},
"com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse": {
  "type": "structure",
  "members": {
    "ReportGenerators": {
      "target": "com.amazonaws.licensemanager#ReportGeneratorList",
      "traits": {
        "smithy.api#documentation": "<p>A report generator that creates periodic reports about your license
configurations.</p>"
      }
    },
    "NextToken": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Token for the next set of results.</p>"
      }
    }
  }
},
"traits": {
  "smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListLicenseSpecificationsForResource": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {

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        "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
        "target": "com.amazonaws.licensemanager#ServerInternalException"
    }
],
"traits": {
    "smithy.api#documentation": "<p>Describes the license configurations for the specified resource.</p>"
}
},
"com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest": {
    "type": "structure",
    "members": {
        "ResourceArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of a resource that has an
associated license configuration.</p>",
                "smithy.api#required": {}
            }
        },
        "MaxResults": {
            "target": "com.amazonaws.licensemanager#BoxInteger",
            "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse": {
    "type": "structure",
    "members": {

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"LicenseSpecifications": {
  "target": "com.amazonaws.licensemanager#LicenseSpecifications",
  "traits": {
    "smithy.api#documentation": "<p>License configurations associated with a resource.</p>"
  }
},
"NextToken": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
  }
},
"traits": {
  "smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListLicenseVersions": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#ListLicenseVersionsRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#ListLicenseVersionsResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Lists all versions of the specified license.</p>"
  }
},
"com.amazonaws.licensemanager#ListLicenseVersionsRequest": {
  "type": "structure",

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"members": {
  "LicenseArn": {
    "target": "com.amazonaws.licensemanager#Arn",
    "traits": {
      "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
      "smithy.api#required": {}
    }
  },
  "NextToken": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Token for the next set of results.</p>"
    }
  },
  "MaxResults": {
    "target": "com.amazonaws.licensemanager#MaxSize100",
    "traits": {
      "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
    }
  },
  "traits": {
    "smithy.api#input": {}
  }
},
"com.amazonaws.licensemanager#ListLicenseVersionsResponse": {
  "type": "structure",
  "members": {
    "Licenses": {
      "target": "com.amazonaws.licensemanager#LicenseList",
      "traits": {
        "smithy.api#documentation": "<p>License details.</p>"
      }
    }
  },
  "NextToken": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Token for the next set of results.</p>"
    }
  },
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#ListLicenses": {
  "type": "operation",

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"input": {
  "target": "com.amazonaws.licensemanager#ListLicensesRequest"
},
"output": {
  "target": "com.amazonaws.licensemanager#ListLicensesResponse"
},
"errors": [
  {
    "target": "com.amazonaws.licensemanager#AccessDeniedException"
  },
  {
    "target": "com.amazonaws.licensemanager#AuthorizationException"
  },
  {
    "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
  },
  {
    "target": "com.amazonaws.licensemanager#RateLimitExceededException"
  },
  {
    "target": "com.amazonaws.licensemanager#ServerInternalException"
  },
  {
    "target": "com.amazonaws.licensemanager#ValidationException"
  }
],
"traits": {
  "smithy.api#documentation": "<p>Lists the licenses for your account.</p>"
}
},
"com.amazonaws.licensemanager#ListLicensesRequest": {
  "type": "structure",
  "members": {
    "LicenseArns": {
      "target": "com.amazonaws.licensemanager#ArnList",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the licenses.</p>"
      }
    }
  }
},

"Filters": {
  "target": "com.amazonaws.licensemanager#FilterList",
  "traits": {
    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are supported:</p>\n
    <ul>\n
      <li>\n
        <p>\n
          <code>Beneficiary</code>\n
        </p>\n
      </li>\n
      <li>\n
        <p>\n
          <code>ProductSKU</code>\n
        </p>\n
      </li>\n
      <li>\n
        <p>\n
          <code>Fingerprint</code>\n
        </p>\n
      </li>\n
      <li>\n
        <p>\n
          <code>Status</code>\n
        </p>\n
      </li>\n
    </ul>"
  }
}

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    }
  },
  "NextToken": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Token
for the next set of results.</p>"
    }
  },
  "MaxResults": {
    "target": "com.amazonaws.licensemanager#MaxSize100",
    "traits": {
      "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
    }
  },
  "traits": {
    "smithy.api#input": {}
  },
  "com.amazonaws.licensemanager#ListLicensesResponse": {
    "type": "structure",
    "members": {
      "Licenses": {
        "target": "com.amazonaws.licensemanager#LicenseList",
        "traits": {
          "smithy.api#documentation": "<p>License details.</p>"
        }
      },
      "NextToken": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Token for the next set of results.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanager#ListReceivedGrants": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#ListReceivedGrantsRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#ListReceivedGrantsResponse"
    }
  }
}

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},
"errors": [
  {
    "target": "com.amazonaws.licensemanager#AccessDeniedException"
  },
  {
    "target": "com.amazonaws.licensemanager#AuthorizationException"
  },
  {
    "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
  },
  {
    "target": "com.amazonaws.licensemanager#RateLimitExceededException"
  },
  {
    "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
  },
  {
    "target": "com.amazonaws.licensemanager#ServerInternalException"
  },
  {
    "target": "com.amazonaws.licensemanager#ValidationException"
  }
],
"traits": {
  "smithy.api#documentation": "<p>Lists grants that are received. Received grants are grants created while specifying the recipient as this Amazon Web Services account, your organization, or an organizational unit (OU) to which this member account belongs.</p>"
}
},
"com.amazonaws.licensemanager#ListReceivedGrantsForOrganization": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    }
  ],

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    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    },
    {
      "target":
"com.amazonaws.licensemanager#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Lists the grants received for all accounts in the organization.</p>"
  }
},
"com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest": {
  "type": "structure",
  "members": {
    "LicenseArn": {
      "target": "com.amazonaws.licensemanager#Arn",
      "traits": {
        "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the received license.</p>",
        "smithy.api#required": {}
      }
    },
    "Filters": {
      "target": "com.amazonaws.licensemanager#FilterList",
      "traits": {
        "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n
        <ul>\n
          <li>\n
            <p>\n
              <code>ParentArn</code>\n
            </p>\n
          </li>\n
          <li>\n
            <p>\n
              <code>GranteePrincipalArn</code>\n
            </p>\n
          </li>\n
        </ul>"
      }
    },
    "NextToken": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Token for the next set of results.</p>"
      }
    },
    "MaxResults": {
      "target": "com.amazonaws.licensemanager#MaxSize100",
      "traits": {
        "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
      }
    }
  }
}

```

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    }
  },
  "traits": {
    "smithy.api#input": {}
  }
},
"com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse":
{
  "type": "structure",
  "members": {
    "Grants": {
      "target": "com.amazonaws.licensemanager#GrantList",
      "traits": {
        "smithy.api#documentation": "<p>Lists the grants the organization has received.</p>"
      }
    },
    "NextToken": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Token for the next set of results.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#ListReceivedGrantsRequest": {
  "type": "structure",
  "members": {
    "GrantArns": {
      "target": "com.amazonaws.licensemanager#ArnList",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the grants.</p>"
      }
    },
    "Filters": {
      "target": "com.amazonaws.licensemanager#FilterList",
      "traits": {
        "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n  <ul>\n    <li>\n      <p>\n        <code>ProductSKU</code>\n      </p>\n    </li>\n    <li>\n      <p>\n        <code>LicenseIssuerName</code>\n      </p>\n    </li>\n    <li>\n      <p>\n        <code>LicenseArn</code>\n      </p>\n    </li>\n    <li>\n      <p>\n        <code>GrantStatus</code>\n      </p>\n    </li>\n  </ul>\n    <code>GranterAccountId</code>\n  </p>\n  </li>\n  </ul>"
      }
    }
  },

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    "NextToken": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Token for the next set of results.</p>"
      }
    },
    "MaxResults": {
      "target": "com.amazonaws.licensemanager#MaxSize100",
      "traits": {
        "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#input": {}
  }
},
"com.amazonaws.licensemanager#ListReceivedGrantsResponse": {
  "type": "structure",
  "members": {
    "Grants": {
      "target": "com.amazonaws.licensemanager#GrantList",
      "traits": {
        "smithy.api#documentation": "<p>Received grant details.</p>"
      }
    },
    "NextToken": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Token for the next set of results.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#ListReceivedLicenses": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#ListReceivedLicensesRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#ListReceivedLicensesResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    }
  ]
}

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    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    },
    {
      "target": "com.amazonaws.licensemanager#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Lists received licenses.</p>"
  }
},
"com.amazonaws.licensemanager#ListReceivedLicensesForOrganization":
{
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
    }
  ]
}

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    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    },
    {
      "target": "com.amazonaws.licensemanager#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Lists the licenses received for all accounts in the organization.</p>"
  }
},
"com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest": {
  "type": "structure",
  "members": {
    "Filters": {
      "target": "com.amazonaws.licensemanager#FilterList",
      "traits": {
        "smithy.api#documentation": "<p>Filters to scope the results. The following filters are supported:</p>\n      <ul>\n        <li>\n          <p>\n            <code>Beneficiary</code>\n          </p>\n        </li>\n        <li>\n          <p>\n            <code>ProductSKU</code>\n          </p>\n        </li>\n      </ul>"
      }
    },
    "NextToken": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Token for the next set of results.</p>"
      }
    },
    "MaxResults": {
      "target": "com.amazonaws.licensemanager#MaxSize100",
      "traits": {
        "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#input": {}
  }
},
"com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse": {
  "type": "structure",
  "members": {
    "Licenses": {
      "target": "com.amazonaws.licensemanager#GrantedLicenseList",

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    "traits": {
      "smithy.api#documentation": "<p>Lists the licenses the organization has received.</p>"
    }
  },
  "NextToken": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Token for the next set of results.</p>"
    }
  }
},
"traits": {
  "smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListReceivedLicensesRequest": {
  "type": "structure",
  "members": {
    "LicenseArns": {
      "target": "com.amazonaws.licensemanager#ArnList",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the licenses.</p>"
      }
    },
    "Filters": {
      "target": "com.amazonaws.licensemanager#FilterList",
      "traits": {
        "smithy.api#documentation": "<p>Filters to scope the results. The following filters are supported:</p>\n
        <ul>\n
          <li>\n
            <p>\n
              <code>ProductSKU</code>\n
            </li>\n
            <li>\n
              <p>\n
                <code>Status</code>\n
              </p>\n
            </li>\n
            <p>\n
              <code>Fingerprint</code>\n
            </p>\n
            </li>\n
            <p>\n
              <code>IssuerName</code>\n
            </p>\n
            </li>\n
            <p>\n
              <code>Beneficiary</code>\n
            </p>\n
          </li>\n
        </ul>"
      }
    },
    "NextToken": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Token for the next set of results.</p>"
      }
    },
    "MaxResults": {
      "target": "com.amazonaws.licensemanager#MaxSize100",
      "traits": {
        "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
      }
    }
  }
}

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    },
    "traits": {
      "smithy.api#input": {}
    }
  },
  "com.amazonaws.licensemanager#ListReceivedLicensesResponse": {
    "type": "structure",
    "members": {
      "Licenses": {
        "target": "com.amazonaws.licensemanager#GrantedLicenseList",
        "traits": {
          "smithy.api#documentation": "<p>Received license details.</p>"
        }
      },
      "NextToken": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Token for the next set of results.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanager#ListResourceInventory": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#ListResourceInventoryRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#ListResourceInventoryResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#FailedDependencyException"
      },
      {
        "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
      },
      {

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    "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
  },
  {
    "target": "com.amazonaws.licensemanager#RateLimitExceededException"
  },
  {
    "target": "com.amazonaws.licensemanager#ServerInternalException"
  }
],
"traits": {
  "smithy.api#documentation": "<p>Lists resources managed using Systems Manager inventory.</p>"
}
},
"com.amazonaws.licensemanager#ListResourceInventoryRequest": {
  "type": "structure",
  "members": {
    "MaxResults": {
      "target": "com.amazonaws.licensemanager#BoxInteger",
      "traits": {
        "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
      }
    },
    "NextToken": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Token for the next set of results.</p>"
      }
    },
    "Filters": {
      "target": "com.amazonaws.licensemanager#InventoryFilterList",
      "traits": {
        "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical operators\n are supported:</p>\n <ul>\n <li>\n <p>\n <code>account_id</code>\n - The ID of the Amazon Web Services account that owns the resource.\n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n </li>\n <li>\n <p>\n <code>application_name</code> - The name of the application. \n Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>.</p>\n </li>\n <li>\n <p>\n <code>license_included</code> - The type of license included. \n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.\n Possible values are <code>sql-server-enterprise</code> | \n <code>sql-server-standard</code> | \n <code>sql-server-web</code> | \n <code>windows-server-datacenter</code>.</p>\n </li>\n <li>\n <p>\n <code>platform</code> - The platform of the resource.\n Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>.</p>\n </li>\n <li>\n <p>\n <code>resource_id</code> - The ID of the resource. \n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n </li>\n <li>\n <p>\n <code>tag:<key></code> - The key/value combination of a tag assigned \n to the resource. Logical operators are <code>EQUALS</code> (single account) or \n <code>EQUALS</code> | <code>NOT_EQUALS</code> (cross account).</p>\n </li>\n </ul>"
      }
    }
  }
}

```

```

    }
  }
},
"traits": {
  "smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListResourceInventoryResponse": {
  "type": "structure",
  "members": {
    "ResourceInventoryList": {
      "target": "com.amazonaws.licensemanager#ResourceInventoryList",
      "traits": {
        "smithy.api#documentation": "<p>Information
about the resources.</p>"
      }
    },
    "NextToken": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Token for the next set of results.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#ListTagsForResource": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#ListTagsForResourceRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#ListTagsForResourceResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    }
  ]
}

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    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Lists the tags for the specified license configuration.</p>"
  }
},
"com.amazonaws.licensemanager#ListTagsForResourceRequest": {
  "type": "structure",
  "members": {
    "ResourceArn": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",

"smithy.api#required": {}
      }
    }
  },
  "traits": {
    "smithy.api#input": {}
  }
},
"com.amazonaws.licensemanager#ListTagsForResourceResponse": {
  "type": "structure",
  "members": {
    "Tags": {
      "target": "com.amazonaws.licensemanager#TagList",
      "traits": {
        "smithy.api#documentation": "<p>Information about the tags.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#ListTokens": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#ListTokensRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#ListTokensResponse"
  }
},

```

```

"errors":
[
  {
    "target": "com.amazonaws.licensemanager#AccessDeniedException"
  },
  {
    "target": "com.amazonaws.licensemanager#AuthorizationException"
  },
  {
    "target": "com.amazonaws.licensemanager#RateLimitExceededException"
  },
  {
    "target": "com.amazonaws.licensemanager#ServerInternalException"
  },
  {
    "target": "com.amazonaws.licensemanager#ValidationException"
  }
],
"traits": {
  "smithy.api#documentation": "<p>Lists your tokens.</p>"
}
},
"com.amazonaws.licensemanager#ListTokensRequest": {
  "type": "structure",
  "members": {
    "TokenIds": {
      "target": "com.amazonaws.licensemanager#StringList",
      "traits": {
        "smithy.api#documentation": "<p>Token IDs.</p>"
      }
    },
    "Filters": {
      "target": "com.amazonaws.licensemanager#FilterList",
      "traits": {
        "smithy.api#documentation": "<p>Filters to scope the results. The following filter is supported:</p>\n
<ul>\n
  <li>\n
    <p>\n
      <code>LicenseArns</code>\n
    </p>\n
  </li>\n
</ul>"
      }
    }
  },
  "NextToken": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Token for the next set of results.</p>"
    }
  },
  "MaxResults": {
    "target": "com.amazonaws.licensemanager#MaxSize100",

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    "traits": {
      "smithy.api#documentation":
"<p>Maximum number of results to return in a single call.</p>"
    }
  },
  "traits": {
    "smithy.api#input": {}
  }
},
"com.amazonaws.licensemanager#ListTokensResponse": {
  "type": "structure",
  "members": {
    "Tokens": {
      "target": "com.amazonaws.licensemanager#TokenList",
      "traits": {
        "smithy.api#documentation": "<p>Received token details.</p>"
      }
    },
    "NextToken": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Token for the next set of results.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#ListUsageForLicenseConfiguration":
{
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
    }
  ]
}

```

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    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Lists all license usage records for a license configuration, displaying license consumption details by resource at a selected point in time. Use this action to audit the current license consumption for any license inventory and configuration.</p>"
  }
},
"com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest": {
  "type": "structure",
  "members": {
    "LicenseConfigurationArn": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>",
        "smithy.api#required": {}
      }
    },
    "MaxResults": {
      "target": "com.amazonaws.licensemanager#BoxInteger",
      "traits": {
        "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
      }
    },
    "NextToken": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Token for the next set of results.</p>"
      }
    },
    "Filters": {
      "target": "com.amazonaws.licensemanager#Filters",
      "traits": {
        "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical operators are supported:</p>
        <ul>
          <li><code>resourceArn</code> - The ARN of the license configuration resource.</li>
          <li>Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</li>
          <li><code>resourceType</code> - The resource type
        </ul>"
      }
    }
  }
}

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(<code>EC2_INSTANCE</code> | <code>EC2_HOST</code> | <code>EC2_AMI</code> |
<code>SYSTEMS_MANAGER_MANAGED_INSTANCE</code>). \n      Logical operators are
<code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n      </li>\n      <li>\n      <p>\n      <code>resourceAccount</code> - The ID of the account that owns the resource. \n      Logical operators
are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n      </li>\n    </ul>"
    }
  },
  "traits": {
    "smithy.api#input": {}
  }
},
"com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse": {
  "type": "structure",
  "members": {
    "LicenseConfigurationUsageList": {
      "target": "com.amazonaws.licensemanager#LicenseConfigurationUsageList",
      "traits": {
        "smithy.api#documentation": "<p>Information about the license configurations.</p>"
      }
    },
    "NextToken": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Token for the next set of results.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#Location": {
  "type": "string"
},
"com.amazonaws.licensemanager#Long": {
  "type": "long"
},
"com.amazonaws.licensemanager#ManagedResourceSummary": {
  "type": "structure",
  "members": {
    "ResourceType": {
      "target": "com.amazonaws.licensemanager#ResourceType",
      "traits": {
        "smithy.api#documentation": "<p>Type of resource associated with a license.</p>"
      }
    }
  }
}

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    },
    "AssociationCount": {
      "target": "com.amazonaws.licensemanager#BoxLong",
      "traits": {
        "smithy.api#documentation": "<p>Number of resources associated with licenses.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>Summary information about a managed resource.</p>"
  }
},
"com.amazonaws.licensemanager#ManagedResourceSummaryList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanager#ManagedResourceSummary"
  }
},
"com.amazonaws.licensemanager#MaxSize100": {
  "type": "integer",
  "traits": {
    "smithy.api#range": {
      "min": 1,
      "max": 100
    }
  }
},
"com.amazonaws.licensemanager#MaxSize3StringList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanager#String"
  },
  "traits": {
    "smithy.api#length": {
      "min": 0,
      "max": 3
    }
  }
},
"com.amazonaws.licensemanager#Message": {
  "type": "string"
},
"com.amazonaws.licensemanager#Metadata": {
  "type": "structure",
  "members": {
    "Name": {
      "target": "com.amazonaws.licensemanager#String",

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    "traits": {
      "smithy.api#documentation": "<p>The key name.</p>"
    }
  },

  "Value": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>The value.</p>"
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>Describes key/value pairs.</p>"
  },
  "com.amazonaws.licensemanager#MetadataList": {
    "type": "list",
    "member": {
      "target": "com.amazonaws.licensemanager#Metadata"
    }
  },
  "com.amazonaws.licensemanager#NoEntitlementsAllowedException": {
    "type": "structure",
    "members": {
      "Message": {
        "target": "com.amazonaws.licensemanager#Message"
      }
    },
    "traits": {
      "smithy.api#documentation": "<p>There are no entitlements found for this license, or the entitlement
maximum count is reached.</p>",
      "smithy.api#error": "client",
      "smithy.api#httpError": 400
    }
  },
  "com.amazonaws.licensemanager#Options": {
    "type": "structure",
    "members": {
      "ActivationOverrideBehavior": {
        "target": "com.amazonaws.licensemanager#ActivationOverrideBehavior",
        "traits": {
          "smithy.api#documentation": "<p>An activation option for your grant that determines the behavior of
activating a grant.\n      Activation options can only be used with granted licenses sourced from the Amazon Web
Services Marketplace. Additionally, the operation must specify the value of <code>ACTIVE</code> for the\n
<code>Status</code> parameter.</p>\n      <ul>\n        <li>\n          <p>As a license administrator, you can
optionally specify an\n          <code>ActivationOverrideBehavior</code> when activating a grant.</p>\n

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    </li>\n    <li>\n        <p>As a grantor, you can optionally specify an\n
        <code>ActivationOverrideBehavior</code> when you activate a grant for a grantee\n
        account in your organization.</p>\n    </li>\n    <li>\n        <p>As a grantee, if the grantor creating the distributed\n
        grant doesnt specify an\n
        <code>ActivationOverrideBehavior</code>, you can optionally specify one\n
        when you\n
        are activating the grant.</p>\n    </li>\n </ul>\n <dl>\n
<dt>DISTRIBUTED_GRANTS_ONLY</dt>\n    <dd>\n        <p>Use this value to activate a grant\n
        without replacing any member accounts\n
        active grants for the same product.</p>\n    </dd>\n
<dt>ALL_GRANTS_PERMITTED_BY_ISSUER</dt>\n    <dd>\n        <p>Use this value to activate a\n
        grant and disable other active grants in any\n
        member accounts\n
        for the same product. This action will also replace their\n
        previously activated grants with this activated\n
        grant.</p>\n    </dd>\n </dl>"
    }
    },
    "traits": {
        "smithy.api#documentation": "<p>The options you can specify when you create a new version of a grant,\n
        such as activation\n
        override behavior. For more information, see <a\n
        href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/granted-licenses.html\">Granted licenses in\n
        License Manager</a> in the <i>License Manager User Guide</i>.</p>"
    }
},
"com.amazonaws.licensemanager#OrganizationConfiguration": {
    "type": "structure",
    "members": {
        "EnableIntegration": {
            "target": "com.amazonaws.licensemanager#Boolean",
            "traits": {
                "smithy.api#default": false,
                "smithy.api#documentation":
"<p>Enables Organizations integration.</p>",
                "smithy.api#required": {}
            }
        }
    }
},
"traits": {
    "smithy.api#documentation": "<p>Configuration information for Organizations.</p>"
}
},
"com.amazonaws.licensemanager#PrincipalArnList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#Arn"
    },
    "traits": {
        "smithy.api#length": {
            "min": 1,
            "max": 1
        }
    }
}

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    }
  },
  "com.amazonaws.licensemanager#ProductInformation": {
    "type": "structure",
    "members": {
      "ResourceType": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Resource type. The
possible values are <code>SSM_MANAGED</code> | <code>RDS</code>.</p>",
          "smithy.api#required": {}
        }
      }
    },
    "ProductInformationFilterList": {
      "target": "com.amazonaws.licensemanager#ProductInformationFilterList",
      "traits": {
        "smithy.api#documentation": "<p>A Product information filter consists of a
<code>ProductInformationFilterComparator</code> which is a logical operator, a
<code>ProductInformationFilterName</code> which specifies the type of filter being declared, and a
<code>ProductInformationFilterValue</code> that specifies the value to filter on. </p>\n
<p>Accepted values
for <code>ProductInformationFilterName</code> are listed here along with descriptions and valid options for
<code>ProductInformationFilterComparator</code>. </p>\n
<p>The following filters and are supported when
the resource type \n
is <code>SSM_MANAGED</code>:</p>\n
<ul>\n
<li>\n
<p>\n
<code>Application Name</code> - The name of the
application.\n
Logical operator is <code>EQUALS</code>.</p>\n
</li>\n
<li>\n
<p>\n
<code>Application Publisher</code> - The publisher of the application.\n
Logical
operator is <code>EQUALS</code>.</p>\n
</li>\n
<li>\n
<p>\n
<code>Application Version</code> - The version of the application.\n
Logical operator is
<code>EQUALS</code>.</p>\n
</li>\n
<li>\n
<p>\n
<code>Platform
Name</code> - The name of the platform.\n
Logical operator is <code>EQUALS</code>.</p>\n
</li>\n
<li>\n
<p>\n
<code>Platform Type</code> - The platform type.\n
Logical operator is <code>EQUALS</code>.</p>\n
</li>\n
<li>\n
<p>\n
<code>Tag:key</code> - The key of a tag attached to an
Amazon Web Services resource you wish to exclude from automated discovery. Logical operator is
<code>NOT_EQUALS</code>. The key for your tag must be appended to <code>Tag:</code> following the
example: <code>Tag:name-of-your-key</code>. <code>ProductInformationFilterValue</code> is optional if you
are not using values for the key.\n
</p>\n
</li>\n
<li>\n
<p>\n
<code>AccountId</code> - The 12-digit ID of an Amazon Web Services account you wish to exclude from
automated discovery.\n
Logical operator is <code>NOT_EQUALS</code>.</p>\n
</li>\n
<li>\n
<p>\n
<code>License Included</code> - The type of license included.\n
Logical
operators are <code>EQUALS</code> and <code>NOT_EQUALS</code>.\n
Possible values are:
<code>sql-server-enterprise</code> | \n
<code>sql-server-standard</code> | \n
<code>sql-server-
web</code> | \n
<code>windows-server-datacenter</code>.</p>\n
</li>\n
</ul>\n
<p>The following filters and logical operators are supported when the resource type\n
is
<code>RDS</code>:</p>\n
<ul>\n
<li>\n
<p>\n
<code>Engine Edition</code> -
The edition of the database engine.\n
Logical operator is <code>EQUALS</code>.\n
Possible
values are: <code>oracle-ee</code> | <code>oracle-se</code> | <code>oracle-se1</code> | <code>oracle-
se2</code>.</p>\n
</li>\n
<li>\n
<p>\n
<code>License Pack</code> - The license

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pack.\n      Logical operator is <code>EQUALS</code>.\n      Possible values are: <code>data
guard</code> | \n      <code>diagnostic pack sqlt</code> | \n
      <code>tuning pack sqlt</code> | \n      <code>ols</code> | \n      <code>olap</code>.</p>\n
</li>\n      </ul>",
      "smithy.api#required": {}
    }
  }
},
"traits": {
  "smithy.api#documentation": "<p>Describes product information for a license configuration.</p>"
}
},
"com.amazonaws.licensemanager#ProductInformationFilter": {
  "type": "structure",
  "members": {
    "ProductInformationFilterName": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Filter name.</p>",
        "smithy.api#required": {}
      }
    },
    "ProductInformationFilterValue": {
      "target": "com.amazonaws.licensemanager#StringList",

      "traits": {
        "smithy.api#documentation": "<p>Filter value.</p>"
      }
    },
    "ProductInformationFilterComparator": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Logical operator.</p>",
        "smithy.api#required": {}
      }
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>Describes product information filters.</p>"
  }
},
"com.amazonaws.licensemanager#ProductInformationFilterList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanager#ProductInformationFilter"
  }
},
"com.amazonaws.licensemanager#ProductInformationList": {

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    "type": "list",
    "member": {
      "target": "com.amazonaws.licensemanager#ProductInformation"
    }
  },
  "com.amazonaws.licensemanager#ProvisionalConfiguration": {
    "type": "structure",
    "members": {
      "MaxTimeToLiveInMinutes": {
        "target": "com.amazonaws.licensemanager#BoxInteger",
        "traits": {
          "smithy.api#documentation": "<p>Maximum time for the provisional configuration, in minutes.</p>",
          "smithy.api#required": {}
        }
      }
    },
    "traits": {
      "smithy.api#documentation": "<p>Details about a provisional configuration.</p>"
    }
  },
  "com.amazonaws.licensemanager#RateLimitExceededException": {
    "type": "structure",
    "members": {
      "Message": {
        "target": "com.amazonaws.licensemanager#Message"
      }
    },
    "traits": {
      "aws.protocols#awsQueryError": {
        "code": "RateLimitExceeded",
        "httpResponseCode": 429
      },
      "smithy.api#documentation": "<p>Too many requests have been submitted. Try again after a brief wait.</p>",
      "smithy.api#error": "client",
      "smithy.api#httpError": 429
    }
  },
  "com.amazonaws.licensemanager#ReceivedMetadata": {
    "type": "structure",
    "members": {
      "ReceivedStatus": {
        "target": "com.amazonaws.licensemanager#ReceivedStatus",
        "traits": {
          "smithy.api#documentation": "<p>Received status.</p>"
        }
      }
    },
    "ReceivedStatusReason": {

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        "target": "com.amazonaws.licensemanager#StatusReasonMessage",
        "traits": {
            "smithy.api#documentation": "<p>Received
status reason.</p>"
        }
    },
    "AllowedOperations": {
        "target": "com.amazonaws.licensemanager#AllowedOperationList",
        "traits": {
            "smithy.api#documentation": "<p>Allowed operations.</p>"
        }
    }
},
"traits": {
    "smithy.api#documentation": "<p>Metadata associated with received licenses and grants.</p>"
}
},
"com.amazonaws.licensemanager#ReceivedStatus": {
    "type": "enum",
    "members": {
        "PENDING_WORKFLOW": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PENDING_WORKFLOW"
            }
        },
        "PENDING_ACCEPT": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue":
"PENDING_ACCEPT"
            }
        },
        "REJECTED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "REJECTED"
            }
        },
        "ACTIVE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "ACTIVE"
            }
        },
        "FAILED_WORKFLOW": {
            "target": "smithy.api#Unit",
            "traits": {

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        "smithy.api#enumValue": "FAILED_WORKFLOW"
    }
},
"DELETED": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "DELETED"
    }
},
"DISABLED": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "DISABLED"
    }
},
"WORKFLOW_COMPLETED": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "WORKFLOW_COMPLETED"
    }
}
},
"com.amazonaws.licensemanager#RedirectException": {
    "type": "structure",
    "members": {
        "Location": {
            "target": "com.amazonaws.licensemanager#Location",
            "traits": {
                "smithy.api#httpHeader": "Location"
            }
        },
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>This is not the correct Region for the resource. Try again.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 308
    }
},
"com.amazonaws.licensemanager#RejectGrant": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#RejectGrantRequest"
    },
    "output": {

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    "target": "com.amazonaws.licensemanager#RejectGrantResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target":
"com.amazonaws.licensemanager#ResourceLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    },
    {
      "target": "com.amazonaws.licensemanager#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Rejects the specified grant.</p>"
  }
},
"com.amazonaws.licensemanager#RejectGrantRequest": {
  "type": "structure",
  "members": {
    "GrantArn": {
      "target": "com.amazonaws.licensemanager#Arn",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
        "smithy.api#required": {}
      }
    }
  },
  "traits": {
    "smithy.api#input": {}
  }
}
},
"com.amazonaws.licensemanager#RejectGrantResponse": {
  "type": "structure",

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"members": {
  "GrantArn": {
    "target": "com.amazonaws.licensemanager#Arn",
    "traits": {
      "smithy.api#documentation": "<p>Grant ARN.</p>"
    }
  },
  "Status": {
    "target": "com.amazonaws.licensemanager#GrantStatus",
    "traits": {
      "smithy.api#documentation": "<p>Grant status.</p>"
    }
  },
  "Version": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Grant version.</p>"
    }
  }
},
"traits": {
  "smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#RenewType":
{
  "type": "enum",
  "members": {
    "NONE": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "None"
      }
    },
    "WEEKLY": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "Weekly"
      }
    },
    "MONTHLY": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "Monthly"
      }
    }
  }
}
},

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```

"com.amazonaws.licensemanager#ReportContext": {
  "type": "structure",
  "members": {
    "licenseConfigurationArns": {
      "target": "com.amazonaws.licensemanager#ArnList",
      "traits": {

        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration that this
generator reports on.</p>",
        "smithy.api#required": {}
      }
    },
    "traits": {
      "smithy.api#documentation": "<p>Details of the license configuration that this generator reports on.</p>"
    }
  },
  "com.amazonaws.licensemanager#ReportFrequency": {
    "type": "structure",
    "members": {
      "value": {
        "target": "com.amazonaws.licensemanager#Integer",
        "traits": {
          "smithy.api#documentation": "<p>Number of times within the frequency period that a report is
generated. \n      The only supported value is <code>1</code>.</p>"
        }
      },
      "period": {
        "target": "com.amazonaws.licensemanager#ReportFrequencyType",

        "traits": {
          "smithy.api#documentation": "<p>Time period between each report. The period can be daily, weekly,
or monthly.</p>"
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Details about how frequently reports are generated.</p>"
      }
    },
    "com.amazonaws.licensemanager#ReportFrequencyType": {
      "type": "enum",
      "members": {
        "DAY": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "DAY"
          }
        }
      }
    }
  }

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```

    },
    "WEEK": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "WEEK"
      }
    },
    "MONTH": {
      "target": "smithy.api#Unit",
      "traits":
    {
      "smithy.api#enumValue": "MONTH"
    }
  }
},
"com.amazonaws.licensemanager#ReportGenerator": {
  "type": "structure",
  "members": {
    "ReportGeneratorName": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Name of the report generator.</p>"
      }
    },
    "ReportType": {
      "target": "com.amazonaws.licensemanager#ReportTypeList",
      "traits": {
        "smithy.api#documentation": "<p>Type of reports that are generated.</p>"
      }
    },
    "ReportContext": {
      "target": "com.amazonaws.licensemanager#ReportContext",
      "traits": {
        "smithy.api#documentation": "<p>License
configuration type for this generator.</p>"
      }
    },
    "ReportFrequency": {
      "target": "com.amazonaws.licensemanager#ReportFrequency",
      "traits": {
        "smithy.api#documentation": "<p>Details about how frequently reports are generated.</p>"
      }
    },
    "LicenseManagerReportGeneratorArn": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator.</p>"
      }
    }
  }
}

```

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    }
  },
  "LastRunStatus": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Status of the last report generation attempt.</p>"
    }
  },
  "LastRunFailureReason": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Failure message for the last report generation attempt.</p>"
    }
  },
  "LastReportGenerationTime": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Time the last report was generated at.</p>"
    }
  },
  "ReportCreatorAccount": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>The Amazon Web Services account ID used to create the report
generator.</p>"
    }
  },
  "Description": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Description of the report generator.</p>"
    }
  },
  "S3Location": {
    "target": "com.amazonaws.licensemanager#S3Location",
    "traits": {
      "smithy.api#documentation": "<p>Details of the S3 bucket that report generator reports are published
to.</p>"
    }
  },
  "CreateTime": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Time the report was created.</p>"
    }
  },
}

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    "Tags": {
      "target": "com.amazonaws.licensemanager#TagList",
      "traits": {
        "smithy.api#documentation": "<p>Tags associated with the report generator.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>Describe the details of a report generator.</p>"
  }
},
"com.amazonaws.licensemanager#ReportGeneratorList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanager#ReportGenerator"
  }
},
"com.amazonaws.licensemanager#ReportGeneratorName": {
  "type": "string",
  "traits": {
    "smithy.api#length": {
      "min": 1,
      "max": 100
    }
  }
},
"com.amazonaws.licensemanager#ReportType": {
  "type": "enum",
  "members": {
    "LICENSE_CONFIGURATION_SUMMARY_REPORT": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "LicenseConfigurationSummaryReport"
      }
    }
  }
},
  "LICENSE_CONFIGURATION_USAGE_REPORT": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "LicenseConfigurationUsageReport"
    }
  }
},
"com.amazonaws.licensemanager#ReportTypeList": {
  "type": "list",
  "member": {

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    "target": "com.amazonaws.licensemanager#ReportType"
  }
},
"com.amazonaws.licensemanager#ResourceInventory": {
  "type": "structure",
  "members": {
    "ResourceId": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>ID of the resource.</p>"
      }
    },
    "ResourceType": {
      "target": "com.amazonaws.licensemanager#ResourceType",
      "traits": {
        "smithy.api#documentation": "<p>Type of resource.</p>"
      }
    },
    "ResourceArn": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
      }
    },
    "Platform": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Platform of the resource.</p>"
      }
    },
    "PlatformVersion": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Platform version of the resource in the inventory.</p>"
      }
    },
    "ResourceOwningAccountId": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>ID of the account that owns the resource.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>Details about a resource.</p>"
  }
}

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},
"com.amazonaws.licensemanager#ResourceInventoryList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanager#ResourceInventory"
  }
},
"com.amazonaws.licensemanager#ResourceLimitExceededException": {
  "type": "structure",
  "members": {
    "Message": {
      "target": "com.amazonaws.licensemanager#Message"
    }
  },
  "traits": {
    "aws.protocols#awsQueryError": {
      "code": "ResourceLimitExceeded",

      "httpResponseCode": 400
    },
    "smithy.api#documentation": "<p>Your resource limits have been exceeded.</p>",
    "smithy.api#error": "client",
    "smithy.api#httpError": 400
  }
},
"com.amazonaws.licensemanager#ResourceNotFoundException": {
  "type": "structure",
  "members": {
    "Message": {
      "target": "com.amazonaws.licensemanager#Message"
    }
  },
  "traits": {
    "aws.protocols#awsQueryError": {
      "code": "InvalidResource.NotFound",
      "httpResponseCode": 400
    },
    "smithy.api#documentation": "<p>The resource cannot be found.</p>",
    "smithy.api#error": "client",
    "smithy.api#httpError": 400
  }
},
"com.amazonaws.licensemanager#ResourceType": {
  "type": "enum",
  "members": {
    "EC2_INSTANCE": {
      "target": "smithy.api#Unit",
      "traits": {

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        "smithy.api#enumValue": "EC2_INSTANCE"
    }
},
"EC2_HOST": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "EC2_HOST"
    }
},
"EC2_AMI": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "EC2_AMI"
    }
},
"RDS": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "RDS"
    }
},
"SYSTEMS_MANAGER_MANAGED_INSTANCE": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "SYSTEMS_MANAGER_MANAGED_INSTANCE"
    }
}
},
"com.amazonaws.licensemanager#S3Location": {
    "type": "structure",
    "members": {
        "bucket": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Name of the S3 bucket reports are published to.</p>"
            }
        },
        "keyPrefix": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Prefix of the S3 bucket reports are published to.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Details of the S3 bucket that report generator reports are published to.</p>"
    }
}

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    }
  },
  "com.amazonaws.licensemanager#ServerInternalException": {
    "type": "structure",
    "members": {
      "Message": {
        "target": "com.amazonaws.licensemanager#Message"
      }
    },
    "traits": {
      "aws.protocols#awsQueryError": {
        "code": "InternalServerError",
        "httpResponseCode": 500
      },
      "smithy.api#documentation": "<p>The server experienced an internal error. Try again.</p>",
      "smithy.api#error": "server",
      "smithy.api#httpError": 500
    }
  },
  "com.amazonaws.licensemanager#SignedToken": {
    "type": "string",
    "traits": {
      "smithy.api#length": {
        "min": 4096
      }
    }
  },
  "com.amazonaws.licensemanager#StatusReasonMessage": {
    "type": "string",
    "traits": {
      "smithy.api#length": {
        "min": 0,
        "max": 400
      },
      "smithy.api#pattern": "^[\\s\\S]+$"
    }
  },
  "com.amazonaws.licensemanager#String": {
    "type": "string"
  },
  "com.amazonaws.licensemanager#StringList": {
    "type": "list",
    "member": {
      "target": "com.amazonaws.licensemanager#String"
    }
  },
  "com.amazonaws.licensemanager#Tag": {

```

```

"type": "structure",
"members": {
  "Key": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Tag key.</p>"
    }
  },
  "Value": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation":
"<p>Tag value.</p>"
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>Details about a tag for a license configuration.</p>"
  },
  "com.amazonaws.licensemanager#TagKeyList": {
    "type": "list",
    "member": {
      "target": "com.amazonaws.licensemanager#String"
    }
  },
  "com.amazonaws.licensemanager#TagList": {
    "type": "list",
    "member": {
      "target": "com.amazonaws.licensemanager#Tag"
    }
  },
  "com.amazonaws.licensemanager#TagResource": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#TagResourceRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#TagResourceResponse"
    },
    "errors": [
      {
        "target":
"com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      }
    ]
  }
}

```

```

    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Adds the specified tags to the specified license configuration.</p>"
  }
},
"com.amazonaws.licensemanager#TagResourceRequest": {
  "type": "structure",
  "members": {
    "ResourceArn": {
      "target": "com.amazonaws.licensemanager#String",
      "traits":
    {
      "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
      "smithy.api#required": {}
    }
  },
  "Tags": {
    "target": "com.amazonaws.licensemanager#TagList",
    "traits": {
      "smithy.api#documentation": "<p>One or more tags.</p>",
      "smithy.api#required": {}
    }
  }
},
  "traits": {
    "smithy.api#input": {}
  }
},
"com.amazonaws.licensemanager#TagResourceResponse": {
  "type": "structure",
  "members": {},
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#TokenData": {
  "type": "structure",
  "members": {

```

```

"TokenId": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>Token ID.</p>"
  }
},
"TokenType": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>Type of token generated. The supported value is
<code>REFRESH_TOKEN</code>.</p>"
  }
},
"LicenseArn": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
  }
},
"ExpirationTime": {
  "target": "com.amazonaws.licensemanager#ISO8601DateTime",
  "traits": {
    "smithy.api#documentation": "<p>Token expiration time, in ISO8601-UTC
format.</p>"
  }
},
"TokenProperties": {
  "target": "com.amazonaws.licensemanager#MaxSize3StringList",
  "traits": {
    "smithy.api#documentation": "<p>Data specified by the caller.</p>"
  }
},
"RoleArns": {
  "target": "com.amazonaws.licensemanager#ArnList",
  "traits": {
    "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the roles included in the
token.</p>"
  }
},
"Status": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>Token status. The possible values are
<code>AVAILABLE</code> and <code>DELETED</code>.</p>"
  }
},
"traits": {

```

```

    "smithy.api#documentation": "<p>Describes a token.</p>"
  }
},
"com.amazonaws.licensemanager#TokenList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanager#TokenData"
  }
},
"com.amazonaws.licensemanager#TokenString": {
  "type": "string",
  "traits": {
    "smithy.api#length": {
      "min": 0,
      "max": 4096
    },
    "smithy.api#pattern": "^\\S+$"
  }
},
"com.amazonaws.licensemanager#TokenType": {
  "type": "enum",
  "members": {
    "REFRESH_TOKEN": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "REFRESH_TOKEN"
      }
    }
  }
},
"com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException":
{
  "type": "structure",
  "members": {
    "Message": {
      "target": "com.amazonaws.licensemanager#Message"
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>The digital signature method is unsupported. Try your request
again.</p>",
    "smithy.api#error": "client",
    "smithy.api#httpError": 400
  }
},
"com.amazonaws.licensemanager#UntagResource": {
  "type": "operation",

```

```

"input": {
  "target": "com.amazonaws.licensemanager#UntagResourceRequest"
},
"output": {
  "target": "com.amazonaws.licensemanager#UntagResourceResponse"
},
"errors": [
  {
    "target": "com.amazonaws.licensemanager#AccessDeniedException"
  },
  {
    "target": "com.amazonaws.licensemanager#AuthorizationException"
  },
  {
    "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
  },
  {
    "target": "com.amazonaws.licensemanager#RateLimitExceededException"
  },
  {
    "target": "com.amazonaws.licensemanager#ServerInternalException"
  }
],
"traits": {
  "smithy.api#documentation": "<p>Removes the specified tags from the specified license
configuration.</p>"
}
},
"com.amazonaws.licensemanager#UntagResourceRequest": {
  "type": "structure",
  "members": {
    "ResourceArn": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
        "smithy.api#required": {}
      }
    },
    "TagKeys": {
      "target": "com.amazonaws.licensemanager#TagKeyList",
      "traits": {
        "smithy.api#documentation": "<p>Keys identifying the tags to remove.</p>",
        "smithy.api#required": {}
      }
    }
  },
  "traits": {

```

```

    "smithy.api#input": {}
  }
},
"com.amazonaws.licensemanager#UntagResourceResponse": {
  "type": "structure",
  "members": {},
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#UpdateLicenseConfiguration": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Modifies the attributes of an existing license configuration.</p>"
  }
},
"com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest": {
  "type": "structure",
  "members": {
    "LicenseConfigurationArn": {
      "target": "com.amazonaws.licensemanager#String",

```

```

    "traits": {
      "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
      "smithy.api#required": {}
    }
  },
  "LicenseConfigurationStatus": {
    "target": "com.amazonaws.licensemanager#LicenseConfigurationStatus",
    "traits": {
      "smithy.api#documentation": "<p>New status of the license configuration.</p>"
    }
  },
  "LicenseRules": {
    "target": "com.amazonaws.licensemanager#StringList",
    "traits": {

"smithy.api#documentation": "<p>New license rule. The only rule that you can add after you create a license\n
configuration is licenseAffinityToHost.</p>"
    }
  },
  "LicenseCount": {
    "target": "com.amazonaws.licensemanager#BoxLong",
    "traits": {
      "smithy.api#documentation": "<p>New number of licenses managed by the license
configuration.</p>"
    }
  },
  "LicenseCountHardLimit": {
    "target": "com.amazonaws.licensemanager#BoxBoolean",
    "traits": {
      "smithy.api#documentation": "<p>New hard limit of the number of available licenses.</p>"
    }
  },
  "Name": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>New name
of the license configuration.</p>"
    }
  },
  "Description": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>New description of the license configuration.</p>"
    }
  },
  "ProductInformationList": {
    "target": "com.amazonaws.licensemanager#ProductInformationList",

```



```

    "traits": {
      "smithy.api#documentation": "<p>New product information.</p>"
    }
  },
  "DisassociateWhenNotFound": {
    "target": "com.amazonaws.licensemanager#BoxBoolean",
    "traits": {
      "smithy.api#documentation": "<p>When true, disassociates a resource when software is
uninstalled.</p>"
    }
  }
},
"traits":
{
  "smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse": {
  "type": "structure",
  "members": {},
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
    }
  ],

```

```

    {
      "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    },
    {
      "target": "com.amazonaws.licensemanager#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Updates a report generator.</p>\n    <p>After you make changes to a report generator, it starts generating new reports within 60 minutes of being updated.</p>"
  }
},
"com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest":
{
  "type": "structure",
  "members": {
    "LicenseManagerReportGeneratorArn": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator to update.</p>",
        "smithy.api#required": {}
      }
    },
    "ReportGeneratorName": {
      "target": "com.amazonaws.licensemanager#ReportGeneratorName",
      "traits": {
        "smithy.api#documentation": "<p>Name of the report generator.</p>",
        "smithy.api#required": {}
      }
    },
    "Type": {
      "target": "com.amazonaws.licensemanager#ReportTypeList",
      "traits": {
        "smithy.api#documentation":
          "<p>Type of reports to generate. The following report types are supported:</p>\n    <ul>\n      <li>\n        <p>License configuration report - Reports the number and details of consumed licenses for a license configuration.</p>\n      </li>\n      <li>\n        <p>Resource report - Reports the tracked licenses and resource consumption for a license configuration.</p>\n      </li>\n    </ul>",
        "smithy.api#required": {}
      }
    }
  },
  "ReportContext": {
    "target": "com.amazonaws.licensemanager#ReportContext",
    "traits": {

```

```

        "smithy.api#documentation": "<p>The report context.</p>",
        "smithy.api#required": {}
    }
},
"ReportFrequency": {
    "target": "com.amazonaws.licensemanager#ReportFrequency",
    "traits": {
        "smithy.api#documentation": "<p>Frequency by which reports are generated.</p>",
        "smithy.api#required": {}
    }
},
"ClientToken": {
    "target": "com.amazonaws.licensemanager#ClientRequestToken",
    "traits": {
        "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
        "smithy.api#required": {}
    }
},
"Description": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
        "smithy.api#documentation": "<p>Description of the report generator.</p>"
    }
}
},
"traits": {
    "smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse": {
    "type": "structure",
    "members": {},
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse"
    },
    "errors": [

```

```

    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidResourceStateException"
    },
    {
      "target": "com.amazonaws.licensemanager#LicenseUsageException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Adds or removes the specified license configurations for the specified Amazon Web Services resource.</p>\n    <p>You can update the license specifications of AMIs, instances, and hosts.\n    You cannot update the license specifications for launch templates and CloudFormation templates, \n    as they send license configurations to the operation that creates the resource.</p>"
  }
},

"com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest": {
  "type": "structure",
  "members": {
    "ResourceArn": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon Web Services resource.</p>",
        "smithy.api#required": {}
      }
    },
    "AddLicenseSpecifications": {
      "target": "com.amazonaws.licensemanager#LicenseSpecifications",
      "traits": {
        "smithy.api#documentation": "<p>ARNs of the license configurations to add.</p>"
      }
    }
  }
},

```

```

    "RemoveLicenseSpecifications": {
      "target": "com.amazonaws.licensemanager#LicenseSpecifications",
      "traits": {
        "smithy.api#documentation":
"<p>ARNs of the license configurations to remove.</p>"
      }
    },
    "traits": {
      "smithy.api#input": {}
    },
    "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse": {
      "type": "structure",
      "members": {},
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#UpdateServiceSettings": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#UpdateServiceSettingsRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#UpdateServiceSettingsResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Updates License Manager settings for the current Region.</p>"
      }
    },
  },

```

```

"com.amazonaws.licensemanager#UpdateServiceSettingsRequest": {
  "type": "structure",
  "members": {
    "S3BucketArn": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon S3 bucket where
the License
Manager information is stored.</p>"
      }
    },
    "SnsTopicArn": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon SNS topic used
for License Manager alerts.</p>"
      }
    },
    "OrganizationConfiguration": {
      "target": "com.amazonaws.licensemanager#OrganizationConfiguration",
      "traits": {
        "smithy.api#documentation": "<p>Enables integration with Organizations for cross-account
discovery.</p>"
      }
    },
    "EnableCrossAccountsDiscovery": {
      "target": "com.amazonaws.licensemanager#BoxBoolean",
      "traits": {
        "smithy.api#documentation": "<p>Activates cross-account discovery.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#input": {}
  }
},
"com.amazonaws.licensemanager#UpdateServiceSettingsResponse": {
  "type": "structure",
  "members": {},
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#UsageOperation": {
  "type": "string",
  "traits": {
    "smithy.api#length": {

```

```

        "min": 0,
        "max": 50
    }
}
},
"com.amazonaws.licensemanager#ValidationException": {
    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>The provided input is not valid. Try your request again.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
    }
}
}
}
}
}
// Code generated by smithy-go-codegen DO NOT EDIT.

```

```
package licensemanager
```

```
import (
    "context"
    "fmt"
    awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
    "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
    "github.com/aws/smithy-go/middleware"
    smithyhttp "github.com/aws/smithy-go/transport/http"
)

```

```
// Deletes the specified license.
```

```
func (c *Client) DeleteLicense(ctx context.Context, params *DeleteLicenseInput, optFns ...func(*Options))
(*DeleteLicenseOutput, error) {
    if params == nil {
        params = &DeleteLicenseInput{}
    }
}

```

```
result, metadata, err := c.invokeOperation(ctx, "DeleteLicense", params, optFns,
c.addOperationDeleteLicenseMiddlewares)
if err != nil {
    return nil, err
}

```

```
out := result.(*DeleteLicenseOutput)

```

```

out.ResultMetadata = metadata
return out, nil
}

type DeleteLicenseInput struct {

    // Amazon Resource Name (ARN) of the license.
    //
    // This member is required.
    LicenseArn *string

    // Current version of the license.
    //
    // This member is required.
    SourceVersion
    *string

    noSmithyDocumentSerde
}

type DeleteLicenseOutput struct {

    // Date when the license is deleted.
    DeletionDate *string

    // License status.
    Status types.LicenseDeletionStatus

    // Metadata pertaining to the operation's result.
    ResultMetadata middleware.Metadata

    noSmithyDocumentSerde
}

func (c *Client) addOperationDeleteLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
    if err := stack.Serialize.Add(&setOperationInputMiddleware{ }, middleware.After); err != nil {
        return err
    }
    err = stack.Serialize.Add(&awsAwsjson11_serializeOpDeleteLicense{ }, middleware.After)
    if err != nil {
        return err
    }
    err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpDeleteLicense{ }, middleware.After)
    if err != nil {
        return err
    }
    if err := addProtocolFinalizerMiddlewares(stack, options, "DeleteLicense"); err != nil {
        return fmt.Errorf("add protocol finalizers: %v", err)
    }
}

```



```

}

if err = addLegacyEndpointContextSetter(stack, options); err !=
nil {
    return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
    return err
}
if err = addClientRequestID(stack); err != nil {
    return err
}
if err = addComputeContentLength(stack); err != nil {
    return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
    return err
}
if err = addComputePayloadSHA256(stack); err != nil {
    return err
}
if err = addRetry(stack, options); err != nil {
    return err
}
if err = addRawResponseToMetadata(stack); err != nil {
    return err
}
if err = addRecordResponseTiming(stack); err != nil {
    return err
}
if err = addClientUserAgent(stack, options); err != nil {
    return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
    return err
}
if err = addOpDeleteLicenseValidationMiddleware(stack);
err != nil {
    return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDeleteLicense(options.Region),
middleware.Before); err != nil {

```

```

return err
}
if err = addRecursionDetection(stack); err != nil {
return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
return err
}
return nil
}

func newServiceMetadataMiddleware_opDeleteLicense(region string) *awsmiddleware.RegisterServiceMetadata {
return &awsmiddleware.RegisterServiceMetadata{
Region:    region,
ServiceID: ServiceID,
OperationName: "DeleteLicense",
}
}

```

## 1.76 [github.com/99designs/keyring](https://github.com/99designs/keyring) 1.2.2

### 1.76.1 Available under license :

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\* @(#)queue.h 8.5 (Berkeley) 8/20/94

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\* /opt/cola/permits/1686513755\_1685082238.691036/0/aports-master-main-libc-dev-  
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# 1.100 genproto-googleapis-api 0.0.0-

## 20230530153820-e85fd2cbaebc

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## 1.104

**google.golang.org/genproto/googleapis/rpc**

**0.0.0-20230530153820-e85fd2cbaebc**

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# 1.110 cloudevents-sdk-go 2.14.0

## 1.110.1 Available under license :

Apache License

Version 2.0, January 2004

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# 1.111 aws-aws-sdk-go-v2-service-s3 1.31.0

## 1.111.1 Available under license :

// Code generated by smithy-go-codegen DO NOT EDIT.

```
package licensemanager
```

```
import (  
    "context"  
    "errors"  
    "fmt"  
    "github.com/aws/aws-sdk-go-v2/aws"  
    awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"  
    "github.com/aws/aws-sdk-go-v2/aws/signer/v4"  
    internalauth "github.com/aws/aws-sdk-go-v2/internal/auth"
```

```

"github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
smithyendpoints "github.com/aws/smithy-go/endpoints"
"github.com/aws/smithy-go/middleware"
smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license. If the account that created the license is
// the same that is performing the check out, you must specify the account as the
// beneficiary.
func (c *Client) CheckoutLicense(ctx context.Context, params *CheckoutLicenseInput, optFns ...func(*Options))
(*CheckoutLicenseOutput, error) {
    if params == nil {
        params = &CheckoutLicenseInput{}
    }

    result, metadata, err := c.invokeOperation(ctx, "CheckoutLicense", params, optFns,
c.addOperationCheckoutLicenseMiddlewares)
    if
    err != nil {
        return nil, err
    }

    out := result.(*CheckoutLicenseOutput)
    out.ResultMetadata = metadata
    return out, nil
}

type CheckoutLicenseInput struct {

    // Checkout type.
    //
    // This member is required.
    CheckoutType types.CheckoutType

    // Unique, case-sensitive identifier that you provide to ensure the idempotency of
    // the request.
    //
    // This member is required.
    ClientToken *string

    // License entitlements.
    //
    // This member is required.
    Entitlements []types.EntitlementData

    // Key fingerprint identifying the license.
    //
    // This member is required.

```

```

KeyFingerprint *string

// Product SKU.
//
// This member is required.
ProductSKU *string

// License beneficiary.
Beneficiary *string

// Node ID.
NodeId *string

noSmithyDocumentSerde
}

type CheckoutLicenseOutput struct {

// Checkout type.
CheckoutType types.CheckoutType

// Allowed license entitlements.
EntitlementsAllowed []types.EntitlementData

// Date and time
at which the license checkout expires.
Expiration *string

// Date and time at which the license checkout is issued.
IssuedAt *string

// Amazon Resource Name (ARN) of the checkout license.
LicenseArn *string

// License consumption token.
LicenseConsumptionToken *string

// Node ID.
NodeId *string

// Signed token.
SignedToken *string

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

```

```

func (c *Client) addOperationCheckoutLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
    err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutLicense{ }, middleware.After)
    if err != nil {
        return err
    }
    err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutLicense{ }, middleware.After)
    if err != nil {
        return err
    }
    if err = addLegacyEndpointContextSetter(stack, options); err != nil {
        return err
    }
    if err = addSetLoggerMiddleware(stack, options); err != nil {
        return err
    }
    if err =
    = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
        return err
    }
    if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
        return err
    }
    if err = addResolveEndpointMiddleware(stack, options); err != nil {
        return err
    }
    if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
        return err
    }
    if err = addRetryMiddlewares(stack, options); err != nil {
        return err
    }
    if err = addHTTPSignerV4Middleware(stack, options); err != nil {
        return err
    }
    if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
        return err
    }
    if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
        return err
    }
    if err = addClientUserAgent(stack, options); err != nil {
        return err
    }
    if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
        return err
    }
    if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {

```

```

    return err
}
if err = addCheckoutLicenseResolveEndpointMiddleware(stack, options);
err != nil {
    return err
}
if err = addOpCheckoutLicenseValidationMiddleware(stack); err != nil {
    return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutLicense(options.Region),
middleware.Before); err != nil {
    return err
}
if err = awsmiddleware.AddRecursionDetection(stack); err != nil {
    return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
    return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
    return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
    return err
}
if err = addEndpointDisableHTTPSMiddleware(stack, options); err != nil {
    return err
}
return nil
}

func newServiceMetadataMiddleware_opCheckoutLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
    return &awsmiddleware.RegisterServiceMetadata{
        Region:    region,
        ServiceID: ServiceID,
        SigningName: "license-manager",
        OperationName: "CheckoutLicense",
    }
}

type opCheckoutLicenseResolveEndpointMiddleware
struct {
    EndpointResolver EndpointResolverV2
    BuiltInResolver  builtInParameterResolver
}

func (*opCheckoutLicenseResolveEndpointMiddleware) ID() string {

```

```

return "ResolveEndpointV2"
}

func (m *opCheckoutLicenseResolveEndpointMiddleware) HandleSerialize(ctx context.Context, in
middleware.SerializeInput, next middleware.SerializeHandler) (
out middleware.SerializeOutput, metadata middleware.Metadata, err error,
) {
if awsmiddleware.GetRequiresLegacyEndpoints(ctx) {
return next.HandleSerialize(ctx, in)
}

req, ok := in.Request.(*smithyhttp.Request)
if !ok {
return out, metadata, fmt.Errorf("unknown transport type %T", in.Request)
}

if m.EndpointResolver == nil {
return out, metadata, fmt.Errorf("expected endpoint resolver to not be nil")
}

params := EndpointParameters{}

m.BuiltInResolver.ResolveBuiltIns(&params)

var resolvedEndpoint smithyendpoints.Endpoint
resolvedEndpoint, err = m.EndpointResolver.ResolveEndpoint(ctx, params)
if err != nil
{
return out, metadata, fmt.Errorf("failed to resolve service endpoint, %w", err)
}

req.URL = &resolvedEndpoint.URI

for k := range resolvedEndpoint.Headers {
req.Header.Set(
k,
resolvedEndpoint.Headers.Get(k),
)
}

authSchemes, err := internalauth.GetAuthenticationSchemes(&resolvedEndpoint.Properties)
if err != nil {
var nfe *internalauth.NoAuthenticationSchemesFoundError
if errors.As(err, &nfe) {
// if no auth scheme is found, default to sigv4
signingName := "license-manager"
signingRegion := m.BuiltInResolver.(*builtInResolver).Region
ctx = awsmiddleware.SetSigningName(ctx, signingName)
}
}
}

```



```

ctx = awsmiddleware.SetSigningRegion(ctx, signingRegion)

}
var ue *internalauth.UnSupportedAuthenticationSchemeSpecifiedError
if errors.As(err, &ue) {
return out, metadata, fmt.Errorf(
    "This operation requests signer version(s) %v but the client only supports %v",
    ue.UnsupportedSchemes,
    internalauth.SupportedSchemes,
)
}
}

for _, authScheme
:= range authSchemes {
switch authScheme.(type) {
case *internalauth.AuthenticationSchemeV4:
v4Scheme, _ := authScheme.(*internalauth.AuthenticationSchemeV4)
var signingName, signingRegion string
if v4Scheme.SigningName == nil {
signingName = "license-manager"
} else {
signingName = *v4Scheme.SigningName
}
if v4Scheme.SigningRegion == nil {
signingRegion = m.BuiltInResolver.(*builtInResolver).Region
} else {
signingRegion = *v4Scheme.SigningRegion
}
if v4Scheme.DisableDoubleEncoding != nil {
// The signer sets an equivalent value at client initialization time.
// Setting this context value will cause the signer to extract it
// and override the value set at client initialization time.
ctx = internalauth.SetDisableDoubleEncoding(ctx, *v4Scheme.DisableDoubleEncoding)
}
ctx = awsmiddleware.SetSigningName(ctx, signingName)
ctx = awsmiddleware.SetSigningRegion(ctx, signingRegion)
break
case *internalauth.AuthenticationSchemeV4A:
v4aScheme,
_ := authScheme.(*internalauth.AuthenticationSchemeV4A)
if v4aScheme.SigningName == nil {
v4aScheme.SigningName = aws.String("license-manager")
}
if v4aScheme.DisableDoubleEncoding != nil {
// The signer sets an equivalent value at client initialization time.
// Setting this context value will cause the signer to extract it
// and override the value set at client initialization time.

```

```

    ctx = internalauth.SetDisableDoubleEncoding(ctx, *v4aScheme.DisableDoubleEncoding)
  }
  ctx = awsmiddleware.SetSigningName(ctx, *v4aScheme.SigningName)
  ctx = awsmiddleware.SetSigningRegion(ctx, v4aScheme.SigningRegionSet[0])
  break
case *internalauth.AuthenticationSchemeNone:
  break
}
}

return next.HandleSerialize(ctx, in)
}

func addCheckoutLicenseResolveEndpointMiddleware(stack *middleware.Stack, options Options) error {
return stack.Serialize.Insert(&opCheckoutLicenseResolveEndpointMiddleware{
  EndpointResolver: options.EndpointResolverV2,
  BuiltInResolver:
&builtInResolver{
  Region: options.Region,
  UseDualStack: options.EndpointOptions.UseDualStackEndpoint,
  UseFIPS: options.EndpointOptions.UseFIPSEndpoint,
  Endpoint: options.BaseEndpoint,
  },
}, "ResolveEndpoint", middleware.After)
}

```

AWS SDK for Go

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name: License Scan

on: [pull\_request]

jobs:

licensescan:

name: License Scan

runs-on: ubuntu-latest

strategy:

matrix:

python-version: [3.9]

steps:

- name: Checkout target

uses: actions/checkout@v2

with:

path: sdkbase

ref: \${{ github.base\_ref }}

- name: Checkout this ref

uses: actions/checkout@v2

```

with:
  path: new-ref
  fetch-depth: 0
- name: Get Diff
  run: git --git-dir ./new-ref/.git diff --name-only --diff-filter=ACMRT ${{ github.event.pull_request.base.sha }}
${{ github.sha }} > refDiffFiles.txt
- name: Get Target Files
  run: git --git-dir ./sdkbase/.git ls-files | grep -xf refDiffFiles.txt - > targetFiles.txt
- name: Checkout scancode
  uses: actions/checkout@v2
  with:
    repository: nexB/scancode-toolkit
    path: scancode-toolkit
    fetch-depth: 1
- name: Set up Python ${{ matrix.python-version }}
  uses: actions/setup-python@v2
  with:
    python-version: ${{ matrix.python-version }}
# ScanCode
- name: Self-configure scancode
  working-directory: ./scancode-toolkit
  run: ./scancode --help
- name: Run Scan code on target
  run: cat targetFiles.txt | while read filename; do echo ./sdkbase/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> old-licenses.txt
- name: Run Scan code on pr ref
  run: cat refDiffFiles.txt | while read filename; do echo ./new-ref/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> new-licenses.txt
# compare
- name: License test
  run: if ! cmp old-licenses.txt new-licenses.txt; then echo "Licenses differ! Failing."; exit -1; else echo "Licenses
are the same. Success."; exit 0; fi
// Code generated by smithy-go-codegen DO NOT EDIT.

```

package grafana

```

import (
  "context"
  "errors"
  "fmt"
  "github.com/aws/aws-sdk-go-v2/aws"
  awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
  "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
  internalauth "github.com/aws/aws-sdk-go-v2/internal/auth"
  "github.com/aws/aws-sdk-go-v2/service/grafana/types"
  smithyendpoints "github.com/aws/smithy-go/endpoints"
  "github.com/aws/smithy-go/middleware"
  smithyhttp "github.com/aws/smithy-go/transport/http"

```

```

)

// Removes the Grafana Enterprise license from a workspace.
func (c *Client) DisassociateLicense(ctx context.Context, params *DisassociateLicenseInput, optFns
...func(*Options)) (*DisassociateLicenseOutput, error) {
    if params == nil {
        params = &DisassociateLicenseInput{}
    }

    result, metadata, err := c.invokeOperation(ctx, "DisassociateLicense", params, optFns,
c.addOperationDisassociateLicenseMiddlewares)
    if err != nil {
        return nil, err
    }

    out := result.(*DisassociateLicenseOutput)
    out.ResultMetadata
    = metadata
    return out, nil
}

type DisassociateLicenseInput struct {

    // The type of license to remove from the workspace.
    //
    // This member is required.
    LicenseType types.LicenseType

    // The ID of the workspace to remove the Grafana Enterprise license from.
    //
    // This member is required.
    WorkspaceId *string

    noSmithyDocumentSerde
}

type DisassociateLicenseOutput struct {

    // A structure containing information about the workspace.
    //
    // This member is required.
    Workspace *types.WorkspaceDescription

    // Metadata pertaining to the operation's result.
    ResultMetadata middleware.Metadata

    noSmithyDocumentSerde
}

```

```

func (c *Client) addOperationDisassociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
    err = stack.Serialize.Add(&awsRestjson1_serializeOpDisassociateLicense{ }, middleware.After)
    if err != nil {
        return err
    }
    err = stack.Deserialize.Add(&awsRestjson1_deserializeOpDisassociateLicense{ }, middleware.After)
    if
err != nil {
        return err
    }
    if err = addLegacyEndpointContextSetter(stack, options); err != nil {
        return err
    }
    if err = addSetLoggerMiddleware(stack, options); err != nil {
        return err
    }
    if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
        return err
    }
    if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
        return err
    }
    if err = addResolveEndpointMiddleware(stack, options); err != nil {
        return err
    }
    if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
        return err
    }
    if err = addRetryMiddlewares(stack, options); err != nil {
        return err
    }
    if err = addHTTPSignerV4Middleware(stack, options); err != nil {
        return err
    }
    if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
        return err
    }
    if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
        return err
    }
    if err = addClientUserAgent(stack, options); err != nil {
        return err
    }
    if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
err != nil {
        return err
    }
}

```

```

}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = addDisassociateLicenseResolveEndpointMiddleware(stack, options); err != nil {
    return err
}
if err = addOpDisassociateLicenseValidationMiddleware(stack); err != nil {
    return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDisassociateLicense(options.Region),
middleware.Before); err != nil {
    return err
}
if err = awsmiddleware.AddRecursionDetection(stack); err != nil {
    return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
    return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
    return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
    return err
}
if err = addendpointDisableHTTPSMiddleware(stack, options); err != nil {
    return err
}
return nil
}

func newServiceMetadataMiddleware_opDisassociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata
{
    return &awsmiddleware.RegisterServiceMetadata{
        Region:    region,
        ServiceID: ServiceID,
        SigningName: "grafana",
        OperationName: "DisassociateLicense",
    }
}

type opDisassociateLicenseResolveEndpointMiddleware struct {
    EndpointResolver EndpointResolverV2
    BuiltInResolver  builtInParameterResolver
}

```

```

func (*opDisassociateLicenseResolveEndpointMiddleware) ID() string {
    return "ResolveEndpointV2"
}

func (m *opDisassociateLicenseResolveEndpointMiddleware) HandleSerialize(ctx context.Context, in
middleware.SerializeInput, next middleware.SerializeHandler) (
    out middleware.SerializeOutput, metadata middleware.Metadata, err error,
) {
    if awsmiddleware.GetRequiresLegacyEndpoints(ctx) {
        return next.HandleSerialize(ctx, in)
    }

    req, ok := in.Request.(*smithyhttp.Request)
    if !ok {
        return out, metadata, fmt.Errorf("unknown transport type %T", in.Request)
    }

    if m.EndpointResolver == nil {
        return out, metadata, fmt.Errorf("expected endpoint resolver to
not be nil")
    }

    params := EndpointParameters{}

    m.BuiltInResolver.ResolveBuiltIns(&params)

    var resolvedEndpoint smithyendpoints.Endpoint
    resolvedEndpoint, err = m.EndpointResolver.ResolveEndpoint(ctx, params)
    if err != nil {
        return out, metadata, fmt.Errorf("failed to resolve service endpoint, %w", err)
    }

    req.URL = &resolvedEndpoint.URI

    for k := range resolvedEndpoint.Headers {
        req.Header.Set(
            k,
            resolvedEndpoint.Headers.Get(k),
        )
    }

    authSchemes, err := internalauth.GetAuthenticationSchemes(&resolvedEndpoint.Properties)
    if err != nil {
        var nfe *internalauth.NoAuthenticationSchemesFoundError
        if errors.As(err, &nfe) {
            // if no auth scheme is found, default to sigv4
            signingName := "grafana"
            signingRegion := m.BuiltInResolver.(*builtInResolver).Region

```

```

ctx = awsmiddleware.SetSigningName(ctx, signingName)
ctx = awsmiddleware.SetSigningRegion(ctx, signingRegion)

}
var ue *internalauth.UnsupportedAuthenticationSchemeSpecifiedError
if errors.As(err,
&ue) {
return out, metadata, fmt.Errorf(
"This operation requests signer version(s) %v but the client only supports %v",
ue.UnsupportedSchemes,
internalauth.SupportedSchemes,
)
}
}

for _, authScheme := range authSchemes {
switch authScheme.(type) {
case *internalauth.AuthenticationSchemeV4:
v4Scheme, _ := authScheme.(*internalauth.AuthenticationSchemeV4)
var signingName, signingRegion string
if v4Scheme.SigningName == nil {
signingName = "grafana"
} else {
signingName = *v4Scheme.SigningName
}
if v4Scheme.SigningRegion == nil {
signingRegion = m.BuiltInResolver.(*builtInResolver).Region
} else {
signingRegion = *v4Scheme.SigningRegion
}
if v4Scheme.DisableDoubleEncoding != nil {
// The signer sets an equivalent value at client initialization time.
// Setting this context value will cause the signer to extract it
// and override the value set at client initialization time.
ctx = internalauth.SetDisableDoubleEncoding(ctx,
*v4Scheme.DisableDoubleEncoding)
}
ctx = awsmiddleware.SetSigningName(ctx, signingName)
ctx = awsmiddleware.SetSigningRegion(ctx, signingRegion)
break
case *internalauth.AuthenticationSchemeV4A:
v4aScheme, _ := authScheme.(*internalauth.AuthenticationSchemeV4A)
if v4aScheme.SigningName == nil {
v4aScheme.SigningName = aws.String("grafana")
}
if v4aScheme.DisableDoubleEncoding != nil {
// The signer sets an equivalent value at client initialization time.
// Setting this context value will cause the signer to extract it

```



```

// and override the value set at client initialization time.
ctx = internalauth.SetDisableDoubleEncoding(ctx, *v4aScheme.DisableDoubleEncoding)
}
ctx = awsmiddleware.SetSigningName(ctx, *v4aScheme.SigningName)
ctx = awsmiddleware.SetSigningRegion(ctx, v4aScheme.SigningRegionSet[0])
break
case *internalauth.AuthenticationSchemeNone:
break
}
}

return next.HandleSerialize(ctx, in)
}

func
addDisassociateLicenseResolveEndpointMiddleware(stack *middleware.Stack, options Options) error {
return stack.Serialize.Insert(&opDisassociateLicenseResolveEndpointMiddleware{
EndpointResolver: options.EndpointResolverV2,
BuiltInResolver: &builtInResolver{
Region: options.Region,
UseDualStack: options.EndpointOptions.UseDualStackEndpoint,
UseFIPS: options.EndpointOptions.UseFIPSEndpoint,
Endpoint: options.BaseEndpoint,
},
}, "ResolveEndpoint", middleware.After)
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
"context"
"errors"
"fmt"
"github.com/aws/aws-sdk-go-v2/aws"
awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
"github.com/aws/aws-sdk-go-v2/aws/signer/v4"
internalauth "github.com/aws/aws-sdk-go-v2/internal/auth"
"github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
smithyendpoints "github.com/aws/smithy-go/endpoints"
"github.com/aws/smithy-go/middleware"
smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license for offline use.
func (c *Client) CheckoutBorrowLicense(ctx context.Context, params *CheckoutBorrowLicenseInput, optFns
...func(*Options)) (*CheckoutBorrowLicenseOutput, error) {
if params == nil {

```

```

params = &CheckoutBorrowLicenseInput{ }
}

result, metadata, err := c.invokeOperation(ctx, "CheckoutBorrowLicense", params, optFns,
c.addOperationCheckoutBorrowLicenseMiddlewares)
if err != nil {
return nil, err
}

out := result.(*CheckoutBorrowLicenseOutput)
out.ResultMetadata
= metadata
return out, nil
}

type CheckoutBorrowLicenseInput struct {

// Unique, case-sensitive identifier that you provide to ensure the idempotency of
// the request.
//
// This member is required.
ClientToken *string

// Digital signature method. The possible value is JSON Web Signature (JWS)
// algorithm PS384. For more information, see RFC 7518 Digital Signature with
// RSASSA-PSS (https://tools.ietf.org/html/rfc7518#section-3.5) .
//
// This member is required.
DigitalSignatureMethod types.DigitalSignatureMethod

// License entitlements. Partial checkouts are not supported.
//
// This member is required.
Entitlements []types.EntitlementData

// Amazon Resource Name (ARN) of the license. The license must use the borrow
// consumption configuration.
//
// This member is required.
LicenseArn *string

// Information about constraints.
CheckoutMetadata []types.Metadata

// Node ID.
NodeId *string

noSmithyDocumentSerde

```

```

}

type
CheckoutBorrowLicenseOutput struct {

// Information about constraints.
CheckoutMetadata []types.Metadata

// Allowed license entitlements.
EntitlementsAllowed []types.EntitlementData

// Date and time at which the license checkout expires.
Expiration *string

// Date and time at which the license checkout is issued.
IssuedAt *string

// Amazon Resource Name (ARN) of the license.
LicenseArn *string

// License consumption token.
LicenseConsumptionToken *string

// Node ID.
NodeId *string

// Signed token.
SignedToken *string

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutBorrowLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutBorrowLicense{ }, middleware.After)
if err != nil {
return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutBorrowLicense{ },
middleware.After)
if err != nil {
return err
}
if err = addLegacyEndpointContextSetter(stack, options); err != nil {
return err
}
}

```

```

}
if err = addSetLoggerMiddleware(stack, options); err != nil {
    return err
}
if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
    return err
}
if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
    return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
    return err
}
if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
    return err
}
if err = addRetryMiddlewares(stack, options); err != nil {
    return err
}
if err = addHTTPSignerV4Middleware(stack, options); err != nil {
    return err
}
if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
    return err
}
if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
    return err
}
if err = addClientUserAgent(stack, options); err != nil {
    return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
err != nil {
    return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = addCheckoutBorrowLicenseResolveEndpointMiddleware(stack, options); err != nil {
    return err
}
if err = addOpCheckoutBorrowLicenseValidationMiddleware(stack); err != nil {
    return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutBorrowLicense(options.Region),
middleware.Before); err != nil {
    return err
}
}

```

```

if err = awsmiddleware.AddRecursionDetection(stack); err != nil {
    return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
    return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
    return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
    return err
}
if err = addendpointDisableHTTPSMiddleware(stack, options); err != nil {
    return err
}
return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region
string) *awsmiddleware.RegisterServiceMetadata {
return &awsmiddleware.RegisterServiceMetadata{
    Region:    region,
    ServiceID: ServiceID,
    SigningName: "license-manager",
    OperationName: "CheckoutBorrowLicense",
}
}

type opCheckoutBorrowLicenseResolveEndpointMiddleware struct {
    EndpointResolver EndpointResolverV2
    BuiltInResolver  builtInParameterResolver
}

func (*opCheckoutBorrowLicenseResolveEndpointMiddleware) ID() string {
return "ResolveEndpointV2"
}

func (m *opCheckoutBorrowLicenseResolveEndpointMiddleware) HandleSerialize(ctx context.Context, in
middleware.SerializeInput, next middleware.SerializeHandler) (
    out middleware.SerializeOutput, metadata middleware.Metadata, err error,
) {
    if awsmiddleware.GetRequiresLegacyEndpoints(ctx) {
        return next.HandleSerialize(ctx, in)
    }

    req, ok := in.Request.(*smithyhttp.Request)
    if !ok {
        return out, metadata, fmt.Errorf("unknown transport type %T", in.Request)
    }
}

```

```

}

if m.EndpointResolver == nil {
    return out, metadata,
    fmt.Errorf("expected endpoint resolver to not be nil")
}

params := EndpointParameters{}

m.BuiltInResolver.ResolveBuiltIns(&params)

var resolvedEndpoint smithyendpoints.Endpoint
resolvedEndpoint, err = m.EndpointResolver.ResolveEndpoint(ctx, params)
if err != nil {
    return out, metadata, fmt.Errorf("failed to resolve service endpoint, %w", err)
}

req.URL = &resolvedEndpoint.URI

for k := range resolvedEndpoint.Headers {
    req.Header.Set(
        k,
        resolvedEndpoint.Headers.Get(k),
    )
}

authSchemes, err := internalauth.GetAuthenticationSchemes(&resolvedEndpoint.Properties)
if err != nil {
    var nfe *internalauth.NoAuthenticationSchemesFoundError
    if errors.As(err, &nfe) {
        // if no auth scheme is found, default to sigv4
        signingName := "license-manager"
        signingRegion := m.BuiltInResolver.(*builtInResolver).Region
        ctx = awsmiddleware.SetSigningName(ctx, signingName)
        ctx = awsmiddleware.SetSigningRegion(ctx, signingRegion)
    }
    var ue *internalauth.UnsupportedAuthenticationSchemeSpecifiedError
    if
    errors.As(err, &ue) {
        return out, metadata, fmt.Errorf(
            "This operation requests signer version(s) %v but the client only supports %v",
            ue.UnsupportedSchemes,
            internalauth.SupportedSchemes,
        )
    }
}

```

```

for _, authScheme := range authSchemes {
    switch authScheme.(type) {
    case *internalauth.AuthenticationSchemeV4:
        v4Scheme, _ := authScheme.(*internalauth.AuthenticationSchemeV4)
        var signingName, signingRegion string
        if v4Scheme.SigningName == nil {
            signingName = "license-manager"
        } else {
            signingName = *v4Scheme.SigningName
        }
        if v4Scheme.SigningRegion == nil {
            signingRegion = m.BuiltInResolver.(*builtInResolver).Region
        } else {
            signingRegion = *v4Scheme.SigningRegion
        }
        if v4Scheme.DisableDoubleEncoding != nil {
            // The signer sets an equivalent value at client initialization time.
            // Setting this context value will cause the signer to extract it
            // and override the
value set at client initialization time.
            ctx = internalauth.SetDisableDoubleEncoding(ctx, *v4Scheme.DisableDoubleEncoding)
        }
        ctx = awsmiddleware.SetSigningName(ctx, signingName)
        ctx = awsmiddleware.SetSigningRegion(ctx, signingRegion)
        break
    case *internalauth.AuthenticationSchemeV4A:
        v4aScheme, _ := authScheme.(*internalauth.AuthenticationSchemeV4A)
        if v4aScheme.SigningName == nil {
            v4aScheme.SigningName = aws.String("license-manager")
        }
        if v4aScheme.DisableDoubleEncoding != nil {
            // The signer sets an equivalent value at client initialization time.
            // Setting this context value will cause the signer to extract it
            // and override the value set at client initialization time.
            ctx = internalauth.SetDisableDoubleEncoding(ctx, *v4aScheme.DisableDoubleEncoding)
        }
        ctx = awsmiddleware.SetSigningName(ctx, *v4aScheme.SigningName)
        ctx = awsmiddleware.SetSigningRegion(ctx, v4aScheme.SigningRegionSet[0])
        break
    case *internalauth.AuthenticationSchemeNone:
        break
    }
}

return
next.HandleSerialize(ctx, in)
}

```

```

func addCheckoutBorrowLicenseResolveEndpointMiddleware(stack *middleware.Stack, options Options) error {
    return stack.Serialize.Insert(&opCheckoutBorrowLicenseResolveEndpointMiddleware{
        EndpointResolver: options.EndpointResolverV2,
        BuiltInResolver: &builtInResolver{
            Region:    options.Region,
            UseDualStack: options.EndpointOptions.UseDualStackEndpoint,
            UseFIPS:    options.EndpointOptions.UseFIPSEndpoint,
            Endpoint:  options.BaseEndpoint,
        },
    }, "ResolveEndpoint", middleware.After)
}
// Code generated by smithy-go-codegen DO NOT EDIT.

```

```

package licensemanager

```

```

import (
    "context"
    "errors"
    "fmt"
    "github.com/aws/aws-sdk-go-v2/aws"
    awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
    "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
    internalauth "github.com/aws/aws-sdk-go-v2/internal/auth"
    "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
    smithyendpoints "github.com/aws/smithy-go/endpoints"
    "github.com/aws/smithy-go/middleware"
    smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Gets detailed information about the specified license.
func (c *Client) GetLicense(ctx context.Context, params *GetLicenseInput, optFns ...func(*Options))
(*GetLicenseOutput, error) {
    if params == nil {
        params = &GetLicenseInput{}
    }

    result, metadata, err := c.invokeOperation(ctx, "GetLicense", params, optFns,
c.addOperationGetLicenseMiddlewares)
    if err != nil {
        return nil, err
    }

    out := result.(*GetLicenseOutput)
    out.ResultMetadata = metadata
    return out,
    nil
}

```



```

type GetLicenseInput struct {

    // Amazon Resource Name (ARN) of the license.
    //
    // This member is required.
    LicenseArn *string

    // License version.
    Version *string

    noSmithyDocumentSerde
}

type GetLicenseOutput struct {

    // License details.
    License *types.License

    // Metadata pertaining to the operation's result.
    ResultMetadata middleware.Metadata

    noSmithyDocumentSerde
}

func (c *Client) addOperationGetLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
    err = stack.Serialize.Add(&awsAwsjson11_serializeOpGetLicense{ }, middleware.After)
    if err != nil {
        return err
    }
    err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpGetLicense{ }, middleware.After)
    if err != nil {
        return err
    }
    if err = addLegacyEndpointContextSetter(stack, options); err != nil {
        return err
    }
    if err = addSetLoggerMiddleware(stack, options); err != nil {
        return err
    }
    if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
        return err
    }
    if
    err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
        return err
    }
    if err = addResolveEndpointMiddleware(stack, options); err != nil {
        return err
    }
}

```

```

}
if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
    return err
}
if err = addRetryMiddlewares(stack, options); err != nil {
    return err
}
if err = addHTTPSignerV4Middleware(stack, options); err != nil {
    return err
}
if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
    return err
}
if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
    return err
}
if err = addClientUserAgent(stack, options); err != nil {
    return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = addGetLicenseResolveEndpointMiddleware(stack, options); err != nil {
    return err
}
if err = addOpGetLicenseValidationMiddleware(stack); err !=
nil {
    return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opGetLicense(options.Region), middleware.Before);
err != nil {
    return err
}
if err = awsmiddleware.AddRecursionDetection(stack); err != nil {
    return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
    return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
    return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
    return err
}
}

```

```

if err = addendpointDisableHTTPSMiddleware(stack, options); err != nil {
    return err
}
return nil
}

func newServiceMetadataMiddleware_opGetLicense(region string) *awsmiddleware.RegisterServiceMetadata {
return &awsmiddleware.RegisterServiceMetadata{
    Region:    region,
    ServiceID: ServiceID,
    SigningName: "license-manager",
    OperationName: "GetLicense",
}
}

type opGetLicenseResolveEndpointMiddleware struct {
    EndpointResolver EndpointResolverV2
    BuiltInResolver  builtInParameterResolver
}

func
(*opGetLicenseResolveEndpointMiddleware) ID() string {
return "ResolveEndpointV2"
}

func (m *opGetLicenseResolveEndpointMiddleware) HandleSerialize(ctx context.Context, in
middleware.SerializeInput, next middleware.SerializeHandler) (
    out middleware.SerializeOutput, metadata middleware.Metadata, err error,
) {
if awsmiddleware.GetRequiresLegacyEndpoints(ctx) {
return next.HandleSerialize(ctx, in)
}

req, ok := in.Request.(*smithyhttp.Request)
if !ok {
return out, metadata, fmt.Errorf("unknown transport type %T", in.Request)
}

if m.EndpointResolver == nil {
return out, metadata, fmt.Errorf("expected endpoint resolver to not be nil")
}

params := EndpointParameters{}

m.BuiltInResolver.ResolveBuiltIns(&params)

var resolvedEndpoint smithyendpoints.Endpoint
resolvedEndpoint, err = m.EndpointResolver.ResolveEndpoint(ctx, params)

```

```

if err != nil {
    return out, metadata, fmt.Errorf("failed to resolve service endpoint, %w", err)
}

req.URL = &resolvedEndpoint.URI

for
k := range resolvedEndpoint.Headers {
    req.Header.Set(
        k,
        resolvedEndpoint.Headers.Get(k),
    )
}

authSchemes, err := internalauth.GetAuthenticationSchemes(&resolvedEndpoint.Properties)
if err != nil {
    var nfe *internalauth.NoAuthenticationSchemesFoundError
    if errors.As(err, &nfe) {
        // if no auth scheme is found, default to sigv4
        signingName := "license-manager"
        signingRegion := m.BuiltInResolver.(*builtInResolver).Region
        ctx = awsmiddleware.SetSigningName(ctx, signingName)
        ctx = awsmiddleware.SetSigningRegion(ctx, signingRegion)
    }
    var ue *internalauth.UnsupportedAuthenticationSchemeSpecifiedError
    if errors.As(err, &ue) {
        return out, metadata, fmt.Errorf(
            "This operation requests signer version(s) %v but the client only supports %v",
            ue.UnsupportedSchemes,
            internalauth.SupportedSchemes,
        )
    }
}

for _, authScheme := range authSchemes {
    switch authScheme.(type) {
    case *internalauth.AuthenticationSchemeV4:
        v4Scheme, _ := authScheme.(*internalauth.AuthenticationSchemeV4)
        var
        signingName, signingRegion string
        if v4Scheme.SigningName == nil {
            signingName = "license-manager"
        } else {
            signingName = *v4Scheme.SigningName
        }
        if v4Scheme.SigningRegion == nil {
            signingRegion = m.BuiltInResolver.(*builtInResolver).Region

```

```

    } else {
        signingRegion = *v4Scheme.SigningRegion
    }
    if v4Scheme.DisableDoubleEncoding != nil {
        // The signer sets an equivalent value at client initialization time.
        // Setting this context value will cause the signer to extract it
        // and override the value set at client initialization time.
        ctx = internalauth.SetDisableDoubleEncoding(ctx, *v4Scheme.DisableDoubleEncoding)
    }
    ctx = awsmiddleware.SetSigningName(ctx, signingName)
    ctx = awsmiddleware.SetSigningRegion(ctx, signingRegion)
    break
case *internalauth.AuthenticationSchemeV4A:
    v4aScheme, _ := authScheme.(*internalauth.AuthenticationSchemeV4A)
    if v4aScheme.SigningName ==
nil {
        v4aScheme.SigningName = aws.String("license-manager")
    }
    if v4aScheme.DisableDoubleEncoding != nil {
        // The signer sets an equivalent value at client initialization time.
        // Setting this context value will cause the signer to extract it
        // and override the value set at client initialization time.
        ctx = internalauth.SetDisableDoubleEncoding(ctx, *v4aScheme.DisableDoubleEncoding)
    }
    ctx = awsmiddleware.SetSigningName(ctx, *v4aScheme.SigningName)
    ctx = awsmiddleware.SetSigningRegion(ctx, v4aScheme.SigningRegionSet[0])
    break
case *internalauth.AuthenticationSchemeNone:
    break
}
}

return next.HandleSerialize(ctx, in)
}

func addGetLicenseResolveEndpointMiddleware(stack *middleware.Stack, options Options) error {
return stack.Serialize.Insert(&opGetLicenseResolveEndpointMiddleware{
    EndpointResolver: options.EndpointResolverV2,
    BuiltInResolver: &builtInResolver{
        Region:    options.Region,
        UseDualStack: options.EndpointOptions.UseDualStackEndpoint,
        UseFIPS:
            options.EndpointOptions.UseFIPSEndpoint,
        Endpoint:  options.BaseEndpoint,
    },
}, "ResolveEndpoint", middleware.After)
}

```

```

// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
    "context"
    "errors"
    "fmt"
    "github.com/aws/aws-sdk-go-v2/aws"
    awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
    "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
    internalauth "github.com/aws/aws-sdk-go-v2/internal/auth"
    "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
    smithyendpoints "github.com/aws/smithy-go/endpoints"
    "github.com/aws/smithy-go/middleware"
    smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists the licenses for your account.
func (c *Client) ListLicenses(ctx context.Context, params *ListLicensesInput, optFns ...func(*Options))
(*ListLicensesOutput, error) {
    if params == nil {
        params = &ListLicensesInput{}
    }

    result, metadata, err := c.invokeOperation(ctx, "ListLicenses", params, optFns,
c.addOperationListLicensesMiddlewares)
    if err != nil {
        return nil, err
    }

    out := result.(*ListLicensesOutput)
    out.ResultMetadata = metadata
    return out, nil
}

type
ListLicensesInput struct {

    // Filters to scope the results. The following filters are supported:
    // - Beneficiary
    // - ProductSKU
    // - Fingerprint
    // - Status
    Filters []types.Filter

    // Amazon Resource Names (ARNs) of the licenses.
    LicenseArns []string
}

```

```

// Maximum number of results to return in a single call.
MaxResults *int32

// Token for the next set of results.
NextToken *string

noSmithyDocumentSerde
}

type ListLicensesOutput struct {

// License details.
Licenses []types.License

// Token for the next set of results.
NextToken *string

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationListLicensesMiddlewares(stack *middleware.Stack, options Options) (err error) {
err = stack.Serialize.Add(&awsAwsjson11_serializeOpListLicenses{ }, middleware.After)
if err != nil {
return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListLicenses{ }, middleware.After)
if
err != nil {
return err
}
if err = addLegacyEndpointContextSetter(stack, options); err != nil {
return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
return err
}
if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
return err
}
if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
return err
}

```

```

}
if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
    return err
}
if err = addRetryMiddlewares(stack, options); err != nil {
    return err
}
if err = addHTTPSignerV4Middleware(stack, options); err != nil {
    return err
}
if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
    return err
}
if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
    return err
}
if err = addClientUserAgent(stack, options); err != nil {
    return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
err != nil {
    return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = addListLicensesResolveEndpointMiddleware(stack, options); err != nil {
    return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListLicenses(options.Region), middleware.Before);
err != nil {
    return err
}
if err = awsmiddleware.AddRecursionDetection(stack); err != nil {
    return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
    return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
    return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
    return err
}
if err = addEndpointDisableHTTPSMiddleware(stack, options); err != nil {
    return err
}
}

```



```

return nil
}

func newServiceMetadataMiddleware_opListLicenses(region string) *awsmiddleware.RegisterServiceMetadata {
return &awsmiddleware.RegisterServiceMetadata{
Region:    region,
ServiceID:
ServiceID,
SigningName: "license-manager",
OperationName: "ListLicenses",
}
}

type opListLicensesResolveEndpointMiddleware struct {
EndpointResolver EndpointResolverV2
BuiltInResolver  builtInParameterResolver
}

func (*opListLicensesResolveEndpointMiddleware) ID() string {
return "ResolveEndpointV2"
}

func (m *opListLicensesResolveEndpointMiddleware) HandleSerialize(ctx context.Context, in
middleware.SerializeInput, next middleware.SerializeHandler) (
out middleware.SerializeOutput, metadata middleware.Metadata, err error,
) {
if awsmiddleware.GetRequiresLegacyEndpoints(ctx) {
return next.HandleSerialize(ctx, in)
}

req, ok := in.Request.(*smithyhttp.Request)
if !ok {
return out, metadata, fmt.Errorf("unknown transport type %T", in.Request)
}

if m.EndpointResolver == nil {
return out, metadata, fmt.Errorf("expected endpoint resolver to not be nil")
}

params := EndpointParameters{}

m.BuiltInResolver.ResolveBuiltIns(&params)

var resolvedEndpoint
smithyendpoints.Endpoint
resolvedEndpoint, err = m.EndpointResolver.ResolveEndpoint(ctx, params)
if err != nil {
return out, metadata, fmt.Errorf("failed to resolve service endpoint, %w", err)
}
}

```

```

}

req.URL = &resolvedEndpoint.URI

for k := range resolvedEndpoint.Headers {
    req.Header.Set(
        k,
        resolvedEndpoint.Headers.Get(k),
    )
}

authSchemes, err := internalauth.GetAuthenticationSchemes(&resolvedEndpoint.Properties)
if err != nil {
    var nfe *internalauth.NoAuthenticationSchemesFoundError
    if errors.As(err, &nfe) {
        // if no auth scheme is found, default to sigv4
        signingName := "license-manager"
        signingRegion := m.BuiltInResolver.(*builtInResolver).Region
        ctx = awsmiddleware.SetSigningName(ctx, signingName)
        ctx = awsmiddleware.SetSigningRegion(ctx, signingRegion)
    }
    var ue *internalauth.UnSupportedAuthenticationSchemeSpecifiedError
    if errors.As(err, &ue) {
        return out, metadata, fmt.Errorf(
            "This operation requests signer version(s) %v but the
client only supports %v",
            ue.UnsupportedSchemes,
            internalauth.SupportedSchemes,
        )
    }
}

for _, authScheme := range authSchemes {
    switch authScheme.(type) {
    case *internalauth.AuthenticationSchemeV4:
        v4Scheme, _ := authScheme.(*internalauth.AuthenticationSchemeV4)
        var signingName, signingRegion string
        if v4Scheme.SigningName == nil {
            signingName = "license-manager"
        } else {
            signingName = *v4Scheme.SigningName
        }
        if v4Scheme.SigningRegion == nil {
            signingRegion = m.BuiltInResolver.(*builtInResolver).Region
        } else {
            signingRegion = *v4Scheme.SigningRegion
        }
    }
}

```

```

if v4Scheme.DisableDoubleEncoding != nil {
    // The signer sets an equivalent value at client initialization time.
    // Setting this context value will cause the signer to extract it
    // and override the value set at client initialization time.
    ctx = internalauth.SetDisableDoubleEncoding(ctx, *v4Scheme.DisableDoubleEncoding)
}
ctx = awsmiddleware.SetSigningName(ctx,
signingName)
ctx = awsmiddleware.SetSigningRegion(ctx, signingRegion)
break
case *internalauth.AuthenticationSchemeV4A:
    v4aScheme, _ := authScheme.(*internalauth.AuthenticationSchemeV4A)
    if v4aScheme.SigningName == nil {
        v4aScheme.SigningName = aws.String("license-manager")
    }
    if v4aScheme.DisableDoubleEncoding != nil {
        // The signer sets an equivalent value at client initialization time.
        // Setting this context value will cause the signer to extract it
        // and override the value set at client initialization time.
        ctx = internalauth.SetDisableDoubleEncoding(ctx, *v4aScheme.DisableDoubleEncoding)
    }
    ctx = awsmiddleware.SetSigningName(ctx, *v4aScheme.SigningName)
    ctx = awsmiddleware.SetSigningRegion(ctx, v4aScheme.SigningRegionSet[0])
    break
case *internalauth.AuthenticationSchemeNone:
    break
}
}

return next.HandleSerialize(ctx, in)
}

func addListLicensesResolveEndpointMiddleware(stack *middleware.Stack, options Options)
error {
return stack.Serialize.Insert(&opListLicensesResolveEndpointMiddleware{
    EndpointResolver: options.EndpointResolverV2,
    BuiltInResolver: &builtInResolver{
        Region:    options.Region,
        UseDualStack: options.EndpointOptions.UseDualStackEndpoint,
        UseFIPS:    options.EndpointOptions.UseFIPSEndpoint,
        Endpoint:   options.BaseEndpoint,
    },
}, "ResolveEndpoint", middleware.After)
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

```

```

import (
    "context"
    "errors"
    "fmt"
    "github.com/aws/aws-sdk-go-v2/aws"
    awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
    "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
    internalauth "github.com/aws/aws-sdk-go-v2/internal/auth"
    "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
    smithyendpoints "github.com/aws/smithy-go/endpoints"
    "github.com/aws/smithy-go/middleware"
    smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Deletes the specified license.
func (c *Client) DeleteLicense(ctx context.Context, params *DeleteLicenseInput, optFns ...func(*Options))
(*DeleteLicenseOutput, error) {
    if params == nil {
        params = &DeleteLicenseInput{}
    }

    result, metadata, err := c.invokeOperation(ctx, "DeleteLicense", params, optFns,
c.addOperationDeleteLicenseMiddlewares)
    if err != nil {
        return nil, err
    }

    out := result.(*DeleteLicenseOutput)
    out.ResultMetadata = metadata
    return out, nil
}

type
DeleteLicenseInput struct {

    // Amazon Resource Name (ARN) of the license.
    //
    // This member is required.
    LicenseArn *string

    // Current version of the license.
    //
    // This member is required.
    SourceVersion *string

    noSmithyDocumentSerde
}

```

```

type DeleteLicenseOutput struct {

    // Date when the license is deleted.
    DeletionDate *string

    // License status.
    Status types.LicenseDeletionStatus

    // Metadata pertaining to the operation's result.
    ResultMetadata middleware.Metadata

    noSmithyDocumentSerde
}

func (c *Client) addOperationDeleteLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
    err = stack.Serialize.Add(&awsAwsjson11_serializeOpDeleteLicense{ }, middleware.After)
    if err != nil {
        return err
    }
    err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpDeleteLicense{ }, middleware.After)
    if err != nil {
        return err
    }
    if err = addLegacyEndpointContextSetter(stack, options); err != nil {
        return err
    }
    if err = addSetLoggerMiddleware(stack,
options); err != nil {
        return err
    }
    if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
        return err
    }
    if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
        return err
    }
    if err = addResolveEndpointMiddleware(stack, options); err != nil {
        return err
    }
    if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
        return err
    }
    if err = addRetryMiddlewares(stack, options); err != nil {
        return err
    }
    if err = addHTTPSignerV4Middleware(stack, options); err != nil {
        return err
    }
}

```

```

if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
    return err
}
if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
    return err
}
if err = addClientUserAgent(stack, options); err != nil {
    return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = addDeleteLicenseResolveEndpointMiddleware(stack,
options); err != nil {
    return err
}
if err = addOpDeleteLicenseValidationMiddleware(stack); err != nil {
    return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDeleteLicense(options.Region),
middleware.Before); err != nil {
    return err
}
if err = awsmiddleware.AddRecursionDetection(stack); err != nil {
    return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
    return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
    return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
    return err
}
if err = addendpointDisableHTTPSMiddleware(stack, options); err != nil {
    return err
}
return nil
}

func newServiceMetadataMiddleware_opDeleteLicense(region string) *awsmiddleware.RegisterServiceMetadata {
return &awsmiddleware.RegisterServiceMetadata{
    Region:    region,
    ServiceID: ServiceID,
}
}

```

```

    SigningName: "license-manager",
    OperationName: "DeleteLicense",
}
}

type
opDeleteLicenseResolveEndpointMiddleware struct {
    EndpointResolver EndpointResolverV2
    BuiltInResolver  builtInParameterResolver
}

func (*opDeleteLicenseResolveEndpointMiddleware) ID() string {
    return "ResolveEndpointV2"
}

func (m *opDeleteLicenseResolveEndpointMiddleware) HandleSerialize(ctx context.Context, in
middleware.SerializeInput, next middleware.SerializeHandler) (
    out middleware.SerializeOutput, metadata middleware.Metadata, err error,
) {
    if awsmiddleware.GetRequiresLegacyEndpoints(ctx) {
        return next.HandleSerialize(ctx, in)
    }

    req, ok := in.Request.(*smithyhttp.Request)
    if !ok {
        return out, metadata, fmt.Errorf("unknown transport type %T", in.Request)
    }

    if m.EndpointResolver == nil {
        return out, metadata, fmt.Errorf("expected endpoint resolver to not be nil")
    }

    params := EndpointParameters{}

    m.BuiltInResolver.ResolveBuiltIns(&params)

    var resolvedEndpoint smithyendpoints.Endpoint
    resolvedEndpoint, err = m.EndpointResolver.ResolveEndpoint(ctx,
    params)
    if err != nil {
        return out, metadata, fmt.Errorf("failed to resolve service endpoint, %w", err)
    }

    req.URL = &resolvedEndpoint.URI

    for k := range resolvedEndpoint.Headers {
        req.Header.Set(
            k,

```

```

resolvedEndpoint.Headers.Get(k),
)
}

authSchemes, err := internalauth.GetAuthenticationSchemes(&resolvedEndpoint.Properties)
if err != nil {
var nfe *internalauth.NoAuthenticationSchemesFoundError
if errors.As(err, &nfe) {
// if no auth scheme is found, default to sigv4
signingName := "license-manager"
signingRegion := m.BuiltInResolver.(*builtInResolver).Region
ctx = awsmiddleware.SetSigningName(ctx, signingName)
ctx = awsmiddleware.SetSigningRegion(ctx, signingRegion)

}
var ue *internalauth.UnSupportedAuthenticationSchemeSpecifiedError
if errors.As(err, &ue) {
return out, metadata, fmt.Errorf(
    "This operation requests signer version(s) %v but the client only supports %v",
    ue.UnsupportedSchemes,
    internalauth.SupportedSchemes,
)
}
}

for
_, authScheme := range authSchemes {
switch authScheme.(type) {
case *internalauth.AuthenticationSchemeV4:
v4Scheme, _ := authScheme.(*internalauth.AuthenticationSchemeV4)
var signingName, signingRegion string
if v4Scheme.SigningName == nil {
signingName = "license-manager"
} else {
signingName = *v4Scheme.SigningName
}
if v4Scheme.SigningRegion == nil {
signingRegion = m.BuiltInResolver.(*builtInResolver).Region
} else {
signingRegion = *v4Scheme.SigningRegion
}
if v4Scheme.DisableDoubleEncoding != nil {
// The signer sets an equivalent value at client initialization time.
// Setting this context value will cause the signer to extract it
// and override the value set at client initialization time.
ctx = internalauth.SetDisableDoubleEncoding(ctx, *v4Scheme.DisableDoubleEncoding)
}
ctx = awsmiddleware.SetSigningName(ctx, signingName)

```



```

    ctx = awsmiddleware.SetSigningRegion(ctx, signingRegion)
    break
case
*internalauth.AuthenticationSchemeV4A:
v4aScheme, _ := authScheme.(*internalauth.AuthenticationSchemeV4A)
if v4aScheme.SigningName == nil {
    v4aScheme.SigningName = aws.String("license-manager")
}
if v4aScheme.DisableDoubleEncoding != nil {
    // The signer sets an equivalent value at client initialization time.
    // Setting this context value will cause the signer to extract it
    // and override the value set at client initialization time.
    ctx = internalauth.SetDisableDoubleEncoding(ctx, *v4aScheme.DisableDoubleEncoding)
}
ctx = awsmiddleware.SetSigningName(ctx, *v4aScheme.SigningName)
ctx = awsmiddleware.SetSigningRegion(ctx, v4aScheme.SigningRegionSet[0])
break
case *internalauth.AuthenticationSchemeNone:
    break
}
}

return next.HandleSerialize(ctx, in)
}

func addDeleteLicenseResolveEndpointMiddleware(stack *middleware.Stack, options Options) error {
return stack.Serialize.Insert(&opDeleteLicenseResolveEndpointMiddleware{
    EndpointResolver:
options.EndpointResolverV2,
    BuiltInResolver: &builtinResolver{
        Region:    options.Region,
        UseDualStack: options.EndpointOptions.UseDualStackEndpoint,
        UseFIPS:    options.EndpointOptions.UseFIPSEndpoint,
        Endpoint:   options.BaseEndpoint,
    },
}, "ResolveEndpoint", middleware.After)
}

```

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// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

```
import (  
    "context"  
    "errors"  
    "fmt"  
    "github.com/aws/aws-sdk-go-v2/aws"  
    awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"  
    "github.com/aws/aws-sdk-go-v2/aws/signer/v4"  
    internalauth "github.com/aws/aws-sdk-go-v2/internal/auth"  
    smithyendpoints "github.com/aws/smithy-go/endpoints"  
    "github.com/aws/smithy-go/middleware"  
    smithyhttp "github.com/aws/smithy-go/transport/http"  
)  
  
// Checks in the specified license. Check in a license when it is no longer in use.  
func (c *Client) CheckInLicense(ctx context.Context, params *CheckInLicenseInput, optFns ...func(*Options))  
(*CheckInLicenseOutput, error) {  
    if params == nil {  
        params = &CheckInLicenseInput{ }  
    }  
  
    result, metadata, err := c.invokeOperation(ctx, "CheckInLicense", params, optFns,  
c.addOperationCheckInLicenseMiddlewares)  
    if err != nil {  
        return nil, err  
    }  
  
    out := result.(*CheckInLicenseOutput)
```

```

out.ResultMetadata = metadata
return out, nil
}

type
CheckInLicenseInput struct {

// License consumption token.
//
// This member is required.
LicenseConsumptionToken *string

// License beneficiary.
Beneficiary *string

noSmithyDocumentSerde
}

type CheckInLicenseOutput struct {
// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationCheckInLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckInLicense{ }, middleware.After)
if err != nil {
return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckInLicense{ }, middleware.After)
if err != nil {
return err
}
if err = addLegacyEndpointContextSetter(stack, options); err != nil {
return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
return err
}
if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
return err
}
if err = smithyhttp.AddComputeContentLengthMiddleware(stack);
err != nil {
return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {

```

```

return err
}
if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
return err
}
if err = addRetryMiddlewares(stack, options); err != nil {
return err
}
if err = addHTTPSignerV4Middleware(stack, options); err != nil {
return err
}
if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
return err
}
if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
return err
}
if err = addClientUserAgent(stack, options); err != nil {
return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
return err
}
if err = addCheckInLicenseResolveEndpointMiddleware(stack, options); err != nil {
return err
}
if err = addOpCheckInLicenseValidationMiddleware(stack); err != nil {
return err
}
}
if
err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckInLicense(options.Region),
middleware.Before); err != nil {
return err
}
if err = awsmiddleware.AddRecursionDetection(stack); err != nil {
return err
}
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
return err
}
}
if err = addResponseErrorMiddleware(stack); err != nil {
return err
}
}
if err = addRequestResponseLogging(stack, options); err != nil {
return err
}

```

```

}
if err = addendpointDisableHTTPSMiddleware(stack, options); err != nil {
    return err
}
return nil
}

func newServiceMetadataMiddleware_opCheckInLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
return &awsmiddleware.RegisterServiceMetadata{
    Region:    region,
    ServiceID: ServiceID,
    SigningName: "license-manager",
    OperationName: "CheckInLicense",
}
}

type opCheckInLicenseResolveEndpointMiddleware struct {
    EndpointResolver EndpointResolverV2
    BuiltInResolver  builtInParameterResolver
}

func (*opCheckInLicenseResolveEndpointMiddleware)
ID() string {
return "ResolveEndpointV2"
}

func (m *opCheckInLicenseResolveEndpointMiddleware) HandleSerialize(ctx context.Context, in
middleware.SerializeInput, next middleware.SerializeHandler) (
out middleware.SerializeOutput, metadata middleware.Metadata, err error,
) {
if awsmiddleware.GetRequiresLegacyEndpoints(ctx) {
return next.HandleSerialize(ctx, in)
}

req, ok := in.Request.(*smithyhttp.Request)
if !ok {
return out, metadata, fmt.Errorf("unknown transport type %T", in.Request)
}

if m.EndpointResolver == nil {
return out, metadata, fmt.Errorf("expected endpoint resolver to not be nil")
}

params := EndpointParameters{}

m.BuiltInResolver.ResolveBuiltIns(&params)

```

```

var resolvedEndpoint smithyendpoints.Endpoint
resolvedEndpoint, err = m.EndpointResolver.ResolveEndpoint(ctx, params)
if err != nil {
    return out, metadata, fmt.Errorf("failed to resolve service endpoint, %w", err)
}

req.URL = &resolvedEndpoint.URI

for
k := range resolvedEndpoint.Headers {
    req.Header.Set(
        k,
        resolvedEndpoint.Headers.Get(k),
    )
}

authSchemes, err := internalauth.GetAuthenticationSchemes(&resolvedEndpoint.Properties)
if err != nil {
    var nfe *internalauth.NoAuthenticationSchemesFoundError
    if errors.As(err, &nfe) {
        // if no auth scheme is found, default to sigv4
        signingName := "license-manager"
        signingRegion := m.BuiltInResolver.(*builtInResolver).Region
        ctx = awsmiddleware.SetSigningName(ctx, signingName)
        ctx = awsmiddleware.SetSigningRegion(ctx, signingRegion)
    }
    var ue *internalauth.UnSupportedAuthenticationSchemeSpecifiedError
    if errors.As(err, &ue) {
        return out, metadata, fmt.Errorf(
            "This operation requests signer version(s) %v but the client only supports %v",
            ue.UnsupportedSchemes,
            internalauth.SupportedSchemes,
        )
    }
}

for _, authScheme := range authSchemes {
    switch authScheme.(type) {
    case *internalauth.AuthenticationSchemeV4:
        v4Scheme, _ :=
        authScheme.(*internalauth.AuthenticationSchemeV4)
        var signingName, signingRegion string
        if v4Scheme.SigningName == nil {
            signingName = "license-manager"
        } else {
            signingName = *v4Scheme.SigningName
        }
    }
}

```

```

if v4Scheme.SigningRegion == nil {
    signingRegion = m.BuiltInResolver.(*builtInResolver).Region
} else {
    signingRegion = *v4Scheme.SigningRegion
}
if v4Scheme.DisableDoubleEncoding != nil {
    // The signer sets an equivalent value at client initialization time.
    // Setting this context value will cause the signer to extract it
    // and override the value set at client initialization time.
    ctx = internalauth.SetDisableDoubleEncoding(ctx, *v4Scheme.DisableDoubleEncoding)
}
ctx = awsmiddleware.SetSigningName(ctx, signingName)
ctx = awsmiddleware.SetSigningRegion(ctx, signingRegion)
break
case *internalauth.AuthenticationSchemeV4A:
    v4aScheme, _ := authScheme.(*internalauth.AuthenticationSchemeV4A)
    if v4aScheme.SigningName
== nil {
        v4aScheme.SigningName = aws.String("license-manager")
    }
    if v4aScheme.DisableDoubleEncoding != nil {
        // The signer sets an equivalent value at client initialization time.
        // Setting this context value will cause the signer to extract it
        // and override the value set at client initialization time.
        ctx = internalauth.SetDisableDoubleEncoding(ctx, *v4aScheme.DisableDoubleEncoding)
    }
    ctx = awsmiddleware.SetSigningName(ctx, *v4aScheme.SigningName)
    ctx = awsmiddleware.SetSigningRegion(ctx, v4aScheme.SigningRegionSet[0])
    break
case *internalauth.AuthenticationSchemeNone:
    break
}
}

return next.HandleSerialize(ctx, in)
}

func addCheckInLicenseResolveEndpointMiddleware(stack *middleware.Stack, options Options) error {
return stack.Serialize.Insert(&opCheckInLicenseResolveEndpointMiddleware{
    EndpointResolver: options.EndpointResolverV2,
    BuiltInResolver: &builtInResolver{
        Region:    options.Region,
        UseDualStack: options.EndpointOptions.UseDualStackEndpoint,
        UseFIPS:
            options.EndpointOptions.UseFIPSEndpoint,
        Endpoint:  options.BaseEndpoint,
    },
}, "ResolveEndpoint", middleware.After)
}

```

}

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// Code generated by smithy-go-codegen DO NOT EDIT.

```
package licensemanager
```

```
import (  
    "context"  
    "errors"  
    "fmt"  
    "github.com/aws/aws-sdk-go-v2/aws"  
    awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"  
    "github.com/aws/aws-sdk-go-v2/aws/signer/v4"  
    internalauth "github.com/aws/aws-sdk-go-v2/internal/auth"  
    "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"  
    smithyendpoints "github.com/aws/smithy-go/endpoints"  
    "github.com/aws/smithy-go/middleware"  
    smithyhttp "github.com/aws/smithy-go/transport/http"  
)  
  
// Lists received licenses.  
func (c *Client) ListReceivedLicenses(ctx context.Context, params *ListReceivedLicensesInput, optFns  
...func(*Options)) (*ListReceivedLicensesOutput, error) {  
    if params == nil {  
        params = &ListReceivedLicensesInput{ }  
    }  
  
    result, metadata, err := c.invokeOperation(ctx, "ListReceivedLicenses", params, optFns,  
c.addOperationListReceivedLicensesMiddlewares)  
    if err != nil {  
        return nil, err
```

```

}

out := result.(*ListReceivedLicensesOutput)
out.ResultMetadata
= metadata
return out, nil
}

type ListReceivedLicensesInput struct {

// Filters to scope the results. The following filters are supported:
// - ProductSKU
// - Status
// - Fingerprint
// - IssuerName
// - Beneficiary
Filters []types.Filter

// Amazon Resource Names (ARNs) of the licenses.
LicenseArns []string

// Maximum number of results to return in a single call.
MaxResults *int32

// Token for the next set of results.
NextToken *string

noSmithyDocumentSerde
}

type ListReceivedLicensesOutput struct {

// Received license details.
Licenses []types.GrantedLicense

// Token for the next set of results.
NextToken *string

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationListReceivedLicensesMiddlewares(stack *middleware.Stack, options Options) (err
error) {
err = stack.Serialize.Add(&awsAwsjson11_serializeOpListReceivedLicenses{ }, middleware.After)
if

```

```

err != nil {
    return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListReceivedLicenses{ }, middleware.After)
if err != nil {
    return err
}
if err = addLegacyEndpointContextSetter(stack, options); err != nil {
    return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
    return err
}
if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
    return err
}
if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
    return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
    return err
}
if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
    return err
}
if err = addRetryMiddlewares(stack, options); err != nil {
    return err
}
if err = addHTTPSignerV4Middleware(stack, options); err != nil {
    return err
}
if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
    return err
}
if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
    return
err
}
if err = addClientUserAgent(stack, options); err != nil {
    return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = addListReceivedLicensesResolveEndpointMiddleware(stack, options); err != nil {

```

```

    return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListReceivedLicenses(options.Region),
middleware.Before); err != nil {
    return err
}
if err = awsmiddleware.AddRecursionDetection(stack); err != nil {
    return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
    return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
    return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
    return err
}
if err = addendpointDisableHTTPSMiddleware(stack, options); err != nil {
    return err
}
return nil
}

```

```

func newServiceMetadataMiddleware_opListReceivedLicenses(region
string) *awsmiddleware.RegisterServiceMetadata {
return &awsmiddleware.RegisterServiceMetadata{
    Region:    region,
    ServiceID: ServiceID,
    SigningName: "license-manager",
    OperationName: "ListReceivedLicenses",
}
}

```

```

type opListReceivedLicensesResolveEndpointMiddleware struct {
    EndpointResolver EndpointResolverV2
    BuiltInResolver  builtInParameterResolver
}

```

```

func (*opListReceivedLicensesResolveEndpointMiddleware) ID() string {
return "ResolveEndpointV2"
}

```

```

func (m *opListReceivedLicensesResolveEndpointMiddleware) HandleSerialize(ctx context.Context, in
middleware.SerializeInput, next middleware.SerializeHandler) (
out middleware.SerializeOutput, metadata middleware.Metadata, err error,
) {
if awsmiddleware.GetRequiresLegacyEndpoints(ctx) {

```

```

return next.HandleSerialize(ctx, in)
}

req, ok := in.Request.(*smithyhttp.Request)
if !ok {
return out, metadata, fmt.Errorf("unknown transport type %T", in.Request)
}

if m.EndpointResolver == nil {
return
out, metadata, fmt.Errorf("expected endpoint resolver to not be nil")
}

params := EndpointParameters{}

m.BuiltInResolver.ResolveBuiltIns(&params)

var resolvedEndpoint smithyendpoints.Endpoint
resolvedEndpoint, err = m.EndpointResolver.ResolveEndpoint(ctx, params)
if err != nil {
return out, metadata, fmt.Errorf("failed to resolve service endpoint, %w", err)
}

req.URL = &resolvedEndpoint.URI

for k := range resolvedEndpoint.Headers {
req.Header.Set(
k,
resolvedEndpoint.Headers.Get(k),
)
}

authSchemes, err := internalauth.GetAuthenticationSchemes(&resolvedEndpoint.Properties)
if err != nil {
var nfe *internalauth.NoAuthenticationSchemesFoundError
if errors.As(err, &nfe) {
// if no auth scheme is found, default to sigv4
signingName := "license-manager"
signingRegion := m.BuiltInResolver.(*builtInResolver).Region
ctx = awsmiddleware.SetSigningName(ctx, signingName)
ctx = awsmiddleware.SetSigningRegion(ctx, signingRegion)
}
var ue *internalauth.UnSupportedAuthenticationSchemeSpecifiedError
if
errors.As(err, &ue) {
return out, metadata, fmt.Errorf(
"This operation requests signer version(s) %v but the client only supports %v",

```



```

    ue.UnsupportedSchemes,
    internalauth.SupportedSchemes,
)
}
}

for _, authScheme := range authSchemes {
    switch authScheme.(type) {
    case *internalauth.AuthenticationSchemeV4:
        v4Scheme, _ := authScheme.(*internalauth.AuthenticationSchemeV4)
        var signingName, signingRegion string
        if v4Scheme.SigningName == nil {
            signingName = "license-manager"
        } else {
            signingName = *v4Scheme.SigningName
        }
        if v4Scheme.SigningRegion == nil {
            signingRegion = m.BuiltInResolver.(*builtInResolver).Region
        } else {
            signingRegion = *v4Scheme.SigningRegion
        }
        if v4Scheme.DisableDoubleEncoding != nil {
            // The signer sets an equivalent value at client initialization time.
            // Setting this context value will cause the signer to extract it
            // and override
            the value set at client initialization time.
            ctx = internalauth.SetDisableDoubleEncoding(ctx, *v4Scheme.DisableDoubleEncoding)
        }
        ctx = awsmiddleware.SetSigningName(ctx, signingName)
        ctx = awsmiddleware.SetSigningRegion(ctx, signingRegion)
        break
    case *internalauth.AuthenticationSchemeV4A:
        v4aScheme, _ := authScheme.(*internalauth.AuthenticationSchemeV4A)
        if v4aScheme.SigningName == nil {
            v4aScheme.SigningName = aws.String("license-manager")
        }
        if v4aScheme.DisableDoubleEncoding != nil {
            // The signer sets an equivalent value at client initialization time.
            // Setting this context value will cause the signer to extract it
            // and override the value set at client initialization time.
            ctx = internalauth.SetDisableDoubleEncoding(ctx, *v4aScheme.DisableDoubleEncoding)
        }
        ctx = awsmiddleware.SetSigningName(ctx, *v4aScheme.SigningName)
        ctx = awsmiddleware.SetSigningRegion(ctx, v4aScheme.SigningRegionSet[0])
        break
    case *internalauth.AuthenticationSchemeNone:
        break
    }
}

```

```

}

return
next.HandleSerialize(ctx, in)
}

func addListReceivedLicensesResolveEndpointMiddleware(stack *middleware.Stack, options Options) error {
return stack.Serialize.Insert(&opListReceivedLicensesResolveEndpointMiddleware{
EndpointResolver: options.EndpointResolverV2,
BuiltInResolver: &builtInResolver{
Region:    options.Region,
UseDualStack: options.EndpointOptions.UseDualStackEndpoint,
UseFIPS:    options.EndpointOptions.UseFIPSEndpoint,
Endpoint:   options.BaseEndpoint,
},
}, "ResolveEndpoint", middleware.After)
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
"context"
"errors"
"fmt"
"github.com/aws/aws-sdk-go-v2/aws"
awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
"github.com/aws/aws-sdk-go-v2/aws/signer/v4"
internalauth "github.com/aws/aws-sdk-go-v2/internal/auth"
"github.com/aws/aws-sdk-go-v2/service/grafana/types"
smithyendpoints "github.com/aws/smithy-go/endpoints"
"github.com/aws/smithy-go/middleware"
smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Assigns a Grafana Enterprise license to a workspace. Upgrading to Grafana
// Enterprise incurs additional fees. For more information, see Upgrade a
// workspace to Grafana Enterprise (https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-Grafana-Enterprise.html)
// .
func (c *Client) AssociateLicense(ctx context.Context, params *AssociateLicenseInput, optFns ...func(*Options))
(*AssociateLicenseOutput, error) {
if params == nil {
params = &AssociateLicenseInput{}
}

result,

```

```

metadata, err := c.invokeOperation(ctx, "AssociateLicense", params, optFns,
c.addOperationAssociateLicenseMiddlewares)
if err != nil {
    return nil, err
}

out := result.(*AssociateLicenseOutput)
out.ResultMetadata = metadata
return out, nil
}

type AssociateLicenseInput struct {

    // The type of license to associate with the workspace.
    //
    // This member is required.
    LicenseType types.LicenseType

    // The ID of the workspace to associate the license with.
    //
    // This member is required.
    WorkspaceId *string

    noSmithyDocumentSerde
}

type AssociateLicenseOutput struct {

    // A structure containing data about the workspace.
    //
    // This member is required.
    Workspace *types.WorkspaceDescription

    // Metadata pertaining to the operation's result.
    ResultMetadata middleware.Metadata

    noSmithyDocumentSerde
}

func (c *Client) addOperationAssociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
    err = stack.Serialize.Add(&awsRestjson1_serializeOpAssociateLicense{ },
    middleware.After)
    if err != nil {
        return err
    }
    err = stack.Deserialize.Add(&awsRestjson1_deserializeOpAssociateLicense{ }, middleware.After)
    if err != nil {
        return err
    }
}

```

```

}
if err = addLegacyEndpointContextSetter(stack, options); err != nil {
    return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
    return err
}
if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
    return err
}
if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
    return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
    return err
}
if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
    return err
}
if err = addRetryMiddlewares(stack, options); err != nil {
    return err
}
if err = addHTTPSignerV4Middleware(stack, options); err != nil {
    return err
}
if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
    return err
}
if err = awsmiddleware.AddRecordResponseTiming(stack);
err != nil {
    return err
}
if err = addClientUserAgent(stack, options); err != nil {
    return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = addAssociateLicenseResolveEndpointMiddleware(stack, options); err != nil {
    return err
}
if err = addOpAssociateLicenseValidationMiddleware(stack); err != nil {
    return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opAssociateLicense(options.Region),

```

```

middleware.Before); err != nil {
    return err
}
if err = awsmiddleware.AddRecursionDetection(stack); err != nil {
    return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
    return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
    return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
    return err
}
if err = addendpointDisableHTTPSMiddleware(stack,
options); err != nil {
    return err
}
return nil
}

func newServiceMetadataMiddleware_opAssociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
return &awsmiddleware.RegisterServiceMetadata{
    Region:    region,
    ServiceID: ServiceID,
    SigningName: "grafana",
    OperationName: "AssociateLicense",
}
}

type opAssociateLicenseResolveEndpointMiddleware struct {
    EndpointResolver EndpointResolverV2
    BuiltInResolver  builtInParameterResolver
}

func (*opAssociateLicenseResolveEndpointMiddleware) ID() string {
return "ResolveEndpointV2"
}

func (m *opAssociateLicenseResolveEndpointMiddleware) HandleSerialize(ctx context.Context, in
middleware.SerializeInput, next middleware.SerializeHandler) (
out middleware.SerializeOutput, metadata middleware.Metadata, err error,
) {
if awsmiddleware.GetRequiresLegacyEndpoints(ctx) {
return next.HandleSerialize(ctx, in)
}
}

```

```

req, ok := in.Request.(*smithyhttp.Request)
if !ok {
    return out, metadata, fmt.Errorf("unknown
transport type %T", in.Request)
}

if m.EndpointResolver == nil {
    return out, metadata, fmt.Errorf("expected endpoint resolver to not be nil")
}

params := EndpointParameters{}

m.BuiltInResolver.ResolveBuiltIns(&params)

var resolvedEndpoint smithyendpoints.Endpoint
resolvedEndpoint, err = m.EndpointResolver.ResolveEndpoint(ctx, params)
if err != nil {
    return out, metadata, fmt.Errorf("failed to resolve service endpoint, %w", err)
}

req.URL = &resolvedEndpoint.URI

for k := range resolvedEndpoint.Headers {
    req.Header.Set(
        k,
        resolvedEndpoint.Headers.Get(k),
    )
}

authSchemes, err := internalauth.GetAuthenticationSchemes(&resolvedEndpoint.Properties)
if err != nil {
    var nfe *internalauth.NoAuthenticationSchemesFoundError
    if errors.As(err, &nfe) {
        // if no auth scheme is found, default to sigv4
        signingName := "grafana"
        signingRegion := m.BuiltInResolver.(*builtInResolver).Region
        ctx = awsmiddleware.SetSigningName(ctx, signingName)
        ctx
        = awsmiddleware.SetSigningRegion(ctx, signingRegion)
    }
    var ue *internalauth.UnSupportedAuthenticationSchemeSpecifiedError
    if errors.As(err, &ue) {
        return out, metadata, fmt.Errorf(
            "This operation requests signer version(s) %v but the client only supports %v",
            ue.UnsupportedSchemes,
            internalauth.SupportedSchemes,

```

```

)
}
}

for _, authScheme := range authSchemes {
switch authScheme.(type) {
case *internalauth.AuthenticationSchemeV4:
v4Scheme, _ := authScheme.(*internalauth.AuthenticationSchemeV4)
var signingName, signingRegion string
if v4Scheme.SigningName == nil {
signingName = "grafana"
} else {
signingName = *v4Scheme.SigningName
}
if v4Scheme.SigningRegion == nil {
signingRegion = m.BuiltInResolver.(*builtInResolver).Region
} else {
signingRegion = *v4Scheme.SigningRegion
}
if v4Scheme.DisableDoubleEncoding != nil {
// The signer sets an equivalent value at client initialization time.
// Setting this
context value will cause the signer to extract it
// and override the value set at client initialization time.
ctx = internalauth.SetDisableDoubleEncoding(ctx, *v4Scheme.DisableDoubleEncoding)
}
ctx = awsmiddleware.SetSigningName(ctx, signingName)
ctx = awsmiddleware.SetSigningRegion(ctx, signingRegion)
break
case *internalauth.AuthenticationSchemeV4A:
v4aScheme, _ := authScheme.(*internalauth.AuthenticationSchemeV4A)
if v4aScheme.SigningName == nil {
v4aScheme.SigningName = aws.String("grafana")
}
if v4aScheme.DisableDoubleEncoding != nil {
// The signer sets an equivalent value at client initialization time.
// Setting this context value will cause the signer to extract it
// and override the value set at client initialization time.
ctx = internalauth.SetDisableDoubleEncoding(ctx, *v4aScheme.DisableDoubleEncoding)
}
ctx = awsmiddleware.SetSigningName(ctx, *v4aScheme.SigningName)
ctx = awsmiddleware.SetSigningRegion(ctx,
v4aScheme.SigningRegionSet[0])
break
case *internalauth.AuthenticationSchemeNone:
break
}
}
}

```

```

return next.HandleSerialize(ctx, in)
}

func addAssociateLicenseResolveEndpointMiddleware(stack *middleware.Stack, options Options) error {
return stack.Serialize.Insert(&opAssociateLicenseResolveEndpointMiddleware{
EndpointResolver: options.EndpointResolverV2,
BuiltInResolver: &builtInResolver{
Region: options.Region,
UseDualStack: options.EndpointOptions.UseDualStackEndpoint,
UseFIPS: options.EndpointOptions.UseFIPSEndpoint,
Endpoint: options.BaseEndpoint,
},
}, "ResolveEndpoint", middleware.After)
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
"context"
"errors"
"fmt"
"github.com/aws/aws-sdk-go-v2/aws"
awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
"github.com/aws/aws-sdk-go-v2/aws/signer/v4"
internalauth "github.com/aws/aws-sdk-go-v2/internal/auth"
"github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
smithyendpoints "github.com/aws/smithy-go/endpoints"
"github.com/aws/smithy-go/middleware"
smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Creates a license.
func (c *Client) CreateLicense(ctx context.Context, params *CreateLicenseInput, optFns ...func(*Options))
(*CreateLicenseOutput, error) {
if params == nil {
params = &CreateLicenseInput{}
}

result, metadata, err := c.invokeOperation(ctx, "CreateLicense", params, optFns,
c.addOperationCreateLicenseMiddlewares)
if err != nil {
return nil, err
}

out := result.(*CreateLicenseOutput)
out.ResultMetadata = metadata

```



```

return out, nil
}

type CreateLicenseInput
struct {

// License beneficiary.
//
// This member is required.
Beneficiary *string

// Unique, case-sensitive identifier that you provide to ensure the idempotency of
// the request.
//
// This member is required.
ClientToken *string

// Configuration for consumption of the license. Choose a provisional
// configuration for workloads running with continuous connectivity. Choose a
// borrow configuration for workloads with offline usage.
//
// This member is required.
ConsumptionConfiguration *types.ConsumptionConfiguration

// License entitlements.
//
// This member is required.
Entitlements []types.Entitlement

// Home Region for the license.
//
// This member is required.
HomeRegion *string

// License issuer.
//
// This member is required.
Issuer *types.Issuer

// License name.
//
// This member is required.
LicenseName *string

// Product name.
//
// This member is required.
ProductName *string

```

```

// Product SKU.
//
// This member
is required.
ProductSKU *string

// Date and time range during which the license is valid, in ISO8601-UTC format.
//
// This member is required.
Validity *types.DatetimeRange

// Information about the license.
LicenseMetadata []types.Metadata

noSmithyDocumentSerde
}

type CreateLicenseOutput struct {

// Amazon Resource Name (ARN) of the license.
LicenseArn *string

// License status.
Status types.LicenseStatus

// License version.
Version *string

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationCreateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
err = stack.Serialize.Add(&awsAwsjson11_serializeOpCreateLicense{ }, middleware.After)
if err != nil {
return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCreateLicense{ }, middleware.After)
if err != nil {
return err
}
if err = addLegacyEndpointContextSetter(stack, options); err
!= nil {
return err
}
}

```

```

if err = addSetLoggerMiddleware(stack, options); err != nil {
    return err
}
if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
    return err
}
if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
    return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
    return err
}
if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
    return err
}
if err = addRetryMiddlewares(stack, options); err != nil {
    return err
}
if err = addHTTPSignerV4Middleware(stack, options); err != nil {
    return err
}
if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
    return err
}
if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
    return err
}
if err = addClientUserAgent(stack, options); err != nil {
    return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack);
err != nil {
    return err
}
if err = addCreateLicenseResolveEndpointMiddleware(stack, options); err != nil {
    return err
}
if err = addOpCreateLicenseValidationMiddleware(stack); err != nil {
    return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCreateLicense(options.Region),
middleware.Before); err != nil {
    return err
}
if err = awsmiddleware.AddRecursionDetection(stack); err != nil {

```

```

return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
return err
}
if err = addendpointDisableHTTPSMiddleware(stack, options); err != nil {
return err
}
return nil
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
return &awsmiddleware.RegisterServiceMetadata{
Region:    region,
ServiceID: ServiceID,
SigningName:
"license-manager",
OperationName: "CreateLicense",
}
}

type opCreateLicenseResolveEndpointMiddleware struct {
EndpointResolver EndpointResolverV2
BuiltInResolver  builtInParameterResolver
}

func (*opCreateLicenseResolveEndpointMiddleware) ID() string {
return "ResolveEndpointV2"
}

func (m *opCreateLicenseResolveEndpointMiddleware) HandleSerialize(ctx context.Context, in
middleware.SerializeInput, next middleware.SerializeHandler) (
out middleware.SerializeOutput, metadata middleware.Metadata, err error,
) {
if awsmiddleware.GetRequiresLegacyEndpoints(ctx) {
return next.HandleSerialize(ctx, in)
}

req, ok := in.Request.(*smithyhttp.Request)
if !ok {
return out, metadata, fmt.Errorf("unknown transport type %T", in.Request)
}
}

```

```

if m.EndpointResolver == nil {
    return out, metadata, fmt.Errorf("expected endpoint resolver to not be nil")
}

params := EndpointParameters{}

m.BuiltInResolver.ResolveBuiltIns(&params)

var resolvedEndpoint smithyendpoints.Endpoint
resolvedEndpoint,
err = m.EndpointResolver.ResolveEndpoint(ctx, params)
if err != nil {
    return out, metadata, fmt.Errorf("failed to resolve service endpoint, %w", err)
}

req.URL = &resolvedEndpoint.URI

for k := range resolvedEndpoint.Headers {
    req.Header.Set(
        k,
        resolvedEndpoint.Headers.Get(k),
    )
}

authSchemes, err := internalauth.GetAuthenticationSchemes(&resolvedEndpoint.Properties)
if err != nil {
    var nfe *internalauth.NoAuthenticationSchemesFoundError
    if errors.As(err, &nfe) {
        // if no auth scheme is found, default to sigv4
        signingName := "license-manager"
        signingRegion := m.BuiltInResolver.(*builtInResolver).Region
        ctx = awsmiddleware.SetSigningName(ctx, signingName)
        ctx = awsmiddleware.SetSigningRegion(ctx, signingRegion)
    }
    var ue *internalauth.UnsupportedAuthenticationSchemeSpecifiedError
    if errors.As(err, &ue) {
        return out, metadata, fmt.Errorf(
            "This operation requests signer version(s) %v but the client only supports
            %v",
            ue.UnsupportedSchemes,
            internalauth.SupportedSchemes,
        )
    }
}

for _, authScheme := range authSchemes {

```

```

switch authScheme.(type) {
case *internalauth.AuthenticationSchemeV4:
v4Scheme, _ := authScheme.(*internalauth.AuthenticationSchemeV4)
var signingName, signingRegion string
if v4Scheme.SigningName == nil {
signingName = "license-manager"
} else {
signingName = *v4Scheme.SigningName
}
if v4Scheme.SigningRegion == nil {
signingRegion = m.BuiltInResolver.(*builtInResolver).Region
} else {
signingRegion = *v4Scheme.SigningRegion
}
if v4Scheme.DisableDoubleEncoding != nil {
// The signer sets an equivalent value at client initialization time.
// Setting this context value will cause the signer to extract it
// and override the value set at client initialization time.
ctx = internalauth.SetDisableDoubleEncoding(ctx, *v4Scheme.DisableDoubleEncoding)
}
ctx = awsmiddleware.SetSigningName(ctx, signingName)
ctx
= awsmiddleware.SetSigningRegion(ctx, signingRegion)
break
case *internalauth.AuthenticationSchemeV4A:
v4aScheme, _ := authScheme.(*internalauth.AuthenticationSchemeV4A)
if v4aScheme.SigningName == nil {
v4aScheme.SigningName = aws.String("license-manager")
}
if v4aScheme.DisableDoubleEncoding != nil {
// The signer sets an equivalent value at client initialization time.
// Setting this context value will cause the signer to extract it
// and override the value set at client initialization time.
ctx = internalauth.SetDisableDoubleEncoding(ctx, *v4aScheme.DisableDoubleEncoding)
}
ctx = awsmiddleware.SetSigningName(ctx, *v4aScheme.SigningName)
ctx = awsmiddleware.SetSigningRegion(ctx, v4aScheme.SigningRegionSet[0])
break
case *internalauth.AuthenticationSchemeNone:
break
}
}

return next.HandleSerialize(ctx, in)
}

func addCreateLicenseResolveEndpointMiddleware(stack *middleware.Stack, options Options) error {
return

```

```

stack.Serialize.Insert(&opCreateLicenseResolveEndpointMiddleware{
  EndpointResolver: options.EndpointResolverV2,
  BuiltInResolver: &builtInResolver{
    Region:    options.Region,
    UseDualStack: options.EndpointOptions.UseDualStackEndpoint,
    UseFIPS:   options.EndpointOptions.UseFIPSEndpoint,
    Endpoint:  options.BaseEndpoint,
  },
}, "ResolveEndpoint", middleware.After)
}

```

## 1.112 flatbuffers 23.1.21+incompatible

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# 1.113 aws-aws-sdk-go-v2-feature-s3-manager

## 1.11.59

### 1.113.1 Available under license :

name: License Scan

on: [pull\_request]

jobs:

licensescan:

name: License Scan

runs-on: ubuntu-latest

strategy:

matrix:

python-version: [3.9]

steps:

- name: Checkout target

uses: actions/checkout@v2

with:

path: sdkbase

ref: \${{ github.base\_ref }}

- name: Checkout this ref

uses: actions/checkout@v2

with:

path: new-ref

fetch-depth: 0

- name: Get Diff

run: git --git-dir ./new-ref/.git diff --name-only --diff-filter=ACMRT \${{ github.event.pull\_request.base.sha }}

\${{ github.sha }} > refDiffFiles.txt

- name: Get Target Files

run: git --git-dir ./sdkbase/.git ls-files | grep -xf refDiffFiles.txt - > targetFiles.txt

- name: Checkout scancode

uses: actions/checkout@v2

with:

repository: nexB/scancode-toolkit

path: scancode-toolkit

fetch-depth: 1

- name: Set up Python \${{ matrix.python-version }}

uses: actions/setup-python@v2

with:

python-version: \${{ matrix.python-version }}

# ScanCode



```

- name: Self-configure scancode
  working-directory: ./scancode-toolkit
  run: ./scancode --help
- name: Run Scan code on target
  run: cat targetFiles.txt | while read filename; do echo ./sdkbase/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> old-licenses.txt
- name: Run Scan code on pr ref
  run: cat refDiffFiles.txt | while read filename; do echo ./new-ref/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> new-licenses.txt
# compare
- name: License test
  run: if ! cmp old-licenses.txt new-licenses.txt; then echo "Licenses differ! Failing."; exit -1; else echo "Licenses
are the same. Success."; exit 0; fi
// Code generated by smithy-go-codegen DO NOT EDIT.

```

```
package licensemanager
```

```

import (
  "context"
  "fmt"
  awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
  "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
  "github.com/aws/smithy-go/middleware"
  smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license for offline use.
func (c *Client) CheckoutBorrowLicense(ctx context.Context, params *CheckoutBorrowLicenseInput, optFns
...func(*Options)) (*CheckoutBorrowLicenseOutput, error) {
  if params == nil {
    params = &CheckoutBorrowLicenseInput{}
  }

  result, metadata, err := c.invokeOperation(ctx, "CheckoutBorrowLicense", params, optFns,
c.addOperationCheckoutBorrowLicenseMiddlewares)
  if err != nil {
    return nil, err
  }

  out := result.(*CheckoutBorrowLicenseOutput)
  out.ResultMetadata = metadata
  return out, nil
}

type CheckoutBorrowLicenseInput struct {

  // Unique, case-sensitive identifier that you provide to ensure the idempotency of
  //

```

```

the request.
//
// This member is required.
ClientToken *string

// Digital signature method. The possible value is JSON Web Signature (JWS)
// algorithm PS384. For more information, see RFC 7518 Digital Signature with
// RSASSA-PSS (https://tools.ietf.org/html/rfc7518#section-3.5) .
//
// This member is required.
DigitalSignatureMethod types.DigitalSignatureMethod

// License entitlements. Partial checkouts are not supported.
//
// This member is required.
Entitlements []types.EntitlementData

// Amazon Resource Name (ARN) of the license. The license must use the borrow
// consumption configuration.
//
// This member is required.
LicenseArn *string

// Information about constraints.
CheckoutMetadata []types.Metadata

// Node ID.
NodeId *string

noSmithyDocumentSerde
}

type CheckoutBorrowLicenseOutput struct {

// Information about constraints.
CheckoutMetadata []types.Metadata

// Allowed license entitlements.
EntitlementsAllowed []types.EntitlementData

//
// Date and time at which the license checkout expires.
Expiration *string

// Date and time at which the license checkout is issued.
IssuedAt *string

// Amazon Resource Name (ARN) of the license.

```

```

LicenseArn *string

// License consumption token.
LicenseConsumptionToken *string

// Node ID.
NodeId *string

// Signed token.
SignedToken *string

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutBorrowLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
    if err := stack.Serialize.Add(&setOperationInputMiddleware{ }, middleware.After); err != nil {
        return err
    }
    err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutBorrowLicense{ }, middleware.After)
    if err != nil {
        return err
    }
    err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutBorrowLicense{ }, middleware.After)
    if err != nil {
        return err
    }
    if err := addProtocolFinalizerMiddlewares(stack,
options, "CheckoutBorrowLicense"); err != nil {
        return fmt.Errorf("add protocol finalizers: %v", err)
    }

    if err = addLegacyEndpointContextSetter(stack, options); err != nil {
        return err
    }
    if err = addSetLoggerMiddleware(stack, options); err != nil {
        return err
    }
    if err = addClientRequestID(stack); err != nil {
        return err
    }
    if err = addComputeContentLength(stack); err != nil {
        return err
    }
    if err = addResolveEndpointMiddleware(stack, options); err != nil {

```

```

return err
}
if err = addComputePayloadSHA256(stack); err != nil {
return err
}
if err = addRetry(stack, options); err != nil {
return err
}
if err = addRawResponseToMetadata(stack); err != nil {
return err
}
if err = addRecordResponseTiming(stack); err != nil {
return err
}
if err = addClientUserAgent(stack, options); err != nil {
return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack);
err != nil {
return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
return err
}
if err = addOpCheckoutBorrowLicenseValidationMiddleware(stack); err != nil {
return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutBorrowLicense(options.Region),
middleware.Before); err != nil {
return err
}
if err = addRecursionDetection(stack); err != nil {
return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
return err
}

```

```

}
return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
return &awsmiddleware.RegisterServiceMetadata{
Region:    region,
ServiceID: ServiceID,
OperationName:
"CheckoutBorrowLicense",
}
}
ListLicenses
Initialize stack step
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
Serialize stack step
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
RecursionDetection
Finalize stack step
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
Retry
RetryMetricsHeader
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
RecordResponseTiming
RequestResponseLogger
{
"smithy": "2.0",

```

```

"shapes": {
  "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger": {
    "type": "integer"
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong": {
    "type": "long"
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#Filter": {
    "type": "structure",
    "members": {
      "Name": {
        "target": "smithy.api#String",
        "traits": {
          "smithy.api#documentation": "<p>The type of name to filter by.</p>"
        }
      },
      "Values": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
        "traits": {
          "smithy.api#documentation": "<p>One or more values for the name to filter by.</p>"
        }
      },
      "Operator": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Operator",
        "traits": {
          "smithy.api#documentation": "<p>An operator for filtering results.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#documentation": "<p>A filter object that is used to return more specific results from a describe operation.\n  Filters can be used to match a set of resources by specific criteria.</p>"
    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList": {
    "type": "list",
    "member": {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Filter"
    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest"
    },
    "output": {

```

```

    "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerError"
    },
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
    },
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Lists the Linux subscriptions service settings.</p>",
    "smithy.api#http": {
      "code": 200,
      "method": "POST",
      "uri": "/subscription/GetServiceSettings"
    },
    "smithy.api#idempotent": {}
  }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest":
{
  "type": "structure",
  "members": {}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse": {
  "type": "structure",
  "members": {
    "LinuxSubscriptionsDiscovery": {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
      "traits": {
        "smithy.api#documentation": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
      }
    },
    "LinuxSubscriptionsDiscoverySettings": {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
      "traits": {
        "smithy.api#documentation": "<p>Lists the settings defined for Linux subscriptions discovery. The settings include if\n Organizations integration has been enabled, and which Regions data will be aggregated from.</p>"
      }
    },
    "Status": {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
      "traits": {

```

```

        "smithy.api#documentation": "<p>Indicates the status of Linux subscriptions settings being
applied.</p>"
    }
},
"StatusMessage": {
    "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
    "traits": {
        "smithy.api#documentation": "<p>A message which details the Linux subscriptions service settings
current status.</p>"
    }
},
"HomeRegions": {
    "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
    "traits": {
        "smithy.api#documentation": "<p>The Region in which License Manager displays
the aggregated data for Linux\n    subscriptions.</p>"
    }
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Instance": {
    "type": "structure",
    "members": {
        "AmiId": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The AMI ID used to launch the instance.</p>"
            }
        },
        "InstanceID": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The instance ID of the resource.</p>"
            }
        },
        "InstanceType": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The instance type of the resource.</p>"
            }
        }
    },
    "AccountID": {
        "target": "smithy.api#String",
        "traits": {
            "smithy.api#documentation": "<p>The account ID which owns the instance.</p>"
        }
    },

```



```

"Status": {
  "target": "smithy.api#String",
  "traits": {
    "smithy.api#documentation": "<p>The status of the instance.</p>"
  }
},
"Region": {
  "target": "smithy.api#String",
  "traits": {
    "smithy.api#documentation": "<p>The Region the instance is running in.</p>"
  }
},
"UsageOperation": {
  "target": "smithy.api#String",
  "traits": {
    "smithy.api#documentation": "<p>The usage operation of the instance. For more information, see For
more information, see\n    <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-
subscriptions-usage-operation.html\">Usage\n    operation values</a> in the <i>License Manager User
Guide</i>.</p>"
  }
},
"ProductCode": {
  "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList",
  "traits": {
    "smithy.api#documentation": "<p>The product code for the instance. For more information, see <a
href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-subscriptions-usage-
operation.html\">Usage\n    operation values</a> in the <i>License Manager User Guide</i> .</p>"
  }
},
"LastUpdatedTime": {
  "target": "smithy.api#String",
  "traits": {
    "smithy.api#documentation": "<p>The time in which the last discovery
updated the instance details.</p>"
  }
},
"SubscriptionName": {
  "target": "smithy.api#String",
  "traits": {
    "smithy.api#documentation": "<p>The name of the subscription being used by the instance.</p>"
  }
},
"traits": {
  "smithy.api#documentation": "<p>Details discovered information about a running instance using Linux
subscriptions.</p>"
}
},

```

```

"com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Instance"
  }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerError": {
  "type": "structure",
  "members": {
    "message": {
      "target": "smithy.api#String"
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>An exception occurred with the service.</p>",
    "smithy.api#error": "server"
  }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#LicenseManagerLinuxSubscriptions": {
  "type": "service",
  "version": "2018-05-10",
  "operations": [
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings"
    },
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances"
    },
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions"
    },
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings"
    }
  ],
  "traits": {
    "aws.api#service": {
      "sdkId": "License Manager Linux Subscriptions",
      "arnNamespace": "license-manager-linux-subscriptions",
      "cloudTrailEventSource": "license-manager-linux-subscriptions.amazonaws.com"
    },
    "aws.auth#sigv4": {
      "name": "license-manager-linux-subscriptions"
    },
    "aws.protocols#restJson1": {},
    "smithy.api#cors": {
      "additionalAllowedHeaders": [

```

```

    "x-amz-content-sha256",
    "x-amz-user-agent",
    "x-amzn-platform-id",
    "x-amzn-trace-id",
    "content-length",
    "x-api-key",
    "authorization",
    "x-amz-date",

"x-amz-security-token",
    "Access-Control-Allow-Headers",
    "Access-Control-Allow-Methods",
    "Access-Control-Allow-Origin"
  ],
  "additionalExposedHeaders": [
    "x-amzn-errortype",
    "x-amzn-requestid",
    "x-amzn-trace-id"
  ]
},
"smithy.api#documentation": "<p>With License Manager, you can discover and track your commercial
Linux subscriptions on running Amazon EC2 instances.</p>",
"smithy.api#title": "AWS License Manager Linux Subscriptions",
"smithy.rules#endpointRuleSet": {
  "version": "1.0",
  "parameters": {
    "Region": {
      "builtIn": "AWS::Region",
      "required": false,
      "documentation": "The
AWS region used to dispatch the request.",
      "type": "String"
    },
    "UseDualStack": {
      "builtIn": "AWS::UseDualStack",
      "required": true,
      "default": false,
      "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not
support dual-stack, dispatching the request MAY return an error.",
      "type": "Boolean"
    },
    "UseFIPS": {
      "builtIn": "AWS::UseFIPS",
      "required": true,
      "default": false,
      "documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the

```

configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",

```
"type": "Boolean"
},
"Endpoint": {
  "builtIn": "SDK::Endpoint",
  "required": false,
  "documentation": "Override the endpoint used to send this request",
  "type": "String"
}
},
"rules": [
  {
    "conditions": [
      {
        "fn": "isSet",
        "argv": [
          {
            "ref": "Endpoint"
          }
        ]
      }
    ]
  }
],
"type": "tree",
"rules": [
  {
    "conditions": [
      {
        "fn": "booleanEquals",
        "argv": [
          {
            "ref": "UseFIPS"
          },
          true
        ]
      }
    ]
  },
  {
    "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
    "type": "error"
  },
  {
    "conditions": [],
    "type": "tree",
    "rules": [
      {
```

```

"conditions": [
  {
    "fn": "booleanEquals",
    "argv": [
      {
        "ref": "UseDualStack"
      },
      true
    ]
  }
],
"error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
"type": "error"
},
{
  "conditions": [],

"endpoint": {
  "url": {
    "ref": "Endpoint"
  },
  "properties": {},
  "headers": {}
},
"type": "endpoint"
}
]
}
],
{
  "conditions": [],
"type": "tree",
"rules": [
  {
    "conditions": [
      {
        "fn": "isSet",

"argv": [
      {
        "ref": "Region"
      }
    ]
  }
],
"type": "tree",
"rules": [

```

```

    {
      "conditions": [
        {
          "fn": "aws.partition",
          "argv": [
            {
              "ref": "Region"
            }
          ]
        }
      ],
      "assign": "PartitionResult"
    }
  ],
  "type": "tree",
  "rules": [
    {
      "conditions": [
        {
          "fn": "booleanEquals",
          "argv": [
            {
              "ref": "UseFIPS"
            },
            true
          ]
        }
      ],
      {
        "fn": "booleanEquals",
        "argv": [
          {
            "ref": "UseDualStack"
          },
          true
        ]
      }
    ],
    "type": "tree",
    "rules": [
      {
        "conditions": [
          {
            "fn": "booleanEquals",
            "argv": [
              true,
              {
                "fn": "getAttr",

```

```

        "argv": [
            {
                "ref": "PartitionResult"
            },
            "supportsFIPS"
        ]
    }

    ]
},
{
    "fn": "booleanEquals",
    "argv": [
        true,
        {
            "fn": "getAttr",
            "argv": [
                {
                    "ref": "PartitionResult"
                },
                "supportsDualStack"
            ]
        }
    ]
}
],
"type": "tree",
"rules": [
    {
        "conditions": [],
        "type": "tree",
        "rules": [
            {
                "conditions": [],
                "endpoint": {
                    "url": "https://license-manager-linux-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                    "properties": {},
                    "headers": {}
                },
                "type": "endpoint"
            }
        ]
    }
]
]

```

```

    },
    {
      "conditions": [],
      "error": "FIPS and DualStack are enabled, but this partition does not support
one or both",
      "type": "error"
    }
  ]
},
{
  "conditions": [
    {
      "fn": "booleanEquals",
      "argv": [
        {
          "ref": "UseFIPS"
        },
        true
      ]
    }
  ],
  "type": "tree",
  "rules": [
    {
      "conditions": [
        {
          "fn": "booleanEquals",
          "argv": [
            true,
            {
              "fn": "getAttr",
              "argv": [
                {
                  "ref": "PartitionResult"
                },
                "supportsFIPS"
              ]
            }
          ]
        }
      ]
    }
  ],
  "type": "tree",
  "rules": [
    {
      "conditions": [],

```



```

        "type": "tree",
        "rules": [
            {
                "conditions": [],
                "endpoint": {
                    "url": "https://license-manager-linux-subscriptions-
fips.{Region}.{PartitionResult#dnsSuffix}",
                    "properties": {},
                    "headers": {}
                },
                "type": "endpoint"
            }
        ]
    },
    {
        "conditions": [],
        "error": "FIPS is enabled but this partition does not support FIPS",
        "type": "error"
    }
]

```

},

```

{
    "conditions": [
        {
            "fn": "booleanEquals",
            "argv": [
                {
                    "ref": "UseDualStack"
                },
                true
            ]
        }
    ],
    "type": "tree",
    "rules": [
        {
            "conditions": [
                {
                    "fn": "booleanEquals",
                    "argv": [
                        true,
                        {
                            "fn": "getAttr",

```

```

        "argv": [
            {
                "ref": "PartitionResult"
            },
            "supportsDualStack"
        ]
    }
]
},
"type": "tree",
"rules": [
    {
        "conditions": [],
        "type": "tree",
        "rules": [
            {
                "conditions": [],
                "endpoint": {
                    "url": "https://license-manager-linux-
subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                    "properties": {},
                    "headers": {}
                },
                "type": "endpoint"
            }
        ]
    }
],
{
    "conditions": [],
    "error": "DualStack is enabled but this partition does not support DualStack",
    "type": "error"
}
],
{
    "conditions": [],
    "type": "tree",
    "rules": [
        {
            "conditions": [],
            "endpoint": {
                "url":

```

```

"https://license-manager-linux-subscriptions.{Region}.{PartitionResult#dnsSuffix}",
    "properties": {},
    "headers": {}
  },
  "type": "endpoint"
}
]
}
]
}
]
},
{
  "conditions": [],
  "error": "Invalid Configuration: Missing Region",
  "type": "error"
}
]
}
]
},
"smithy.rules#endpointTests": {
  "testCases": [
    {
      "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions-fips.us-east-1.api.aws"
        }
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": true,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions-fips.us-east-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    }
  ]
}

```

```

    }
  },
  {
    "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-linux-subscriptions.us-east-1.api.aws"
      }
    },
    "params": {
      "Region": "us-east-1",
      "UseFIPS": false,
      "UseDualStack": true
    }
  },
  {
    "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-linux-subscriptions.us-east-1.amazonaws.com"
      }
    },
    "params": {
      "Region": "us-east-1",
      "UseFIPS": false,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-linux-subscriptions-fips.cn-north-1.api.amazonwebservices.com.cn"
      }
    },
    "params": {
      "Region": "cn-north-1",
      "UseFIPS": true,
      "UseDualStack": true
    }
  },
  {
    "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-linux-subscriptions-fips.cn-north-1.amazonaws.com.cn"
      }
    }
  }
}

```

```

    },
    "params": {
      "Region": "cn-north-1",
      "UseFIPS": true,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-linux-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
      }
    },
    "params": {
      "Region": "cn-north-1",
      "UseFIPS": false,
      "UseDualStack": true
    }
  },
  {
    "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
    "expect": {
      "endpoint":
    {
      "url": "https://license-manager-linux-subscriptions.cn-north-1.amazonaws.com.cn"
    }
    },
    "params": {
      "Region": "cn-north-1",
      "UseFIPS": false,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.api.aws"
      }
    },
    "params": {
      "Region": "us-gov-east-1",
      "UseFIPS": true,
      "UseDualStack": true
    }
  },
  {

```

```

    "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.amazonaws.com"
      }
    },
    "params": {
      "Region": "us-gov-east-1",
      "UseFIPS": true,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
    "expect": {
      "endpoint":
        {
          "url": "https://license-manager-linux-subscriptions.us-gov-east-1.api.aws"
        }
    },
    "params": {
      "Region": "us-gov-east-1",
      "UseFIPS": false,
      "UseDualStack": true
    }
  },
  {
    "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-linux-subscriptions.us-gov-east-1.amazonaws.com"
      }
    },
    "params": {
      "Region": "us-gov-east-1",
      "UseFIPS": false,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
    "expect": {
      "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
    },
    "params": {
      "Region": "us-iso-east-1",
      "UseFIPS": true,
      "UseDualStack": true
    }
  }
}

```

```

    }
  },
  {
    "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-linux-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
      }
    },
    "params": {
      "Region": "us-iso-east-1",
      "UseFIPS": true,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
    "expect": {
      "error": "DualStack is enabled but this partition does not support DualStack"
    },
    "params": {
      "Region": "us-iso-east-1",
      "UseFIPS": false,
      "UseDualStack": true
    }
  }
}

```

```

"documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager-linux-subscriptions.us-iso-east-1.c2s.ic.gov"
    }
  },
  "params": {
    "Region": "us-iso-east-1",
    "UseFIPS": false,
    "UseDualStack": false
  }
},
{
  "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
  "expect": {
    "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
  },
  "params": {

```

```

    "Region": "us-isob-east-1",
      "UseFIPS": true,
      "UseDualStack": true
    }
  },
  {
    "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-linux-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
      }
    },
    "params": {
      "Region": "us-isob-east-1",
      "UseFIPS": true,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For region us-isob-east-1 with FIPS disabled
and DualStack enabled",
    "expect": {
      "error": "DualStack is enabled but this partition does not support DualStack"
    },
    "params": {
      "Region": "us-isob-east-1",
      "UseFIPS": false,
      "UseDualStack": true
    }
  },
  {
    "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-linux-subscriptions.us-isob-east-1.sc2s.sgov.gov"
      }
    },
    "params": {
      "Region": "us-isob-east-1",

"UseFIPS": false,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
    "expect": {
      "endpoint": {

```



```

        "url": "https://example.com"
    }
},
"params": {
    "Region": "us-east-1",
    "UseFIPS": false,
    "UseDualStack": false,
    "Endpoint": "https://example.com"
}
},
{
    "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",

```

```

"expect": {
    "endpoint": {
        "url": "https://example.com"
    }
},
"params": {
    "UseFIPS": false,
    "UseDualStack": false,
    "Endpoint": "https://example.com"
}
},
{
    "documentation": "For custom endpoint with fips enabled and dualstack disabled",
    "expect": {
        "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
    },
    "params": {
        "Region": "us-east-1",
        "UseFIPS": true,
        "UseDualStack": false,

"Endpoint": "https://example.com"
    }
},
{
    "documentation": "For custom endpoint with fips disabled and dualstack enabled",
    "expect": {
        "error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
    },
    "params": {
        "Region": "us-east-1",
        "UseFIPS": false,
        "UseDualStack": true,
        "Endpoint": "https://example.com"

```

```

    }
  },
  {
    "documentation": "Missing region",
    "expect": {
      "error": "Invalid Configuration: Missing Region"
    }
  }
],
"version": "1.0"
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery": {
  "type": "string",
  "traits": {
    "smithy.api#enum": [
      {
        "name": "Enabled",
        "value": "Enabled",
        "documentation": "Enabled LinuxSubscriptionsDiscovery"
      },
      {
        "name": "Disabled",
        "value": "Disabled",
        "documentation": "Disabled LinuxSubscriptionsDiscovery"
      }
    ]
  }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings": {
  "type": "structure",
  "members": {
    "SourceRegions": {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
      "traits": {
        "smithy.api#documentation": "<p>The Regions in which to discover data for Linux
subscriptions.</p>",
        "smithy.api#required": {}
      }
    },
    "OrganizationIntegration": {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration",
      "traits": {
        "smithy.api#documentation": "<p>Details if you have enabled resource discovery across your
accounts in Organizations.</p>",
        "smithy.api#required": {}
      }
    }
  }
}

```

```

    }
  },
  "traits": {
    "smithy.api#documentation": "<p>Lists the settings defined for discovering Linux subscriptions.</p>"
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances": {
    "type":
"operation",
    "input": {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerErrorException"
      },
      {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
      },
      {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
      }
    ],
    "traits": {
      "smithy.api#documentation": "<p>Lists the running Amazon EC2 instances that were discovered with
commercial Linux\n  subscriptions.</p>",
      "smithy.api#http": {

"code": 200,
      "method": "POST",
      "uri": "/subscription/ListLinuxSubscriptionInstances"
    },
    "smithy.api#idempotent": {},
    "smithy.api#paginated": {
      "inputToken": "NextToken",
      "outputToken": "NextToken",
      "pageSize": "MaxResults",
      "items": "Instances"
    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest": {
    "type": "structure",
    "members": {

```

```

"Filters": {
  "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
  "traits": {
    "smithy.api#documentation": "<p>An array of structures that you can use to filter the results to those
that match one or\n    more sets of key-value pairs that you specify. For example, you can filter by
the name of\n    <code>AmiID</code> with an optional operator to see subscriptions that match, partially\n
match, or don't match a certain Amazon Machine Image (AMI) ID.</p>\n    <p>The valid names for this filter
are:</p>\n    <ul>\n    <li>\n    <p>\n    <code>AmiID</code>\n    </p>\n
</li>\n    <li>\n    <p>\n    <code>InstanceID</code>\n    </p>\n    </li>\n
<li>\n    <p>\n    <code>AccountID</code>\n    </p>\n    </li>\n    <li>\n
<p>\n    <code>Status</code>\n    </p>\n    </li>\n    <li>\n    <p>\n
<code>Region</code>\n    </p>\n    </li>\n    <li>\n    <p>\n
<code>UsageOperation</code>\n    </p>\n    </li>\n    <li>\n
<p>\n    <code>ProductCode</code>\n    </p>\n    </li>\n    <li>\n    <p>\n
<code>InstanceType</code>\n    </p>\n    </li>\n    </ul>\n    <p>The valid Operators for this
filter are:</p>\n    <ul>\n    <li>\n    <p>\n    <code>contains</code>\n    </p>\n
</li>\n    <li>\n    <p>\n    <code>equals</code>\n    </p>\n    </li>\n    <li>\n
<p>\n    <code>NotEqual</code>\n    </p>\n    </li>\n    </ul>"
  }
},
"MaxResults": {
  "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
  "traits": {
    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
  }
}
},
"NextToken": {
  "target": "smithy.api#String",
  "traits": {
    "smithy.api#documentation": "<p>Token for the next set of results.</p>",
    "smithy.api#length": {
      "min": 1,
      "max": 16384
    }
  }
}
},
"traits": {
  "smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if
parameters in request increases."
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse": {
  "type": "structure",
  "members": {
    "Instances": {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList",

```

```

    "traits": {
      "smithy.api#documentation":
"<p>An array that contains instance objects.</p>"
    }
  },
  "NextToken": {
    "target": "smithy.api#String",
    "traits": {
      "smithy.api#documentation": "<p>Token for the next set of results.</p>"
    }
  }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerError"
    },
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
    },
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Lists the Linux subscriptions that have been discovered. If you have
linked your\n  organization, the returned results will include data aggregated across your accounts in\n
Organizations.</p>",
    "smithy.api#http": {
      "code": 200,
      "method": "POST",
      "uri": "/subscription/ListLinuxSubscriptions"
    },
    "smithy.api#idempotent": {},
    "smithy.api#paginated": {
      "inputToken": "NextToken",
      "outputToken": "NextToken",
      "pageSize": "MaxResults",
      "items": "Subscriptions"
    }
  }
}

```

```

    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest": {
    "type": "structure",
    "members": {
      "Filters": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
        "traits": {
          "smithy.api#documentation": "<p>An array of structures that you can use to filter the results to those
that match one or
more sets of key-value pairs that you specify. For example, you can filter by the name of
<code>Subscription</code> with an optional operator to see subscriptions that match,
partially match, or don't
match a certain subscription's name.</p>
<p>The valid names for this filter are:</p>
<ul>
<li>
<p>
<code>Subscription</code>
</p>
</li>
</ul>
<p>The valid Operators for this filter are:</p>
<ul>
<li>
<p>
<code>contains</code>
</p>
</li>
<li>
<p>
<code>equals</code>
</p>
</li>
<li>
<p>
<code>NotEqual</code>
</p>
</li>
</ul>"
        }
      },
      "MaxResults": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
        "traits": {
          "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
        }
      },
      "NextToken": {
        "target": "smithy.api#String",
        "traits": {
          "smithy.api#documentation": "<p>Token for the next set of results.</p>",
          "smithy.api#length": {
            "min": 1,
            "max": 16384
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if
parameters in request increases."
      }
    },
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse": {
    "type": "structure",
    "members": {
      "Subscriptions": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList",

```

```

    "traits": {
      "smithy.api#documentation": "<p>An array that contains subscription objects.</p>"
    }
  },
  "NextToken": {
    "target": "smithy.api#String",
    "traits": {
      "smithy.api#documentation": "<p>Token for
the next set of results.</p>"
    }
  }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Operator": {
  "type": "string",
  "traits": {
    "smithy.api#enum": [
      {
        "name": "EQUAL",
        "value": "Equal",
        "documentation": "Equal operator"
      },
      {
        "name": "NOT_EQUAL",
        "value": "NotEqual",
        "documentation": "Not equal operator"
      },
      {
        "name": "CONTAINS",
        "value": "Contains",
        "documentation": "Contains operator"
      }
    ],
    "smithy.api#length": {
      "min": 1,
      "max": 20
    }
  }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration": {
  "type": "string",
  "traits": {
    "smithy.api#enum": [
      {
        "name": "Enabled",
        "value": "Enabled",
        "documentation": "Enabled OrganizationIntegration"
      }
    ]
  }
}

```

```

    },
    {
      "name": "Disabled",
      "value": "Disabled",
      "documentation": "Disabled OrganizationIntegration"
    }
  ]
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList": {
  "type": "list",
  "member": {
    "target": "smithy.api#String"
  }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Status": {
  "type": "string",
  "traits": {
    "smithy.api#enum": [
{
      "name": "InProgress",
      "value": "InProgress",
      "documentation": "InProgress status"
    },
    {
      "name": "Completed",
      "value": "Completed",
      "documentation": "Completed status"
    },
    {
      "name": "Successful",
      "value": "Successful",
      "documentation": "Successful status"
    },
    {
      "name": "Failed",
      "value": "Failed",
      "documentation": "Failed status"
    }
  ]
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#StringList": {
  "type": "list",
  "member": {
    "target": "smithy.api#String",
    "traits":

```



```

{
    "smithy.api#length": {
        "min": 1,
        "max": 100
    }
},
"traits": {
    "smithy.api#length": {
        "min": 1,
        "max": 100
    },
    "smithy.api#uniqueItems": {}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#StringMap": {
    "type": "map",
    "key": {
        "target": "smithy.api#String"
    },
    "value": {
        "target": "smithy.api#String"
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Subscription": {
    "type": "structure",
    "members": {
        "Name": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The name of the subscription.</p>"
            }
        },
        "Type": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The type of subscription. The type can be subscription-included with Amazon EC2, Bring Your Own\n    Subscription model (BYOS), or from the Amazon Web Services Marketplace. Certain subscriptions may use licensing from the\n    Amazon Web Services Marketplace as well as OS licensing from Amazon EC2 or BYOS.</p>"
            }
        },
        "InstanceCount": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong",
            "traits": {
                "smithy.api#documentation": "<p>The total amount of running instances using this subscription.</p>"
            }
        }
    }
}

```

```

    }
  },
  "traits": {
    "smithy.api#documentation": "<p>An object which details a discovered Linux
subscription.</p>"
  }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription"
  }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException": {
  "type": "structure",
  "members": {
    "message": {
      "target": "smithy.api#String"
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>The request was denied due to request throttling.</p>",
    "smithy.api#error": "client"
  }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerError"
    },
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
    },
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Updates the service settings for Linux subscriptions.</p>",
    "smithy.api#http": {

```

```

        "code": 200,
        "method": "POST",
        "uri": "/subscription/UpdateServiceSettings"
    },
    "smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest":
{
    "type": "structure",
    "members": {
        "LinuxSubscriptionsDiscovery": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
            "traits": {
                "smithy.api#documentation": "<p>Describes if the discovery of Linux subscriptions is enabled.</p>",
                "smithy.api#required": {}
            }
        },
        "LinuxSubscriptionsDiscoverySettings": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
            "traits": {
                "smithy.api#documentation": "<p>The settings defined for Linux subscriptions discovery. The settings include if Organizations\n    integration has been enabled, and which Regions data will be aggregated from.</p>",
                "smithy.api#required": {}
            }
        },
        "AllowUpdate": {
            "target": "smithy.api#Boolean",
            "traits": {
                "smithy.api#documentation": "<p>Describes if updates are allowed to the service settings for Linux subscriptions. If you\n    allow updates, you can aggregate Linux subscription data in more than one home Region.</p>"
            }
        }
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse": {
    "type": "structure",
    "members": {
        "LinuxSubscriptionsDiscovery": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
            "traits": {
                "smithy.api#documentation": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
            }
        }
    }
},

```

```

"LinuxSubscriptionsDiscoverySettings": {
  "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
  "traits": {
    "smithy.api#documentation": "<p>The settings defined for Linux subscriptions discovery. The
settings include if Organizations\n  integration has been enabled, and which Regions data will be aggregated
from.</p>"
  }
},
"Status": {
  "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
  "traits": {
    "smithy.api#documentation": "<p>Indicates the status of Linux subscriptions settings being
applied.</p>"
  }
},
"StatusMessage": {
  "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
  "traits": {
    "smithy.api#documentation":
"<p>A message which details the Linux subscriptions service settings current status.</p>"
  }
},
"HomeRegions": {
  "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
  "traits": {
    "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated
data for Linux\n  subscriptions.</p>"
  }
}
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException": {
  "type": "structure",
  "members": {
    "message": {
      "target": "smithy.api#String"
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>The provided input is not valid. Try your request again.</p>",
    "smithy.api#error": "client"
  }
}
}
}

```

// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

```

import (
    "context"
    "fmt"
    awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
    "github.com/aws/smithy-go/middleware"
    smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks in the specified license. Check in a license when it is no longer in use.
func (c *Client) CheckInLicense(ctx context.Context, params *CheckInLicenseInput, optFns ...func(*Options))
(*CheckInLicenseOutput, error) {
    if params == nil {
        params = &CheckInLicenseInput{}
    }

    result, metadata, err := c.invokeOperation(ctx, "CheckInLicense", params, optFns,
c.addOperationCheckInLicenseMiddlewares)
    if err != nil {
        return nil, err
    }

    out := result.(*CheckInLicenseOutput)
    out.ResultMetadata = metadata
    return out, nil
}

type CheckInLicenseInput struct {

    // License consumption token.
    //
    // This member is required.
    LicenseConsumptionToken *string

    // License beneficiary.
    Beneficiary *string

    noSmithyDocumentSerde
}

type
CheckInLicenseOutput struct {
    // Metadata pertaining to the operation's result.
    ResultMetadata middleware.Metadata

    noSmithyDocumentSerde
}

```

```

func (c *Client) addOperationCheckInLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
    if err := stack.Serialize.Add(&setOperationInputMiddleware{ }, middleware.After); err != nil {
        return err
    }
    err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckInLicense{ }, middleware.After)
    if err != nil {
        return err
    }
    err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckInLicense{ }, middleware.After)
    if err != nil {
        return err
    }
    if err := addProtocolFinalizerMiddlewares(stack, options, "CheckInLicense"); err != nil {
        return fmt.Errorf("add protocol finalizers: %v", err)
    }
}

if err = addLegacyEndpointContextSetter(stack, options); err != nil {
    return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
    return err
}
if err = addClientRequestID(stack); err != nil {
    return err
}
if
err = addComputeContentLength(stack); err != nil {
    return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
    return err
}
if err = addComputePayloadSHA256(stack); err != nil {
    return err
}
if err = addRetry(stack, options); err != nil {
    return err
}
if err = addRawResponseToMetadata(stack); err != nil {
    return err
}
if err = addRecordResponseTiming(stack); err != nil {
    return err
}
if err = addClientUserAgent(stack, options); err != nil {
    return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {

```

```

return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
return err
}
if err = addOpCheckInLicenseValidationMiddleware(stack); err != nil {
return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckInLicense(options.Region),
middleware.Before); err != nil {
return
err
}
if err = addRecursionDetection(stack); err != nil {
return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
return err
}
return nil
}

```

```

func newServiceMetadataMiddleware_opCheckInLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
return &awsmiddleware.RegisterServiceMetadata{
Region:    region,
ServiceID: ServiceID,
OperationName: "CheckInLicense",
}
}
CheckoutBorrowLicense
Initialize stack step
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation

```

```

Serialize stack step
  setOperationInput
  ResolveEndpoint
  OperationSerializer
Build stack step
  ClientRequestID
  ComputeContentLength
  UserAgent
  RecursionDetection
Finalize stack step
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  Retry
  RetryMetricsHeader
  setLegacyContextSigningOptions
  Signing
Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  RecordResponseTiming
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
  "context"
  "fmt"
  awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
  "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
  "github.com/aws/smithy-go/middleware"
  smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists received licenses.
func (c *Client) ListReceivedLicenses(ctx context.Context, params *ListReceivedLicensesInput, optFns
...func(*Options)) (*ListReceivedLicensesOutput, error) {
  if params == nil {
    params = &ListReceivedLicensesInput{}
  }
}

```



```

    result, metadata, err := c.invokeOperation(ctx, "ListReceivedLicenses", params, optFns,
c.addOperationListReceivedLicensesMiddlewares)
    if err != nil {
        return nil, err
    }

    out := result.(*ListReceivedLicensesOutput)
    out.ResultMetadata = metadata
    return out, nil
}

type ListReceivedLicensesInput struct {

    // Filters to scope the results. The following filters are supported:
    // - ProductSKU
    // - Status
    // - Fingerprint
    //
    // - IssuerName
    // - Beneficiary
    Filters []types.Filter

    // Amazon Resource Names (ARNs) of the licenses.
    LicenseArns []string

    // Maximum number of results to return in a single call.
    MaxResults *int32

    // Token for the next set of results.
    NextToken *string

    noSmithyDocumentSerde
}

type ListReceivedLicensesOutput struct {

    // Received license details.
    Licenses []types.GrantedLicense

    // Token for the next set of results.
    NextToken *string

    // Metadata pertaining to the operation's result.
    ResultMetadata middleware.Metadata

    noSmithyDocumentSerde
}

```

```

func (c *Client) addOperationListReceivedLicensesMiddlewares(stack *middleware.Stack, options Options) (err
error) {
    if err := stack.Serialize.Add(&setOperationInputMiddleware{ }, middleware.After); err != nil {
        return err
    }
    err = stack.Serialize.Add(&awsAwsjson11_serializeOpListReceivedLicenses{ }, middleware.After)
    if err != nil {
        return err
    }
    err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListReceivedLicenses{ },
middleware.After)
    if err != nil {
        return err
    }
    if err := addProtocolFinalizerMiddlewares(stack, options, "ListReceivedLicenses"); err != nil {
        return fmt.Errorf("add protocol finalizers: %v", err)
    }

    if err = addLegacyEndpointContextSetter(stack, options); err != nil {
        return err
    }
    if err = addSetLoggerMiddleware(stack, options); err != nil {
        return err
    }
    if err = addClientRequestID(stack); err != nil {
        return err
    }
    if err = addComputeContentLength(stack); err != nil {
        return err
    }
    if err = addResolveEndpointMiddleware(stack, options); err != nil {
        return err
    }
    if err = addComputePayloadSHA256(stack); err != nil {
        return err
    }
    if err = addRetry(stack, options); err != nil {
        return err
    }
    if err = addRawResponseToMetadata(stack); err != nil {
        return err
    }
    if err = addRecordResponseTiming(stack); err != nil {
        return err
    }
    if err = addClientUserAgent(stack, options); err != nil {
        return err
    }
}

```

```

if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
err != nil {
    return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
    return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListReceivedLicenses(options.Region),
middleware.Before); err != nil {
    return err
}
if err = addRecursionDetection(stack); err != nil {
    return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
    return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
    return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
    return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
    return err
}
return nil
}

```

```

func newServiceMetadataMiddleware_opListReceivedLicenses(region string)
*awsmiddleware.RegisterServiceMetadata {
return &awsmiddleware.RegisterServiceMetadata{
    Region:    region,
    ServiceID:
ServiceID,
    OperationName: "ListReceivedLicenses",
}
}

```

// Code generated by smithy-go-codegen DO NOT EDIT.

```
package licensemanager
```

```
import (
    "context"
    "fmt"

```

```

awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
"github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
"github.com/aws/smithy-go/middleware"
smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license. If the account that created the license is
// the same that is performing the check out, you must specify the account as the
// beneficiary.
func (c *Client) CheckoutLicense(ctx context.Context, params *CheckoutLicenseInput, optFns ...func(*Options))
(*CheckoutLicenseOutput, error) {
    if params == nil {
        params = &CheckoutLicenseInput{}
    }

    result, metadata, err := c.invokeOperation(ctx, "CheckoutLicense", params, optFns,
c.addOperationCheckoutLicenseMiddlewares)
    if err != nil {
        return nil, err
    }

    out := result.(*CheckoutLicenseOutput)
    out.ResultMetadata = metadata
    return out, nil
}

type CheckoutLicenseInput struct {

    // Checkout
    type.
    //
    // This member is required.
    CheckoutType types.CheckoutType

    // Unique, case-sensitive identifier that you provide to ensure the idempotency of
    // the request.
    //
    // This member is required.
    ClientToken *string

    // License entitlements.
    //
    // This member is required.
    Entitlements []types.EntitlementData

    // Key fingerprint identifying the license.
    //
    // This member is required.

```

```

KeyFingerprint *string

// Product SKU.
//
// This member is required.
ProductSKU *string

// License beneficiary.
Beneficiary *string

// Node ID.
NodeId *string

noSmithyDocumentSerde
}

type CheckoutLicenseOutput struct {

// Checkout type.
CheckoutType types.CheckoutType

// Allowed license entitlements.
EntitlementsAllowed []types.EntitlementData

// Date and time at which the license checkout expires.
Expiration *string

// Date and time at which the license checkout is issued.
IssuedAt *string

// Amazon Resource Name (ARN) of the checkout license.
LicenseArn
*string

// License consumption token.
LicenseConsumptionToken *string

// Node ID.
NodeId *string

// Signed token.
SignedToken *string

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

```

```

func (c *Client) addOperationCheckoutLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
    if err := stack.Serialize.Add(&setOperationInputMiddleware{ }, middleware.After); err != nil {
        return err
    }
    err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutLicense{ }, middleware.After)
    if err != nil {
        return err
    }
    err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutLicense{ }, middleware.After)
    if err != nil {
        return err
    }
    if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutLicense"); err != nil {
        return fmt.Errorf("add protocol finalizers: %v", err)
    }

    if err = addLegacyEndpointContextSetter(stack, options); err != nil {
        return err
    }
    if err = addSetLoggerMiddleware(stack,
options); err != nil {
        return err
    }
    if err = addClientRequestID(stack); err != nil {
        return err
    }
    if err = addComputeContentLength(stack); err != nil {
        return err
    }
    if err = addResolveEndpointMiddleware(stack, options); err != nil {
        return err
    }
    if err = addComputePayloadSHA256(stack); err != nil {
        return err
    }
    if err = addRetry(stack, options); err != nil {
        return err
    }
    if err = addRawResponseToMetadata(stack); err != nil {
        return err
    }
    if err = addRecordResponseTiming(stack); err != nil {
        return err
    }
    if err = addClientUserAgent(stack, options); err != nil {
        return err
    }
}

```

```

if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
    return err
}
if err = addOpCheckoutLicenseValidationMiddleware(stack); err != nil {
    return err
}
if err =
stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutLicense(options.Region), middleware.Before);
err != nil {
    return err
}
if err = addRecursionDetection(stack); err != nil {
    return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
    return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
    return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
    return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
    return err
}
return nil
}

func newServiceMetadataMiddleware_opCheckoutLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
    return &awsmiddleware.RegisterServiceMetadata{
        Region:    region,
        ServiceID: ServiceID,
        OperationName: "CheckoutLicense",
    }
}
DisassociateLicense
Initialize stack step
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger

```

OperationInputValidation  
Serialize stack step  
setOperationInput  
ResolveEndpoint  
OperationSerializer  
Build stack step  
ClientRequestID  
ComputeContentLength  
UserAgent  
RecursionDetection  
Finalize stack step  
ResolveAuthScheme  
GetIdentity  
ResolveEndpointV2  
disableHTTPS  
ComputePayloadHash  
Retry  
RetryMetricsHeader  
setLegacyContextSigningOptions  
Signing  
Deserialize stack step  
AddRawResponseToMetadata  
ErrorCloseResponseBody  
CloseResponseBody  
ResponseErrorWrapper  
RequestIDRetriever  
OperationDeserializer  
RecordResponseTiming  
RequestResponseLogger  
CheckoutLicense  
Initialize stack step  
RegisterServiceMetadata  
legacyEndpointContextSetter  
SetLogger  
OperationInputValidation  
Serialize stack step  
setOperationInput  
ResolveEndpoint  
OperationSerializer  
Build stack step  
ClientRequestID  
ComputeContentLength  
UserAgent  
RecursionDetection  
Finalize stack step  
ResolveAuthScheme  
GetIdentity  
ResolveEndpointV2



disableHTTPS  
ComputePayloadHash  
Retry  
RetryMetricsHeader  
setLegacyContextSigningOptions  
Signing  
Deserialize stack step  
AddRawResponseToMetadata  
ErrorCloseResponseBody  
CloseResponseBody  
ResponseErrorWrapper  
RequestIDRetriever  
OperationDeserializer  
RecordResponseTiming  
RequestResponseLogger  
AssociateLicense  
Initialize stack step  
RegisterServiceMetadata  
legacyEndpointContextSetter  
SetLogger  
OperationInputValidation  
Serialize stack step  
setOperationInput  
ResolveEndpoint  
OperationSerializer  
Build stack step  
ClientRequestID  
ComputeContentLength  
UserAgent  
RecursionDetection  
Finalize stack step  
ResolveAuthScheme  
GetIdentity  
ResolveEndpointV2  
disableHTTPS  
ComputePayloadHash  
Retry  
RetryMetricsHeader  
setLegacyContextSigningOptions  
Signing  
Deserialize stack step  
AddRawResponseToMetadata  
ErrorCloseResponseBody  
CloseResponseBody  
ResponseErrorWrapper  
RequestIDRetriever  
OperationDeserializer  
RecordResponseTiming

RequestResponseLogger  
CheckInLicense  
Initialize stack step  
RegisterServiceMetadata  
legacyEndpointContextSetter  
SetLogger  
OperationInputValidation  
Serialize stack step  
setOperationInput  
ResolveEndpoint  
OperationSerializer  
Build stack step  
ClientRequestID  
ComputeContentLength  
UserAgent  
RecursionDetection  
Finalize stack step  
ResolveAuthScheme  
GetIdentity  
ResolveEndpointV2  
disableHTTPS  
ComputePayloadHash  
Retry  
RetryMetricsHeader  
setLegacyContextSigningOptions  
Signing  
Deserialize stack step  
AddRawResponseToMetadata  
ErrorCloseResponseBody  
CloseResponseBody  
ResponseErrorWrapper  
RequestIDRetriever  
OperationDeserializer  
RecordResponseTiming  
RequestResponseLogger

AWS SDK for Go

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CreateLicense

Initialize stack step  
RegisterServiceMetadata  
legacyEndpointContextSetter  
SetLogger  
OperationInputValidation  
Serialize stack step  
setOperationInput  
ResolveEndpoint  
OperationSerializer

Build stack step  
ClientRequestID  
ComputeContentLength  
UserAgent  
RecursionDetection  
Finalize stack step  
ResolveAuthScheme  
GetIdentity  
ResolveEndpointV2  
disableHTTPS  
ComputePayloadHash  
Retry  
RetryMetricsHeader  
setLegacyContextSigningOptions  
Signing  
Deserialize stack step  
AddRawResponseToMetadata  
ErrorCloseResponseBody  
CloseResponseBody  
ResponseErrorWrapper  
RequestIDRetriever  
OperationDeserializer  
RecordResponseTiming  
RequestResponseLogger  
GetLicense  
Initialize stack step  
RegisterServiceMetadata  
legacyEndpointContextSetter  
SetLogger  
OperationInputValidation  
Serialize stack step  
setOperationInput  
ResolveEndpoint  
OperationSerializer  
Build stack step  
ClientRequestID  
ComputeContentLength  
UserAgent  
RecursionDetection  
Finalize stack step  
ResolveAuthScheme  
GetIdentity  
ResolveEndpointV2  
disableHTTPS  
ComputePayloadHash  
Retry  
RetryMetricsHeader  
setLegacyContextSigningOptions

```

Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
RecordResponseTiming
RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
    "context"
    "fmt"
    awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
    "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
    "github.com/aws/smithy-go/middleware"
    smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Creates a license.
func (c *Client) CreateLicense(ctx context.Context, params *CreateLicenseInput, optFns ...func(*Options))
(*CreateLicenseOutput, error) {
    if params == nil {
        params = &CreateLicenseInput{}
    }

    result, metadata, err := c.invokeOperation(ctx, "CreateLicense", params, optFns,
c.addOperationCreateLicenseMiddlewares)
    if err != nil {
        return nil, err
    }

    out := result.(*CreateLicenseOutput)
    out.ResultMetadata = metadata
    return out, nil
}

type CreateLicenseInput struct {

    // License beneficiary.
    //
    // This member is required.
    Beneficiary *string

```

```
// Unique, case-sensitive identifier that you provide to ensure the idempotency of
// the request.
//
//
This member is required.
ClientToken *string

// Configuration for consumption of the license. Choose a provisional
// configuration for workloads running with continuous connectivity. Choose a
// borrow configuration for workloads with offline usage.
//
// This member is required.
ConsumptionConfiguration *types.ConsumptionConfiguration

// License entitlements.
//
// This member is required.
Entitlements []types.Entitlement

// Home Region for the license.
//
// This member is required.
HomeRegion *string

// License issuer.
//
// This member is required.
Issuer *types.Issuer

// License name.
//
// This member is required.
LicenseName *string

// Product name.
//
// This member is required.
ProductName *string

// Product SKU.
//
// This member is required.
ProductSKU *string

// Date and time range during which the license is valid, in ISO8601-UTC format.
//
// This member is required.
Validity *types.DatetimeRange
```

```

// Information about
the license.
LicenseMetadata []types.Metadata

noSmithyDocumentSerde
}

type CreateLicenseOutput struct {

// Amazon Resource Name (ARN) of the license.
LicenseArn *string

// License status.
Status types.LicenseStatus

// License version.
Version *string

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationCreateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
if err := stack.Serialize.Add(&setOperationInputMiddleware{ }, middleware.After); err != nil {
return err
}
err = stack.Serialize.Add(&awsAwsjson11_serializeOpCreateLicense{ }, middleware.After)
if err != nil {
return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCreateLicense{ }, middleware.After)
if err != nil {
return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "CreateLicense"); err != nil {
return fmt.Errorf("add protocol finalizers: %v", err)
}

if
err = addLegacyEndpointContextSetter(stack, options); err != nil {
return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
return err
}
}

```

```

if err = addClientRequestID(stack); err != nil {
    return err
}
if err = addComputeContentLength(stack); err != nil {
    return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
    return err
}
if err = addComputePayloadSHA256(stack); err != nil {
    return err
}
if err = addRetry(stack, options); err != nil {
    return err
}
if err = addRawResponseToMetadata(stack); err != nil {
    return err
}
if err = addRecordResponseTiming(stack); err != nil {
    return err
}
if err = addClientUserAgent(stack, options); err != nil {
    return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
    return
err
}
if err = addOpCreateLicenseValidationMiddleware(stack); err != nil {
    return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCreateLicense(options.Region),
middleware.Before); err != nil {
    return err
}
if err = addRecursionDetection(stack); err != nil {
    return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
    return err
}
if err = addResponseErrorMiddleware(stack); err != nil {

```

```

    return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
    return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
    return err
}
return nil
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
return &awsmiddleware.RegisterServiceMetadata{
    Region:    region,
    ServiceID: ServiceID,
    OperationName: "CreateLicense",
}
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
    "context"
    "fmt"
    awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
    "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
    "github.com/aws/smithy-go/middleware"
    smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Gets detailed information about the specified license.
func (c *Client) GetLicense(ctx context.Context, params *GetLicenseInput, optFns ...func(*Options))
(*GetLicenseOutput, error) {
    if params == nil {
        params = &GetLicenseInput{}
    }

    result, metadata, err := c.invokeOperation(ctx, "GetLicense", params, optFns,
c.addOperationGetLicenseMiddlewares)
    if err != nil {
        return nil, err
    }

    out := result.(*GetLicenseOutput)
    out.ResultMetadata = metadata
    return out, nil
}

```



```

type GetLicenseInput struct {

    // Amazon Resource Name (ARN) of the license.
    //
    // This member is required.
    LicenseArn *string

    // License version.
    Version *string

    noSmithyDocumentSerde
}

type
GetLicenseOutput struct {

    // License details.
    License *types.License

    // Metadata pertaining to the operation's result.
    ResultMetadata middleware.Metadata

    noSmithyDocumentSerde
}

func (c *Client) addOperationGetLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
    if err := stack.Serialize.Add(&setOperationInputMiddleware{ }, middleware.After); err != nil {
        return err
    }
    err = stack.Serialize.Add(&awsAwsjson11_serializeOpGetLicense{ }, middleware.After)
    if err != nil {
        return err
    }
    err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpGetLicense{ }, middleware.After)
    if err != nil {
        return err
    }
    if err := addProtocolFinalizerMiddlewares(stack, options, "GetLicense"); err != nil {
        return fmt.Errorf("add protocol finalizers: %v", err)
    }

    if err = addLegacyEndpointContextSetter(stack, options); err != nil {
        return err
    }
    if err = addSetLoggerMiddleware(stack, options); err != nil {
        return err
    }
}

```

```

if err = addClientRequestID(stack); err
!= nil {
    return err
}
if err = addComputeContentLength(stack); err != nil {
    return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
    return err
}
if err = addComputePayloadSHA256(stack); err != nil {
    return err
}
if err = addRetry(stack, options); err != nil {
    return err
}
if err = addRawResponseToMetadata(stack); err != nil {
    return err
}
if err = addRecordResponseTiming(stack); err != nil {
    return err
}
if err = addClientUserAgent(stack, options); err != nil {
    return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
    return err
}
if err = addOpGetLicenseValidationMiddleware(stack); err != nil {
    return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opGetLicense(options.Region), middleware.Before);
err != nil {
    return err
}
if err = addRecursionDetection(stack); err != nil {
    return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
    return err
}
if err = addResponseErrorMiddleware(stack); err != nil {

```

```

return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
return err
}
return nil
}

func newServiceMetadataMiddleware_opGetLicense(region string) *awsmiddleware.RegisterServiceMetadata {
return &awsmiddleware.RegisterServiceMetadata{
Region:    region,
ServiceID: ServiceID,
OperationName: "GetLicense",
}
}
DeleteLicense
Initialize stack step
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
Serialize stack step
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
UserAgent
RecursionDetection
Finalize stack step
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
Retry
RetryMetricsHeader
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper

```

```

RequestIDRetriever
OperationDeserializer
RecordResponseTiming
RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
    "context"
    "fmt"
    awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
    "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
    "github.com/aws/smithy-go/middleware"
    smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists the licenses for your account.
func (c *Client) ListLicenses(ctx context.Context, params *ListLicensesInput, optFns ...func(*Options))
(*ListLicensesOutput, error) {
    if params == nil {
        params = &ListLicensesInput{}
    }

    result, metadata, err := c.invokeOperation(ctx, "ListLicenses", params, optFns,
c.addOperationListLicensesMiddlewares)
    if err != nil {
        return nil, err
    }

    out := result.(*ListLicensesOutput)
    out.ResultMetadata = metadata
    return out, nil
}

type ListLicensesInput struct {

    // Filters to scope the results. The following filters are supported:
    // - Beneficiary
    // - ProductSKU
    // - Fingerprint
    // - Status
    Filters []types.Filter

    //
    // Amazon Resource Names (ARNs) of the licenses.
    LicenseArns []string

```

```

// Maximum number of results to return in a single call.
MaxResults *int32

// Token for the next set of results.
NextToken *string

noSmithyDocumentSerde
}

type ListLicensesOutput struct {

// License details.
Licenses []types.License

// Token for the next set of results.
NextToken *string

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationListLicensesMiddlewares(stack *middleware.Stack, options Options) (err error) {
if err := stack.Serialize.Add(&setOperationInputMiddleware{ }, middleware.After); err != nil {
return err
}
err = stack.Serialize.Add(&awsAwsjson11_serializeOpListLicenses{ }, middleware.After)
if err != nil {
return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListLicenses{ }, middleware.After)
if err != nil {
return err
}
if err := addProtocolFinalizerMiddlewares(stack,
options, "ListLicenses"); err != nil {
return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addLegacyEndpointContextSetter(stack, options); err != nil {
return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
return err
}
if err = addClientRequestID(stack); err != nil {
return err
}
}

```

```

}
if err = addComputeContentLength(stack); err != nil {
    return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
    return err
}
if err = addComputePayloadSHA256(stack); err != nil {
    return err
}
if err = addRetry(stack, options); err != nil {
    return err
}
if err = addRawResponseToMetadata(stack); err != nil {
    return err
}
if err = addRecordResponseTiming(stack); err != nil {
    return err
}
if err = addClientUserAgent(stack, options); err != nil {
    return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack);
err != nil {
    return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
    return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListLicenses(options.Region), middleware.Before);
err != nil {
    return err
}
if err = addRecursionDetection(stack); err != nil {
    return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
    return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
    return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
    return err
}
}

```

```
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
    return err
}
return nil
}
```

```
func newServiceMetadataMiddleware_opListLicenses(region string) *awsmiddleware.RegisterServiceMetadata {
    return &awsmiddleware.RegisterServiceMetadata{
        Region:    region,
        ServiceID: ServiceID,
        OperationName: "ListLicenses",
    }
}
```

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ListReceivedLicenses

Initialize stack step

RegisterServiceMetadata

legacyEndpointContextSetter

SetLogger

Serialize stack step

setOperationInput

ResolveEndpoint  
OperationSerializer  
Build stack step  
ClientRequestID  
ComputeContentLength  
UserAgent  
RecursionDetection  
Finalize stack step  
ResolveAuthScheme  
GetIdentity  
ResolveEndpointV2  
disableHTTPS  
ComputePayloadHash  
Retry  
RetryMetricsHeader  
setLegacyContextSigningOptions  
Signing  
Deserialize stack step  
AddRawResponseToMetadata  
ErrorCloseResponseBody  
CloseResponseBody  
ResponseErrorWrapper  
RequestIDRetriever  
OperationDeserializer  
RecordResponseTiming  
RequestResponseLogger

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// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

```

import (
    "context"
    "fmt"
    awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
    "github.com/aws/aws-sdk-go-v2/service/grafana/types"
    "github.com/aws/smithy-go/middleware"
    smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Removes the Grafana Enterprise license from a workspace.
func (c *Client) DisassociateLicense(ctx context.Context, params *DisassociateLicenseInput, optFns
    ..func(*Options)) (*DisassociateLicenseOutput, error) {
    if params == nil {
        params = &DisassociateLicenseInput{}
    }

    result, metadata, err := c.invokeOperation(ctx, "DisassociateLicense", params, optFns,
    c.addOperationDisassociateLicenseMiddlewares)
    if err != nil {
        return nil, err
    }

    out := result.(*DisassociateLicenseOutput)
    out.ResultMetadata = metadata
    return out, nil
}

type DisassociateLicenseInput struct {

    // The type of license to remove from the workspace.
    //
    // This member is required.
    LicenseType types.LicenseType

    //
    // The ID of the workspace to remove the Grafana Enterprise license from.
    //
    // This member is required.
    WorkspaceId *string

    noSmithyDocumentSerde
}

type DisassociateLicenseOutput struct {

    // A structure containing information about the workspace.
    //

```

```

// This member is required.
Workspace *types.WorkspaceDescription

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationDisassociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
if err := stack.Serialize.Add(&setOperationInputMiddleware{ }, middleware.After); err != nil {
return err
}
err = stack.Serialize.Add(&awsRestjson1_serializeOpDisassociateLicense{ }, middleware.After)
if err != nil {
return err
}
err = stack.Deserialize.Add(&awsRestjson1_deserializeOpDisassociateLicense{ }, middleware.After)
if err != nil {
return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "DisassociateLicense");
err != nil {
return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addLegacyEndpointContextSetter(stack, options); err != nil {
return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
return err
}
if err = addClientRequestID(stack); err != nil {
return err
}
if err = addComputeContentLength(stack); err != nil {
return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
return err
}
if err = addComputePayloadSHA256(stack); err != nil {
return err
}
if err = addRetry(stack, options); err != nil {
return err
}
}

```

```

if err = addRawResponseToMetadata(stack); err != nil {
    return err
}
if err = addRecordResponseTiming(stack); err != nil {
    return err
}
if err = addClientUserAgent(stack, options); err != nil {
    return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil
{
    return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
    return err
}
if err = addOpDisassociateLicenseValidationMiddleware(stack); err != nil {
    return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDisassociateLicense(options.Region),
middleware.Before); err != nil {
    return err
}
if err = addRecursionDetection(stack); err != nil {
    return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
    return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
    return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
    return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
    return err
}
return nil
}

```

```

func newServiceMetadataMiddleware_opDisassociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
return &awsmiddleware.RegisterServiceMetadata{
    Region:    region,
}
}

```

```

ServiceID: ServiceID,
OperationName: "DisassociateLicense",
}
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
"context"
"fmt"
awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
"github.com/aws/aws-sdk-go-v2/service/grafana/types"
"github.com/aws/smithy-go/middleware"
smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Assigns a Grafana Enterprise license to a workspace. Upgrading to Grafana
// Enterprise incurs additional fees. For more information, see Upgrade a
// workspace to Grafana Enterprise (https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-Grafana-Enterprise.html)
// .
func (c *Client) AssociateLicense(ctx context.Context, params *AssociateLicenseInput, optFns ...func(*Options))
(*AssociateLicenseOutput, error) {
if params == nil {
params = &AssociateLicenseInput{}
}

result, metadata, err := c.invokeOperation(ctx, "AssociateLicense", params, optFns,
c.addOperationAssociateLicenseMiddlewares)
if err != nil {
return nil, err
}

out := result.(*AssociateLicenseOutput)
out.ResultMetadata
= metadata
return out, nil
}

type AssociateLicenseInput struct {

// The type of license to associate with the workspace.
//
// This member is required.
LicenseType types.LicenseType

// The ID of the workspace to associate the license with.

```



```

//
// This member is required.
WorkspaceId *string

noSmithyDocumentSerde
}

type AssociateLicenseOutput struct {

// A structure containing data about the workspace.
//
// This member is required.
Workspace *types.WorkspaceDescription

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationAssociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
if err := stack.Serialize.Add(&setOperationInputMiddleware{ }, middleware.After); err != nil {
return err
}
err = stack.Serialize.Add(&awsRestjson1_serializeOpAssociateLicense{ }, middleware.After)
if err != nil {
return err
}
err = stack.Deserialize.Add(&awsRestjson1_deserializeOpAssociateLicense{ },
middleware.After)
if err != nil {
return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "AssociateLicense"); err != nil {
return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addLegacyEndpointContextSetter(stack, options); err != nil {
return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
return err
}
if err = addClientRequestID(stack); err != nil {
return err
}
if err = addComputeContentLength(stack); err != nil {
return err
}

```

```

}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
    return err
}
if err = addComputePayloadSHA256(stack); err != nil {
    return err
}
if err = addRetry(stack, options); err != nil {
    return err
}
if err = addRawResponseToMetadata(stack); err != nil {
    return err
}
if err = addRecordResponseTiming(stack); err != nil {
    return err
}
if err = addClientUserAgent(stack, options); err != nil {
    return err
}
if
err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
    return err
}
if err = addOpAssociateLicenseValidationMiddleware(stack); err != nil {
    return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opAssociateLicense(options.Region),
middleware.Before); err != nil {
    return err
}
if err = addRecursionDetection(stack); err != nil {
    return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
    return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
    return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
    return err
}
}

```

```

if err = addDisableHTTPSMiddleware(stack, options); err != nil {
    return err
}
return nil
}

func newServiceMetadataMiddleware_opAssociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata
{
return &awsmiddleware.RegisterServiceMetadata{
    Region:    region,
    ServiceID: ServiceID,
    OperationName: "AssociateLicense",
}
}
{
    "smithy": "2.0",
    "shapes": {
        "com.amazonaws.licenseanagerusersubscriptions#AccessDeniedException": {
            "type": "structure",
            "members": {
                "message": {
                    "target": "smithy.api#String"
                }
            },
            "traits": {
                "smithy.api#documentation": "<p>You don't have sufficient access to perform this action.</p>",
                "smithy.api#error": "client"
            }
        },
        "com.amazonaws.licenseanagerusersubscriptions#ActiveDirectoryIdentityProvider": {
            "type": "structure",
            "members": {
                "DirectoryId": {
                    "target": "smithy.api#String",
                    "traits": {
                        "smithy.api#documentation": "<p>The directory ID for an Active Directory identity provider.</p>"
                    }
                }
            },
            "traits": {
                "smithy.api#documentation":
                "<p>Details about an Active Directory identity provider.</p>"
            }
        },
        "com.amazonaws.licenseanagerusersubscriptions#AssociateUser": {
            "type": "operation",
            "input": {

```

```

    "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerErrorException"
    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Associates the user to an EC2 instance to utilize user-based
subscriptions.</p>\n    <note>\n      <p>Your estimated bill for charges on the number of users and related
costs will take 48\n      hours to appear for billing periods that haven't closed (marked as <b>Pending</b> billing
status) in Amazon Web Services Billing. For more information, see <a
href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your\n
monthly charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p>\n    </note>",
    "smithy.api#http": {
      "code": 200,
      "method": "POST",
      "uri": "/user/AssociateUser"
    },
    "smithy.api#idempotent": {}
  }
},
"com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest": {
  "type": "structure",
  "members": {
    "Username": {
      "target": "smithy.api#String",

```

```

    "traits": {
      "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>",
      "smithy.api#required": {}
    }
  },
  "InstanceId": {
    "target": "smithy.api#String",
    "traits": {
      "smithy.api#documentation": "<p>The ID of the
EC2 instance, which provides user-based subscriptions.</p>",
      "smithy.api#required": {}
    }
  },
  "IdentityProvider": {
    "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
    "traits": {
      "smithy.api#documentation": "<p>The identity provider of the user.</p>",
      "smithy.api#required": {}
    }
  },
  "Domain": {
    "target": "smithy.api#String",
    "traits": {
      "smithy.api#documentation": "<p>The domain name of the user.</p>"
    }
  }
},
"com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse": {
  "type": "structure",
  "members": {
    "InstanceUserSummary": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
      "traits": {
        "smithy.api#documentation": "<p>Metadata that describes the associate user operation.</p>",
        "smithy.api#required": {}
      }
    }
  }
},
"com.amazonaws.licensemanagerusersubscriptions#BoxInteger": {
  "type": "integer"
},
"com.amazonaws.licensemanagerusersubscriptions#ConflictException": {
  "type": "structure",
  "members": {
    "message": {
      "target": "smithy.api#String"
    }
  }
}

```

```

    }
  },
  "traits": {
    "smithy.api#documentation": "<p>The request couldn't be completed because it conflicted with the current
state of the\n    resource.</p>",
    "smithy.api#error": "server"
  }
},
"com.amazonaws.licenseanagerusersubscriptions#DeregisterIdentityProvider":
{
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licenseanagerusersubscriptions#DeregisterIdentityProviderRequest"
  },
  "output": {
    "target": "com.amazonaws.licenseanagerusersubscriptions#DeregisterIdentityProviderResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ConflictException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#InternalServerError"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ResourceNotFoundException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ServiceQuotaExceededException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ThrottlingException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Deregisters the identity provider from providing user-based
subscriptions.</p>",
    "smithy.api#http": {
      "code": 200,
      "method": "POST",
      "uri": "/identity-provider/DeregisterIdentityProvider"
    },
  },

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    "smithy.api#idempotent": {}
  }
},
"com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest": {
  "type": "structure",
  "members": {
    "IdentityProvider": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
      "traits": {
        "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
        "smithy.api#required": {}
      }
    }
  },
  "Product": {
    "target": "smithy.api#String",
    "traits": {
      "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
      "smithy.api#required": {}
    }
  }
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse": {
  "type": "structure",
  "members": {
    "IdentityProviderSummary": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
      "traits": {
        "smithy.api#documentation":
"<p>Metadata that describes the results of an identity provider operation.</p>",
        "smithy.api#required": {}
      }
    }
  }
},
"com.amazonaws.licensemanagerusersubscriptions#DisassociateUser": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
    },
    {

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        "target": "com.amazonaws.licenseanagerusersubscriptions#ConflictException"
    },
    {
        "target": "com.amazonaws.licenseanagerusersubscriptions#InternalServerErrorException"
    },
    {
        "target": "com.amazonaws.licenseanagerusersubscriptions#ResourceNotFoundException"
    },
    {
        "target": "com.amazonaws.licenseanagerusersubscriptions#ServiceQuotaExceededException"
    },
    {
        "target": "com.amazonaws.licenseanagerusersubscriptions#ThrottlingException"
    },
    {
        "target": "com.amazonaws.licenseanagerusersubscriptions#ValidationException"
    }
],
"traits": {
    "smithy.api#documentation": "<p>Disassociates the user from an EC2 instance providing user-based
subscriptions.</p>",
    "smithy.api#http": {
        "code": 200,
        "method": "POST",
        "uri": "/user/DisassociateUser"
    },
    "smithy.api#idempotent": {}
}
},
"com.amazonaws.licenseanagerusersubscriptions#DisassociateUserRequest": {
    "type": "structure",
    "members": {
        "Username": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>",
                "smithy.api#required": {}
            }
        },
        "InstanceId": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
                "smithy.api#required": {}
            }
        }
    },
}

```



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    "IdentityProvider": {
      "target": "com.amazonaws.licenseanagerusersubscriptions#IdentityProvider",
      "traits": {
        "smithy.api#documentation":
"<p>An object that specifies details for the identity provider.</p>",
        "smithy.api#required": {}
      }
    },
    "Domain": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>The domain name of the user.</p>"
      }
    }
  }
},
"com.amazonaws.licenseanagerusersubscriptions#DisassociateUserResponse": {
  "type": "structure",
  "members": {
    "InstanceUserSummary": {
      "target": "com.amazonaws.licenseanagerusersubscriptions#InstanceUserSummary",
      "traits": {
        "smithy.api#documentation": "<p>Metadata that describes the associate user operation.</p>",
        "smithy.api#required": {}
      }
    }
  }
},

"com.amazonaws.licenseanagerusersubscriptions#Filter": {
  "type": "structure",
  "members": {
    "Attribute": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>The name of an attribute to use as a filter.</p>"
      }
    },
    "Operation": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>The type of search (For example, eq, geq, leq)</p>"
      }
    },
    "Value": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>Value of the filter.</p>"
      }
    }
  }
}

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    }
  },
  "traits": {
    "smithy.api#documentation": "<p>A filter name and value pair that is used
to return more specific results from a describe\n operation. Filters can be used to match a set of resources by
specific criteria, such as tags,\n attributes, or IDs.</p>"
  }
},
"com.amazonaws.licenseanagerusersubscriptions#FilterList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licenseanagerusersubscriptions#Filter"
  }
},
"com.amazonaws.licenseanagerusersubscriptions#IdentityProvider": {
  "type": "union",
  "members": {
    "ActiveDirectoryIdentityProvider": {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ActiveDirectoryIdentityProvider",
      "traits": {
        "smithy.api#documentation": "<p>An object that details an Active Directory identity provider.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#documentation":
"<p>Details about an identity provider.</p>"
  }
},
"com.amazonaws.licenseanagerusersubscriptions#IdentityProviderSummary": {
  "type": "structure",
  "members": {
    "IdentityProvider": {
      "target": "com.amazonaws.licenseanagerusersubscriptions#IdentityProvider",
      "traits": {
        "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
        "smithy.api#required": {}
      }
    }
  },
  "Settings": {
    "target": "com.amazonaws.licenseanagerusersubscriptions#Settings",
    "traits": {
      "smithy.api#documentation": "<p>An object that details the registered identity providers product
related configuration\n settings such as the subnets to provision VPC endpoints.</p>",
      "smithy.api#required":
{}
    }
  }
}

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    },
    "Product": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
        "smithy.api#required": {}
      }
    },
    "Status": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>The status of an identity provider.</p>",
        "smithy.api#required": {}
      }
    },
    "FailureMessage": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>The failure message associated with an identity provider.</p>"
      }
    },
    "traits": {
      "smithy.api#documentation":
"<p>Describes an identity provider.</p>"
    },
    "com.amazonaws.licenseanagerusersubscriptions#IdentityProviderSummaryList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licenseanagerusersubscriptions#IdentityProviderSummary"
      }
    },
    "com.amazonaws.licenseanagerusersubscriptions#InstanceSummary": {
      "type": "structure",
      "members": {
        "InstanceId": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
            "smithy.api#required": {}
          }
        },
        "Status": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The status

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of an EC2 instance resource.</p>",
    "smithy.api#required": {}
  }
},
"Products": {
  "target": "com.amazonaws.licensemanagerusersubscriptions#StringList",
  "traits": {
    "smithy.api#documentation": "<p>A list of provided user-based subscription products.</p>",
    "smithy.api#required": {}
  }
},
"LastStatusCheckDate": {
  "target": "smithy.api#String",
  "traits": {
    "smithy.api#documentation": "<p>The date of the last status check.</p>"
  }
},
"StatusMessage": {
  "target": "smithy.api#String",
  "traits": {
    "smithy.api#documentation": "<p>The status message for an EC2 instance.</p>"
  }
}
},
"traits": {
  "smithy.api#documentation": "<p>Describes an EC2 instance providing user-based subscriptions.</p>"
}
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary"
  }
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary": {
  "type": "structure",
  "members": {
    "Username": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>",
        "smithy.api#required": {}
      }
    }
  }
},
"InstanceId": {
  "target": "smithy.api#String",
  "traits":

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{
    "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
    "smithy.api#required": {}
}
},
"IdentityProvider": {
    "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
    "traits": {
        "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
        "smithy.api#required": {}
    }
},
"Status": {
    "target": "smithy.api#String",
    "traits": {
        "smithy.api#documentation": "<p>The status of a user associated with an EC2 instance.</p>",
        "smithy.api#required": {}
    }
},
"StatusMessage": {
    "target": "smithy.api#String",
    "traits": {
        "smithy.api#documentation": "<p>The status message for users of an EC2 instance.</p>"
    }
},
"Domain": {
    "target": "smithy.api#String",
    "traits": {
        "smithy.api#documentation": "<p>The domain name of the user.</p>"
    }
},
"AssociationDate": {
    "target": "smithy.api#String",
    "traits": {
        "smithy.api#documentation": "<p>The date a user was associated with an EC2 instance.</p>"
    }
},
"DisassociationDate": {
    "target": "smithy.api#String",
    "traits": {
        "smithy.api#documentation": "<p>The date a user was disassociated from an EC2 instance.</p>"
    }
}
},
"traits": {
    "smithy.api#documentation": "<p>Describes users of an EC2 instance providing user-based

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subscriptions.</p>"
  }
},
"com.amazonaws.licenseanagerusersubscriptions#InstanceUserSummaryList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licenseanagerusersubscriptions#InstanceUserSummary"
  }
},
"com.amazonaws.licenseanagerusersubscriptions#InternalServerError": {
  "type": "structure",
  "members": {
    "message": {
      "target": "smithy.api#String"
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>An exception occurred with the service.</p>",
    "smithy.api#error": "server"
  }
},
"com.amazonaws.licenseanagerusersubscriptions#LicenseManagerUserSubscriptions": {
  "type": "service",

"version": "2018-05-10",
"operations": [
  {
    "target": "com.amazonaws.licenseanagerusersubscriptions#AssociateUser"
  },
  {
    "target": "com.amazonaws.licenseanagerusersubscriptions#DeregisterIdentityProvider"
  },
  {
    "target": "com.amazonaws.licenseanagerusersubscriptions#DisassociateUser"
  },
  {
    "target": "com.amazonaws.licenseanagerusersubscriptions#ListIdentityProviders"
  },
  {
    "target": "com.amazonaws.licenseanagerusersubscriptions#ListInstances"
  },
  {
    "target": "com.amazonaws.licenseanagerusersubscriptions#ListProductSubscriptions"
  },
  {
    "target": "com.amazonaws.licenseanagerusersubscriptions#ListUserAssociations"

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    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider"
    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription"
    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription"
    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings"
    }
  ],
  "traits": {
    "aws.api#service": {
      "sdkId": "License Manager User Subscriptions",
      "arnNamespace": "license-manager-user-subscriptions",
      "cloudTrailEventSource": "license-manager-user-subscriptions.amazonaws.com"
    },
    "aws.auth#sigv4": {
      "name": "license-manager-user-subscriptions"
    },
    "aws.protocols#restJson1": {},
    "smithy.api#cors": {
      "additionalAllowedHeaders": [
        "*",
        "content-type",
        "x-amz-content-sha256",
        "x-amz-user-agent",
        "x-amzn-platform-id",
        "x-amzn-trace-id",
        "content-length",
        "x-api-key",
        "authorization",
        "x-amz-date",
        "x-amz-security-token",
        "Access-Control-Allow-Headers",
        "Access-Control-Allow-Methods",
        "Access-Control-Allow-Origin"
      ],
      "additionalExposedHeaders": [
        "x-amzn-errortype",
        "x-amzn-requestid",
        "x-amzn-trace-id"
      ]
    }
  ]
},

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"smithy.api#documentation": "<p>With License Manager, you can create user-based subscriptions to
utilize licensed software with\n    a per user subscription fee on Amazon EC2 instances.</p>",
"smithy.api#title": "AWS License Manager User Subscriptions",
"smithy.rules#endpointRuleSet": {
  "version": "1.0",
  "parameters": {
    "Region": {
      "builtIn": "AWS::Region",
      "required": false,
      "documentation": "The AWS region used to dispatch the request.",
      "type": "String"
    },
    "UseDualStack": {
      "builtIn": "AWS::UseDualStack",
      "required": true,
      "default": false,
      "documentation": "When true, use the dual-stack
endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
      "type": "Boolean"
    },
    "UseFIPS": {
      "builtIn": "AWS::UseFIPS",
      "required": true,
      "default": false,
      "documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the
configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
      "type": "Boolean"
    },
    "Endpoint": {
      "builtIn": "SDK::Endpoint",
      "required": false,
      "documentation": "Override the endpoint used to send this request",
      "type": "String"
    }
  },
  "rules": [
    {
      "conditions": [
        {
          "fn": "isSet",
          "argv": [
            {
              "ref": "Endpoint"
            }
          ]
        }
      ]
    }
  ],

```



```

"type": "tree",
"rules": [
  {
    "conditions": [
      {
        "fn": "booleanEquals",
        "argv": [
          {
            "ref": "UseFIPS"
          },
          true
        ]
      }
    ],
    "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
    "type": "error"
  },
  {
    "conditions": [
      {
        "fn": "booleanEquals",
        "argv": [
          {
            "ref": "UseDualStack"
          },
          true
        ]
      }
    ],
    "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
    "type": "error"
  },
  {
    "conditions": [],
    "endpoint": {
      "url": {
        "ref": "Endpoint"
      },
      "properties": {},
      "headers": {}
    },
    "type": "endpoint"
  }
],
},
{

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"conditions": [
  {
    "fn": "isSet",
    "argv": [
      {
        "ref": "Region"
      }
    ]
  }
],
"type": "tree",
"rules": [
  {
    "conditions": [
      {
        "fn": "aws.partition",
        "argv": [
          {
            "ref": "Region"
          }
        ],
        "assign": "PartitionResult"
      }
    ],
    "type": "tree",
  }
]
"rules": [
  {
    "conditions": [
      {
        "fn": "booleanEquals",
        "argv": [
          {
            "ref": "UseFIPS"
          },
          true
        ]
      },
      {
        "fn": "booleanEquals",
        "argv": [
          {
            "ref": "UseDualStack"
          },
          true
        ]
      }
    ]
  }
]

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```

    }
  ],
  "type": "tree",
  "rules": [
    {
      "conditions": [
        {
          "fn": "booleanEquals",
          "argv": [
            true,
            {
              "fn": "getAttr",
              "argv": [
                {
                  "ref": "PartitionResult"
                },
                "supportsFIPS"
              ]
            }
          ]
        },
        {
          "fn": "booleanEquals",
          "argv": [
            true,
            {
              "fn": "getAttr",
              "argv": [
                {
                  "ref": "PartitionResult"
                },
                "supportsDualStack"
              ]
            }
          ]
        }
      ],
      "type": "tree",
      "rules": [
        {
          "conditions": [],
          "endpoint": {
            "url": "https://license-manager-user-subscriptions-
            fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
            "properties": {},

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        "headers": {}
      },
      "type": "endpoint"
    }
  ]
},
{
  "conditions": [],
  "error": "FIPS and DualStack are enabled, but this partition does not support one or
both",
  "type": "error"
}
],
},
{
  "conditions": [
    {
      "fn": "booleanEquals",
      "argv": [
        {
          "ref": "UseFIPS"
        },
        true
      ]
    }
  ]
},
],
"type": "tree",

"rules": [
  {
    "conditions": [
      {
        "fn": "booleanEquals",
        "argv": [
          true,
          {
            "fn": "getAttr",
            "argv": [
              {
                "ref": "PartitionResult"
              },
              "supportsFIPS"
            ]
          }
        ]
      }
    ]
  }
],

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```

        "type": "tree",
        "rules": [
            {
                "conditions": [],
                "endpoint": {
                    "url": "https://license-manager-user-subscriptions-
fips.{Region}.{PartitionResult#dnsSuffix}",
                    "properties": {},
                    "headers": {}
                }
            },
            {
                "type": "endpoint"
            }
        ]
    },
    {
        "conditions": [],
        "error": "FIPS is enabled but this partition does not support FIPS",
        "type": "error"
    }
]
},
{
    "conditions": [
        {
            "fn": "booleanEquals",
            "argv": [
                {
                    "ref": "UseDualStack"
                },
                true
            ]
        }
    ],
    "type": "tree",
    "rules": [
        {
            "conditions": [
                {
                    "fn": "booleanEquals",
                    "argv": [
                        true,
                        {
                            "fn": "getAttr",
                            "argv": [
                                {
                                    "ref": "PartitionResult"
                                }
                            ]
                        }
                    ]
                }
            ]
        }
    ]
}

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        },
        "supportsDualStack"
    ]
}
]
},
"type": "tree",
"rules": [
{
    "conditions": [],
    "endpoint": {
        "url": "https://license-manager-user-
subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
        "properties": {},
        "headers": {}
    },
    "type": "endpoint"
}
],
{
    "conditions": [],
    "error": "DualStack is enabled but this partition does
not support DualStack",
    "type": "error"
}
],
{
    "conditions": [],
    "endpoint": {
        "url": "https://license-manager-user-
subscriptions.{Region}.{PartitionResult#dnsSuffix}",
        "properties": {},
        "headers": {}
    },
    "type": "endpoint"
}
]
},
{
    "conditions":
[]
    "error": "Invalid Configuration: Missing Region",

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        "type": "error"
      }
    ]
  },
  "smithy.rules#endpointTests": {
    "testCases": [
      {
        "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager-user-subscriptions-fips.us-east-1.api.aws"
          }
        },
        "params": {
          "Region": "us-east-1",
          "UseFIPS": true,
          "UseDualStack": true
        }
      },
      {
        "documentation":
"\"For region us-east-1 with FIPS enabled and DualStack disabled\",
        "expect": {
          "endpoint": {
            "url": "https://license-manager-user-subscriptions-fips.us-east-1.amazonaws.com"
          }
        },
        "params": {
          "Region": "us-east-1",
          "UseFIPS": true,
          "UseDualStack": false
        }
      },
      {
        "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager-user-subscriptions.us-east-1.api.aws"
          }
        },
        "params": {
          "Region": "us-east-1",
          "UseFIPS": false,
          "UseDualStack": true
        }
      }
    ]
  }
}

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```

    "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-user-subscriptions.us-east-1.amazonaws.com"
      }
    },
    "params": {
      "Region": "us-east-1",
      "UseFIPS": false,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For region cn-north-1 with
FIPS enabled and DualStack enabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-user-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
      }
    },
    "params": {
      "Region": "cn-north-1",
      "UseFIPS": true,
      "UseDualStack": true
    }
  },
  {
    "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-user-subscriptions-fips.cn-north-1.amazonaws.com.cn"
      }
    },
    "params": {
      "Region": "cn-north-1",
      "UseFIPS": true,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-user-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
      }
    },
  },

```



```

    "params": {
      "Region": "cn-north-1",
      "UseFIPS": false,
      "UseDualStack": true
    }
  },
  {
    "documentation": "For region cn-north-1
with FIPS disabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-user-subscriptions.cn-north-1.amazonaws.com.cn"
      }
    },
    "params": {
      "Region": "cn-north-1",
      "UseFIPS": false,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.api.aws"
      }
    },
    "params": {
      "Region": "us-gov-east-1",
      "UseFIPS": true,
      "UseDualStack": true
    }
  },
  {
    "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.amazonaws.com"
      }
    },
    "params": {
      "Region": "us-gov-east-1",
      "UseFIPS": true,
      "UseDualStack": false
    }
  },
  {

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        "documentation": "For region us-gov-east-1
with FIPS disabled and DualStack enabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager-user-subscriptions.us-gov-east-1.api.aws"
            }
        },
        "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": false,
            "UseDualStack": true
        }
    },
    {
        "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager-user-subscriptions.us-gov-east-1.amazonaws.com"
            }
        },
        "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": false,
            "UseDualStack": false
        }
    },
    {
        "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
        "expect": {
            "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
        },
        "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": true,
            "UseDualStack": true
        }
    },
    {
        "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager-user-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
            }
        },
        "params": {
            "Region": "us-iso-east-1",

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        "UseFIPS": true,
        "UseDualStack": false
    }
},
{
    "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
    "expect": {
        "error": "DualStack is enabled but this partition does not support DualStack"
    },
    "params": {
        "Region": "us-iso-east-1",
        "UseFIPS": false,
        "UseDualStack":
true
    }
},
{
    "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager-user-subscriptions.us-iso-east-1.c2s.ic.gov"
        }
    },
    "params": {
        "Region": "us-iso-east-1",
        "UseFIPS": false,
        "UseDualStack": false
    }
},
{
    "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
    "expect": {
        "error": "FIPS and DualStack are enabled, but
this partition does not support one or both"
    },
    "params": {
        "Region": "us-isob-east-1",
        "UseFIPS": true,
        "UseDualStack": true
    }
},
{
    "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager-user-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
        }
    },
},

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    "params": {
      "Region": "us-isob-east-1",
      "UseFIPS": true,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
    "expect": {
      "error": "DualStack is enabled but this partition does not support DualStack"
    },
    "params": {
      "Region": "us-isob-east-1",
      "UseFIPS": false,
      "UseDualStack": true
    }
  },
  {
    "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-user-subscriptions.us-isob-east-1.sc2s.sgov.gov"
      }
    },
    "params": {
      "Region": "us-isob-east-1",
      "UseFIPS": false,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
    "expect": {
      "endpoint": {
        "url": "https://example.com"
      }
    },
    "params": {
      "Region": "us-east-1",
      "UseFIPS": false,
      "UseDualStack": false,
      "Endpoint": "https://example.com"
    }
  },
  {
    {

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"documentation": "For custom endpoint with region not set and fips disabled and dualstack disabled",
  "expect": {
    "endpoint": {
      "url": "https://example.com"
    }
  },
  "params": {
    "UseFIPS": false,
    "UseDualStack": false,
    "Endpoint": "https://example.com"
  }
},
{
  "documentation": "For custom endpoint with fips enabled and dualstack disabled",
  "expect": {
    "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
  },
  "params": {
    "Region": "us-east-1",
    "UseFIPS": true,
    "UseDualStack": false,
    "Endpoint": "https://example.com"
  }
},
{
  "documentation": "For custom endpoint with fips disabled and dualstack enabled",
  "expect": {
    "error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
  },
  "params": {
    "Region": "us-east-1",
    "UseFIPS": false,
    "UseDualStack": true,
    "Endpoint": "https://example.com"
  }
},
{
  "documentation": "Missing region",
  "expect": {
    "error": "Invalid Configuration: Missing Region"
  }
}
],
"version": "1.0"
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders": {

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"type": "operation",
"input": {
  "target": "com.amazonaws.licenseanagerusersubscriptions#ListIdentityProvidersRequest"
},
"output": {
  "target": "com.amazonaws.licenseanagerusersubscriptions#ListIdentityProvidersResponse"
},
"errors": [
  {
    "target": "com.amazonaws.licenseanagerusersubscriptions#AccessDeniedException"
  },
  {
    "target": "com.amazonaws.licenseanagerusersubscriptions#ConflictException"
  },
  {
    "target": "com.amazonaws.licenseanagerusersubscriptions#InternalServerErrorException"
  },
  {
    "target": "com.amazonaws.licenseanagerusersubscriptions#ResourceNotFoundException"
  },
  {
    "target": "com.amazonaws.licenseanagerusersubscriptions#ServiceQuotaExceededException"
  },
  {
    "target": "com.amazonaws.licenseanagerusersubscriptions#ThrottlingException"
  },
  {
    "target": "com.amazonaws.licenseanagerusersubscriptions#ValidationException"
  }
],
"traits": {
  "smithy.api#documentation": "<p>Lists the identity providers for user-based subscriptions.</p>",
  "smithy.api#http": {
    "code": 200,
    "method": "POST",
    "uri": "/identity-provider/ListIdentityProviders"
  },
  "smithy.api#paginated":
{
  "inputToken": "NextToken",
  "outputToken": "NextToken",
  "pageSize": "MaxResults",
  "items": "IdentityProviderSummaries"
}
},
"com.amazonaws.licenseanagerusersubscriptions#ListIdentityProvidersRequest": {
  "type": "structure",

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"members": {
  "MaxResults": {
    "target": "com.amazonaws.licenseanagerusersubscriptions#BoxInteger",
    "traits": {
      "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
    }
  },
  "NextToken": {
    "target": "smithy.api#String",
    "traits": {
      "smithy.api#documentation": "<p>Token for the next set of results.</p>"
    }
  }
},
"com.amazonaws.licenseanagerusersubscriptions#ListIdentityProvidersResponse":
{
  "type": "structure",
  "members": {
    "IdentityProviderSummaries": {
      "target": "com.amazonaws.licenseanagerusersubscriptions#IdentityProviderSummaryList",
      "traits": {
        "smithy.api#documentation": "<p>Metadata that describes the list identity providers operation.</p>",
        "smithy.api#required": {}
      }
    },
    "NextToken": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>Token for the next set of results.</p>"
      }
    }
  }
},
"com.amazonaws.licenseanagerusersubscriptions#ListInstances": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licenseanagerusersubscriptions#ListInstancesRequest"
  },
  "output": {
    "target": "com.amazonaws.licenseanagerusersubscriptions#ListInstancesResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ConflictException"
    }
  ]
}

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    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#InternalServerError"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ResourceNotFoundException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ServiceQuotaExceededException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ThrottlingException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Lists the EC2 instances providing user-based subscriptions.</p>",
    "smithy.api#http": {
      "code": 200,
      "method": "POST",
      "uri": "/instance/ListInstances"
    },
    "smithy.api#paginated": {
      "inputToken": "NextToken",
      "outputToken": "NextToken",
      "pageSize": "MaxResults",
      "items": "InstanceSummaries"
    }
  }
},
"com.amazonaws.licenseanagerusersubscriptions#ListInstancesRequest": {
  "type": "structure",
  "members": {
    "MaxResults": {
      "target": "com.amazonaws.licenseanagerusersubscriptions#BoxInteger",
      "traits": {
        "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
      }
    },
    "NextToken": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>Token for the next set of results.</p>"
      }
    }
  },
  "Filters": {

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        "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
        "traits": {
            "smithy.api#documentation": "<p>An array of structures that you can use to filter the results to those
that match one or\n    more sets of key-value pairs that you specify.</p>"
        }
    }
},
"com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse": {
    "type":
"structure",
    "members": {
        "InstanceSummaries": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList",
            "traits": {
                "smithy.api#documentation": "<p>Metadata that describes the list instances operation.</p>"
            }
        },
        "NextToken": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    }
},
"com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerErrorException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {

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        "target": "com.amazonaws.licenseanagerusersubscriptions#ServiceQuotaExceededException"
    },
    {
        "target": "com.amazonaws.licenseanagerusersubscriptions#ThrottlingException"
    },
    {
        "target": "com.amazonaws.licenseanagerusersubscriptions#ValidationException"
    }
],
"traits": {
    "smithy.api#documentation": "<p>Lists the user-based subscription products available from an identity
provider.</p>",
    "smithy.api#http": {
        "code": 200,
        "method": "POST",
        "uri": "/user/ListProductSubscriptions"
    },
    "smithy.api#paginated": {
        "inputToken": "NextToken",
        "outputToken": "NextToken",
        "pageSize": "MaxResults",
        "items": "ProductUserSummaries"
    }
}
},
"com.amazonaws.licenseanagerusersubscriptions#ListProductSubscriptionsRequest": {
    "type": "structure",
    "members": {
        "Product": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The name
of the user-based subscription product.</p>",
                "smithy.api#required": {}
            }
        },
        "IdentityProvider": {
            "target": "com.amazonaws.licenseanagerusersubscriptions#IdentityProvider",
            "traits": {
                "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "MaxResults": {
        "target": "com.amazonaws.licenseanagerusersubscriptions#BoxInteger",
        "traits": {
            "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
        }
    }
}

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    },
    "Filters": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
      "traits": {
        "smithy.api#documentation": "<p>An array of structures that you can use to filter the results to those that match one or\n more sets of key-value pairs that you specify.</p>"
      }
    },
    "NextToken": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>Token for the next set of results.</p>"
      }
    }
  },
  "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse": {
    "type": "structure",
    "members": {
      "ProductUserSummaries": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList",
        "traits": {
          "smithy.api#documentation": "<p>Metadata that describes the list product subscriptions operation.</p>"
        }
      }
    },
    "NextToken": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>Token for the next set of results.</p>"
      }
    }
  },
  "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
      }
    ]
  }
}

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    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
    },
    {
      "target":
"com.amazonaws.licensemanagerusersubscriptions#InternalServerError"
    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Lists user associations for an identity provider.</p>",
    "smithy.api#http": {
      "code": 200,
      "method": "POST",
      "uri": "/user/ListUserAssociations"
    },
    "smithy.api#paginated":
  {
    "inputToken": "NextToken",
    "outputToken": "NextToken",
    "pageSize": "MaxResults",
    "items": "InstanceUserSummaries"
  }
  },
  "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest": {
    "type": "structure",
    "members": {
      "InstanceId": {
        "target": "smithy.api#String",
        "traits": {
          "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
          "smithy.api#required": {}
        }
      },
      "IdentityProvider": {

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        "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
        "traits": {
            "smithy.api#documentation": "<p>An object that specifies details for the identity
provider.</p>",
            "smithy.api#required": {}
        }
    },
    "MaxResults": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
        "traits": {
            "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
        }
    },
    "Filters": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
        "traits": {
            "smithy.api#documentation": "<p>An array of structures that you can use to filter the results to those
that match one or\n    more sets of key-value pairs that you specify.</p>"
        }
    },
    "NextToken": {
        "target": "smithy.api#String",
        "traits": {
            "smithy.api#documentation": "<p>Token for
the next set of results.</p>"
        }
    }
},
"com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse": {
    "type": "structure",
    "members": {
        "InstanceUserSummaries": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList",
            "traits": {
                "smithy.api#documentation": "<p>Metadata that describes the list user association operation.</p>"
            }
        },
        "NextToken": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    }
},
"com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary": {
    "type": "structure",

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"members": {

"Username": {
  "target": "smithy.api#String",
  "traits": {
    "smithy.api#documentation": "<p>The user name from the identity provider of the user.</p>",
    "smithy.api#required": {}
  }
},
"Product": {
  "target": "smithy.api#String",
  "traits": {
    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
    "smithy.api#required": {}
  }
},
"IdentityProvider": {
  "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
  "traits": {
    "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
    "smithy.api#required": {}
  }
},

"Status": {
  "target": "smithy.api#String",
  "traits": {
    "smithy.api#documentation": "<p>The status of a product for a user.</p>",
    "smithy.api#required": {}
  }
},
"StatusMessage": {
  "target": "smithy.api#String",
  "traits": {
    "smithy.api#documentation": "<p>The status message for a product for a user.</p>"
  }
},
"Domain": {
  "target": "smithy.api#String",
  "traits": {
    "smithy.api#documentation": "<p>The domain name of the user.</p>"
  }
},
"SubscriptionStartDate": {
  "target": "smithy.api#String",
  "traits": {
    "smithy.api#documentation": "<p>The

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start date of a subscription.</p>"
    }
  },
  "SubscriptionEndDate": {
    "target": "smithy.api#String",
    "traits": {
      "smithy.api#documentation": "<p>The end date of a subscription.</p>"
    }
  }
},
"traits": {
  "smithy.api#documentation": "<p>The summary of the user-based subscription products for a user.</p>"
}
},
"com.amazonaws.licenseanagerusersubscriptions#ProductUserSummaryList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licenseanagerusersubscriptions#ProductUserSummary"
  }
},
"com.amazonaws.licenseanagerusersubscriptions#RegisterIdentityProvider": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licenseanagerusersubscriptions#RegisterIdentityProviderRequest"
  },
  "output": {
    "target": "com.amazonaws.licenseanagerusersubscriptions#RegisterIdentityProviderResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ConflictException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#InternalServerErrorException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ResourceNotFoundException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ServiceQuotaExceededException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ThrottlingException"
    },
    {

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        "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
    }
],
"traits": {
    "smithy.api#documentation": "<p>Registers an identity provider for user-based subscriptions.</p>",
    "smithy.api#http": {
        "code": 200,
        "method": "POST",
        "uri": "/identity-provider/RegisterIdentityProvider"
    },
    "smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest": {
    "type": "structure",
    "members": {
        "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
                "smithy.api#documentation": "<p>An object that specifies details for the identity
provider.</p>",
                "smithy.api#required": {}
            }
        },
        "Product": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
                "smithy.api#required": {}
            }
        },
        "Settings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
            "traits": {
                "smithy.api#documentation": "<p>The registered identity providers product related configuration
settings such as the\n    subnets to provision VPC endpoints.</p>"
            }
        }
    }
},
"com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse": {
    "type": "structure",
    "members": {
        "IdentityProviderSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
            "traits": {
                "smithy.api#documentation": "<p>Metadata that describes the results of an identity provider

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operation.</p>",
    "smithy.api#required": {}
  }
}
},
"com.amazonaws.licenseanagerusersubscriptions#ResourceNotFoundException": {
  "type": "structure",
  "members": {
    "message": {
      "target": "smithy.api#String"
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>The resource couldn't be found.</p>",
    "smithy.api#error": "client",
    "smithy.api#httpError": 404
  }
},
"com.amazonaws.licenseanagerusersubscriptions#SecurityGroup": {
  "type": "string",

"traits": {
  "smithy.api#length": {
    "min": 5,
    "max": 200
  },
  "smithy.api#pattern": "^sg-([0-9a-z]{8})([0-9a-z]{17})$"
}
},
"com.amazonaws.licenseanagerusersubscriptions#ServiceQuotaExceededException": {
  "type": "structure",
  "members": {
    "message": {
      "target": "smithy.api#String"
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>The request failed because a service quota is exceeded.</p>",
    "smithy.api#error": "client"
  }
},
"com.amazonaws.licenseanagerusersubscriptions#Settings": {
  "type": "structure",
  "members": {
    "Subnets": {
      "target": "com.amazonaws.licenseanagerusersubscriptions#Subnets",
      "traits": {

```

```

    "smithy.api#documentation":
"<p>The subnets defined for the registered identity provider.</p>",
    "smithy.api#length": {
        "min": 1
    },
    "smithy.api#required": {}
}
},
"SecurityGroupId": {
    "target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
    "traits": {
        "smithy.api#documentation": "<p>A security group ID that allows inbound TCP port 1688
communication between resources in\n    your VPC and the VPC endpoint for activation servers.</p>",
        "smithy.api#required": {}
    }
}
},
"traits": {
    "smithy.api#documentation": "<p>The registered identity providers product related configuration settings
such as the\n    subnets to provision VPC endpoints, and the security group ID that
is associated with the VPC\n    endpoints. The security group should permit inbound TCP port 1688
communication from resources\n    in the VPC.</p>"
}
},
"com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerErrorException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
        }
    ]
}

```

```

    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ThrottlingException"
    },
    {
      "target": "com.amazonaws.licenseanagerusersubscriptions#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Starts a product subscription for a user with the specified identity provider.</p>\n    <note>\n      <p>Your estimated bill for charges on the number of users and related costs will take 48\n      hours to appear for billing periods that haven't closed (marked as <b>Pending</b> billing status) in Amazon Web Services Billing.\n      For more information, see <a href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your\n      monthly charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p>\n    </note>",
    "smithy.api#http": {
      "code": 200,
      "method": "POST",
      "uri": "/user/StartProductSubscription"
    }
  }
},
"com.amazonaws.licenseanagerusersubscriptions#StartProductSubscriptionRequest": {
  "type": "structure",
  "members": {
    "Username": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>The user name from the identity provider of the user.</p>",
        "smithy.api#required": {}
      }
    },
    "IdentityProvider": {
      "target": "com.amazonaws.licenseanagerusersubscriptions#IdentityProvider",
      "traits": {
        "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
        "smithy.api#required": {}
      }
    },
    "Product": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
        "smithy.api#required": {}
      }
    },
    "Domain": {
      "target": "smithy.api#String",

```

```

        "traits": {
            "smithy.api#documentation": "<p>The domain name of the user.</p>"
        }
    },
    "com.amazonaws.licenseanagerusersubscriptions#StartProductSubscriptionResponse": {
        "type": "structure",
        "members": {
            "ProductUserSummary": {
                "target": "com.amazonaws.licenseanagerusersubscriptions#ProductUserSummary",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the start product subscription
operation.</p>",
                    "smithy.api#required": {}
                }
            }
        }
    },
    "com.amazonaws.licenseanagerusersubscriptions#StopProductSubscription": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licenseanagerusersubscriptions#StopProductSubscriptionRequest"
        },
        "output": {
            "target": "com.amazonaws.licenseanagerusersubscriptions#StopProductSubscriptionResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licenseanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licenseanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licenseanagerusersubscriptions#InternalServerErrorException"
            },
            {
                "target": "com.amazonaws.licenseanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licenseanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licenseanagerusersubscriptions#ThrottlingException"
            },
            {

```

```

        "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
    }
],
"traits": {
    "smithy.api#documentation": "<p>Stops a product subscription for a user with the specified identity
provider.</p>",
    "smithy.api#http": {
        "code": 200,
        "method": "POST",
        "uri": "/user/StopProductSubscription"
    }
}
},
"com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest": {
    "type": "structure",
    "members": {
        "Username": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>",
                "smithy.api#required": {}
            }
        },
        "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
                "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                "smithy.api#required":
            {}
        }
    },
    "Product": {
        "target": "smithy.api#String",
        "traits": {
            "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
            "smithy.api#required": {}
        }
    },
    "Domain": {
        "target": "smithy.api#String",
        "traits": {
            "smithy.api#documentation": "<p>The domain name of the user.</p>"
        }
    }
}
},
"com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse": {
    "type": "structure",

```

```

"members": {
  "ProductUserSummary": {
    "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
    "traits": {
      "smithy.api#documentation":
"<p>Metadata that describes the start product subscription operation.</p>",
      "smithy.api#required": {}
    }
  }
},
"com.amazonaws.licensemanagerusersubscriptions#StringList": {
  "type": "list",
  "member": {
    "target": "smithy.api#String"
  }
},
"com.amazonaws.licensemanagerusersubscriptions#Subnet": {
  "type": "string",
  "traits": {
    "smithy.api#pattern": "subnet-[a-z0-9]{8,17}"
  }
},
"com.amazonaws.licensemanagerusersubscriptions#Subnets": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanagerusersubscriptions#Subnet"
  }
},
"com.amazonaws.licensemanagerusersubscriptions#ThrottlingException": {
  "type": "structure",
  "members": {
    "message": {
      "target": "smithy.api#String"
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>The request was denied because of request throttling. Retry the
request.</p>",
    "smithy.api#error": "client"
  }
},
"com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest"
  },

```

```

"output": {
  "target": "com.amazonaws.licenseanagerusersubscriptions#UpdateIdentityProviderSettingsResponse"
},
"errors": [
  {
    "target": "com.amazonaws.licenseanagerusersubscriptions#AccessDeniedException"
  },
  {
    "target": "com.amazonaws.licenseanagerusersubscriptions#InternalServerErrorException"
  },
  {
    "target": "com.amazonaws.licenseanagerusersubscriptions#ThrottlingException"
  },
  {
    "target": "com.amazonaws.licenseanagerusersubscriptions#ValidationException"
  }
],
"traits": {
  "smithy.api#documentation": "<p>Updates additional product configuration settings for the registered
identity\n  provider.</p>",
  "smithy.api#http": {
    "code": 200,
    "method": "POST",
    "uri": "/identity-provider/UpdateIdentityProviderSettings"
  },
  "smithy.api#idempotent": {}
}
},
"com.amazonaws.licenseanagerusersubscriptions#UpdateIdentityProviderSettingsRequest": {
  "type": "structure",
  "members": {
    "IdentityProvider": {
      "target": "com.amazonaws.licenseanagerusersubscriptions#IdentityProvider",
      "traits": {
        "smithy.api#required": {}
      }
    },
    "Product": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
        "smithy.api#required": {}
      }
    },
    "UpdateSettings": {
      "target": "com.amazonaws.licenseanagerusersubscriptions#UpdateSettings",
      "traits": {
        "smithy.api#documentation": "<p>Updates the registered identity providers product related

```

configuration settings. You can update any combination of settings in a single operation such as the:

- Subnets which you want to add to provision VPC endpoints.
- Subnets which you want to remove the VPC endpoints from.
- Security group ID which permits traffic to the VPC endpoints.

```

    "smithy.api#required": {}
  }
}
},
"com.amazonaws.licenseanagerusersubscriptions#UpdateIdentityProviderSettingsResponse": {
  "type": "structure",
  "members": {
    "IdentityProviderSummary": {
      "target": "com.amazonaws.licenseanagerusersubscriptions#IdentityProviderSummary",
      "traits": {
        "smithy.api#required": {}
      }
    }
  }
},
"com.amazonaws.licenseanagerusersubscriptions#UpdateSettings": {
  "type": "structure",
  "members": {
    "AddSubnets": {
      "target": "com.amazonaws.licenseanagerusersubscriptions#Subnets",
      "traits": {
        "smithy.api#documentation": "<p>The ID of one or more subnets in which License Manager will
create a VPC endpoint for products that require connectivity to activation servers.</p>",
        "smithy.api#required": {}
      }
    },
    "RemoveSubnets": {
      "target": "com.amazonaws.licenseanagerusersubscriptions#Subnets",
      "traits": {
        "smithy.api#documentation": "<p>The ID of one or more subnets to remove.</p>",
        "smithy.api#required": {}
      }
    },
    "SecurityGroupId": {
      "target": "com.amazonaws.licenseanagerusersubscriptions#SecurityGroup",
      "traits": {
        "smithy.api#documentation": "<p>A security group ID
that allows inbound TCP port 1688 communication between resources in your VPC and the VPC endpoints for
activation servers.</p>"
      }
    }
  }
},

```



```

    "traits": {
      "smithy.api#documentation": "<p>Updates the registered identity providers product related configuration
settings such as\n    the subnets to provision VPC endpoints.</p>"
    }
  },
  "com.amazonaws.licensemanagerusersubscriptions#ValidationException": {
    "type": "structure",
    "members": {
      "message": {
        "target": "smithy.api#String"
      }
    },
    "traits": {
      "smithy.api#documentation": "<p>A parameter is not valid.</p>",
      "smithy.api#error": "client"
    }
  }
}
}
{
  "smithy": "2.0",
  "metadata": {
    "suppressions": [
      {
        "id": "HttpMethodSemantics",
        "namespace": "*"
      },
      {
        "id": "HttpStatusCodeSemantics",
        "namespace": "*"
      },
      {
        "id": "PaginatedTrait",
        "namespace": "*"
      },
      {
        "id": "HttpHeaderTrait",
        "namespace": "*"
      },
      {
        "id": "HttpUriConflict",
        "namespace": "*"
      },
      {
        "id": "Service",
        "namespace": "*"
      }
    ]
  }
}

```

```

},
"shapes": {
  "com.amazonaws.licensemanager#AWSLicenseManager": {
    "type": "service",
    "version": "2018-08-01",
    "operations": [
      {
        "target": "com.amazonaws.licensemanager#AcceptGrant"
      },
      {
        "target": "com.amazonaws.licensemanager#CheckInLicense"
      },
      {
        "target": "com.amazonaws.licensemanager#CheckoutBorrowLicense"
      },
      {
        "target": "com.amazonaws.licensemanager#CheckoutLicense"
      },
      {
        "target": "com.amazonaws.licensemanager#CreateGrant"
      },
      {
        "target": "com.amazonaws.licensemanager#CreateGrantVersion"
      },
      {
        "target": "com.amazonaws.licensemanager#CreateLicense"
      },
      {
        "target": "com.amazonaws.licensemanager#CreateLicenseConfiguration"
      },
      {
        "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource"
      },
      {
        "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator"
      },
      {
        "target": "com.amazonaws.licensemanager#CreateLicenseVersion"
      },
      {
        "target": "com.amazonaws.licensemanager#CreateToken"
      },
      {
        "target": "com.amazonaws.licensemanager#DeleteGrant"
      },
      {
        "target": "com.amazonaws.licensemanager#DeleteLicense"
      }
    ]
  }
}

```

```

    },
    {
      "target": "com.amazonaws.licensemanager#DeleteLicenseConfiguration"
    },
    {
      "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator"
    },
    {
      "target": "com.amazonaws.licensemanager#DeleteToken"
    },
    {
      "target": "com.amazonaws.licensemanager#ExtendLicenseConsumption"
    }
  },
  {
    "target": "com.amazonaws.licensemanager#GetAccessToken"
  },
  {
    "target": "com.amazonaws.licensemanager#GetGrant"
  },
  {
    "target": "com.amazonaws.licensemanager#GetLicense"
  },
  {
    "target": "com.amazonaws.licensemanager#GetLicenseConfiguration"
  },
  {
    "target": "com.amazonaws.licensemanager#GetLicenseConversionTask"
  },
  {
    "target": "com.amazonaws.licensemanager#GetLicenseManagerReportGenerator"
  },
  {
    "target": "com.amazonaws.licensemanager#GetLicenseUsage"
  },
  {
    "target": "com.amazonaws.licensemanager#GetServiceSettings"
  },
  {
    "target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration"
  },
  {
    "target": "com.amazonaws.licensemanager#ListDistributedGrants"
  },
  {
    "target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations"
  },
  {

```

```

    "target": "com.amazonaws.licensemanager#ListLicenseConfigurations"
  },
  {
    "target": "com.amazonaws.licensemanager#ListLicenseConversionTasks"
  },
  {
    "target": "com.amazonaws.licensemanager#ListLicenseManagerReportGenerators"
  },
  {
    "target": "com.amazonaws.licensemanager#ListLicenses"
  },
  {
    "target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResource"
  },
  {
    "target": "com.amazonaws.licensemanager#ListLicenseVersions"
  },
  {
    "target": "com.amazonaws.licensemanager#ListReceivedGrants"
  },
  {
    "target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganization"
  },
  {
    "target": "com.amazonaws.licensemanager#ListReceivedLicenses"
  },
  {
    "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganization"
  },
  {
    "target": "com.amazonaws.licensemanager#ListResourceInventory"
  },
  {
    "target": "com.amazonaws.licensemanager#ListTagsForResource"
  },
  {
    "target": "com.amazonaws.licensemanager#ListTokens"
  },
  {
    "target": "com.amazonaws.licensemanager#ListUsageForLicenseConfiguration"
  },
  {
    "target": "com.amazonaws.licensemanager#RejectGrant"
  },
  {
    "target": "com.amazonaws.licensemanager#TagResource"
  },

```

```

    {
      "target": "com.amazonaws.licensemanager#UntagResource"
    },
    {
      "target": "com.amazonaws.licensemanager#UpdateLicenseConfiguration"
    },
    {
      "target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator"
    },
    {
      "target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource"
    },
    {
      "target": "com.amazonaws.licensemanager#UpdateServiceSettings"
    }
  ],
  "traits": {
    "aws.api#service": {
      "sdkId": "License Manager",
      "arnNamespace": "license-manager",
      "cloudFormationName": "LicenseManager",
      "cloudTrailEventSource": "licensemanager.amazonaws.com",
      "endpointPrefix": "license-manager"
    },
    "aws.auth#sigv4": {
      "name": "license-manager"
    },
    "aws.protocols#awsJson1_1": {},
    "smithy.api#documentation": "<p>License Manager makes it easier to manage licenses from software vendors across multiple \n      Amazon Web Services accounts and on-premises servers.</p>",
    "smithy.api#title": "AWS License Manager",
    "smithy.api#xmlNamespace": {
      "uri": "https://license-manager.amazonaws.com/doc/2018_08_01"
    },
    "smithy.rules#endpointRuleSet": {
      "version": "1.0",
      "parameters": {
        "Region": {
          "builtIn": "AWS::Region",
          "required": false,
          "documentation": "The AWS region used to dispatch the request.",
          "type": "String"
        }
      },
      "UseDualStack": {
        "builtIn": "AWS::UseDualStack",
        "required": true,
        "default": false,
        "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not

```

```

support dual-stack, dispatching the request MAY return an error.",
  "type": "Boolean"
},
"UseFIPS": {
  "builtIn": "AWS::UseFIPS",
  "required": true,
  "default": false,
  "documentation": "When true, send
this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant
endpoint, dispatching the request will return an error.",
  "type": "Boolean"
},
"Endpoint": {
  "builtIn": "SDK::Endpoint",
  "required": false,
  "documentation": "Override the endpoint used to send this request",
  "type": "String"
}
},
"rules": [
  {
    "conditions": [
      {
        "fn": "isSet",
        "argv": [
          {
            "ref": "Endpoint"
          }
        ]
      }
    ]
  }
]
},
"rules": [
  {
    "conditions": [
      {
        "fn": "booleanEquals",
        "argv": [
          {
            "ref": "UseFIPS"
          },
          true
        ]
      }
    ]
  }
],
"error": "Invalid Configuration: FIPS and custom endpoint are not supported",
"type": "error"

```

```

    },
    {
"conditions": [
    {
        "fn": "booleanEquals",
        "argv": [
            {
                "ref": "UseDualStack"
            },
            true
        ]
    }
],
"error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
"type": "error"
},
{
"conditions": [],
"endpoint": {
    "url": {
        "ref": "Endpoint"
    },
    "properties": {},
    "headers": {}
},
"type": "endpoint"
}
],
},
{
"conditions": [
    {
        "fn": "isSet",
        "argv": [
            {
                "ref": "Region"
            }
        ]
    }
],
"type": "tree",
"rules": [
    {
        "conditions": [
            {
                "fn": "aws.partition",
                "argv": [

```

```

        {
            "ref": "Region"
        }
    ],
    "assign": "PartitionResult"
}
],
"type": "tree",
"rules": [
    {
        "conditions": [
            {
                "fn": "booleanEquals",
                "argv": [
                    {
                        "ref": "UseFIPS"
                    },
                    true
                ]
            },
            {
                "fn": "booleanEquals",
                "argv": [
                    {
                        "ref": "UseDualStack"
                    },
                    true
                ]
            }
        ],
        "type": "tree",
        "rules": [
            {
                "conditions": [
                    {
                        "fn": "booleanEquals",
                        "argv": [
                            true,
                            {
                                "fn": "getAttr",
                                "argv": [
                                    {
                                        "ref": "PartitionResult"
                                    },
                                    "supportsFIPS"
                                ]
                            }
                        ]
                    }
                ]
            }
        ]
    }
]

```



```

    }
    ]
  },
  {
    "fn": "booleanEquals",
    "argv": [
      true,
      {
        "fn": "getAttr",
        "argv": [
          {
            "ref": "PartitionResult"
          },
        ],
      },
    ],
  },
  "supportsDualStack"
    ]
  }
  ],
  "type": "tree",
  "rules": [
    {
      "conditions": [],
      "endpoint": {
        "url": "https://license-manager-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
        "properties": {},
        "headers": {}
      },
    },
    {
      "type": "endpoint"
    }
  ],
  {
    "conditions": [],
    "error": "FIPS and DualStack are enabled, but this partition does not support one or
both",
    "type": "error"
  }
  ],
  {
    "conditions": [
      {
        "fn": "booleanEquals",

```

```

"argv": [
  {
    "ref": "UseFIPS"
  },
  true
]
},
"type": "tree",
"rules": [
  {
    "conditions": [
      {
        "fn": "booleanEquals",
        "argv": [
          true,

          {
            "fn": "getAttr",
            "argv": [
              {
                "ref": "PartitionResult"
              },
              "supportsFIPS"
            ]
          }
        ]
      }
    ],
    "type": "tree",
    "rules": [

      {
        "conditions": [],
        "endpoint": {
          "url": "https://license-manager-fips.{Region}.{PartitionResult#dnsSuffix}",
          "properties": {},
          "headers": {}
        },
        "type": "endpoint"
      }
    ]
  },
  {
    "conditions": [],
    "error": "FIPS is enabled but this
partition does not support FIPS",
    "type": "error"
  }
]

```

```

    }
  ]
},
{
  "conditions": [
    {
      "fn": "booleanEquals",
      "argv": [
        {
          "ref": "UseDualStack"
        },
        true
      ]
    }
  ],
  "type": "tree",
  "rules": [
    {
      "conditions": [
        {
          "fn": "booleanEquals",
          "argv": [
            true,
            {
              "fn": "getAttr",
              "argv": [
                {
                  "ref": "PartitionResult"
                },
                ],
            }
          ]
        }
      ],
      "supportsDualStack"
    }
  ],
  "type": "tree",
  "rules": [
    {
      "conditions": [],
      "endpoint": {
        "url": "https://license-
manager.{Region}.{PartitionResult#dualStackDnsSuffix}",
        "properties": {},
        "headers": {}
      },
    },
    "type": "endpoint"
  ]
}

```

```

        }
      ]
    },
    {
      "conditions": [],
      "error": "DualStack is enabled but this partition does not support DualStack",
      "type": "error"
    }
  ]
},
{
  "conditions": [],
  "endpoint": {
    "url": "https://license-manager.{Region}.{PartitionResult#dnsSuffix}",
    "properties": {},
    "headers": {}
  },
  "type": "endpoint"
}
]
}
]
},
{
  "conditions": [],
  "error": "Invalid Configuration: Missing Region",
  "type": "error"
}
]
},
"smithy.rules#endpointTests": {
  "testCases": [
    {
      "documentation": "For region af-south-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint":
{
          "url": "https://license-manager.af-south-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "af-south-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region ap-east-1 with FIPS disabled and DualStack disabled",

```

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"expect": {
  "endpoint": {
    "url": "https://license-manager.ap-east-1.amazonaws.com"
  }
},
"params": {
  "Region": "ap-east-1",
  "UseFIPS": false,
  "UseDualStack": false
}
},
{
  "documentation": "For region ap-northeast-1 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager.ap-northeast-1.amazonaws.com"
    }
  },
  "params": {
    "Region": "ap-northeast-1",
    "UseFIPS": false,
    "UseDualStack": false
  }
},
{
  "documentation": "For region ap-northeast-2 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager.ap-northeast-2.amazonaws.com"
    }
  },
  "params": {
    "Region": "ap-northeast-2",
    "UseFIPS": false,
    "UseDualStack": false
  }
},
{
  "documentation": "For region ap-northeast-3 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager.ap-northeast-3.amazonaws.com"
    }
  },
  "params": {
    "Region": "ap-northeast-3",
    "UseFIPS": false,
    "UseDualStack": false
  }
}

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    }
  },
  {
    "documentation": "For region ap-south-1 with FIPS disabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager.ap-south-1.amazonaws.com"
      }
    },
    "params": {
      "Region": "ap-south-1",
      "UseFIPS": false,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For region ap-southeast-1 with FIPS disabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager.ap-southeast-1.amazonaws.com"
      }
    }
  },
  {
    "params": {
      "Region": "ap-southeast-1",
      "UseFIPS": false,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For region ap-southeast-2 with FIPS disabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager.ap-southeast-2.amazonaws.com"
      }
    },
    "params": {
      "Region": "ap-southeast-2",
      "UseFIPS": false,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For region ap-southeast-3 with FIPS disabled and DualStack disabled",
    "expect": {
      "endpoint": {

```

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        "url": "https://license-manager.ap-southeast-3.amazonaws.com"
    }
},
"params": {
    "Region": "ap-southeast-3",
    "UseFIPS": false,
    "UseDualStack": false
}
},
{
    "documentation": "For region ca-central-1 with FIPS disabled and DualStack disabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager.ca-central-1.amazonaws.com"
        }
    },
    "params": {
        "Region": "ca-central-1",
        "UseFIPS": false,
        "UseDualStack": false
    }
},
{
    "documentation": "For region eu-central-1 with FIPS disabled and DualStack disabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager.eu-central-1.amazonaws.com"
        }
    },
    "params": {
        "Region": "eu-central-1",
        "UseFIPS": false,
        "UseDualStack": false
    }
},
{
    "documentation": "For region eu-north-1 with FIPS
disabled and DualStack disabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager.eu-north-1.amazonaws.com"
        }
    },
    "params": {
        "Region": "eu-north-1",
        "UseFIPS": false,
        "UseDualStack": false
    }
}

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    }
  },
  {
    "documentation": "For region eu-south-1 with FIPS disabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager.eu-south-1.amazonaws.com"
      }
    },
    "params": {
      "Region":
"eu-south-1",
      "UseFIPS": false,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For region eu-west-1 with FIPS disabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager.eu-west-1.amazonaws.com"
      }
    },
    "params": {
      "Region": "eu-west-1",
      "UseFIPS": false,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For region eu-west-2 with FIPS disabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager.eu-west-2.amazonaws.com"
      }
    },
    "params": {
      "Region": "eu-west-2",
      "UseFIPS": false,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For region eu-west-3 with FIPS disabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager.eu-west-3.amazonaws.com"

```



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    }
  },
  "params": {
    "Region": "eu-west-3",
    "UseFIPS": false,
    "UseDualStack": false
  }
},
{
  "documentation": "For region me-south-1 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager.me-south-1.amazonaws.com"
    }
  },
  "params": {
    "Region": "me-south-1",
    "UseFIPS": false,
    "UseDualStack": false
  }
},
{
  "documentation": "For region sa-east-1 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager.sa-east-1.amazonaws.com"
    }
  },
  "params": {
    "Region": "sa-east-1",
    "UseFIPS": false,
    "UseDualStack": false
  }
},
{
  "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager.us-east-1.amazonaws.com"
    }
  },
  "params": {
    "Region": "us-east-1",
    "UseFIPS": false,
    "UseDualStack": false
  }
}

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},
{
  "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager-fips.us-east-1.amazonaws.com"
    }
  },
  "params": {
    "Region": "us-east-1",
    "UseFIPS": true,
    "UseDualStack": false
  }
},
{
  "documentation": "For region us-east-2 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager.us-east-2.amazonaws.com"
    }
  },
  "params": {
    "Region": "us-east-2",
    "UseFIPS": false,
    "UseDualStack": false
  }
},
{
  "documentation": "For region us-east-2 with FIPS enabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager-fips.us-east-2.amazonaws.com"
    }
  },
  "params": {
    "Region": "us-east-2",
    "UseFIPS": true,
    "UseDualStack": false
  }
},
{
  "documentation": "For region
us-west-1 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager.us-west-1.amazonaws.com"
    }
  }
}

```

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    },
    "params": {
      "Region": "us-west-1",
      "UseFIPS": false,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For region us-west-1 with FIPS enabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-fips.us-west-1.amazonaws.com"
      }
    },
    "params": {
      "Region": "us-west-1",
      "UseFIPS": true,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For region us-west-2 with FIPS disabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager.us-west-2.amazonaws.com"
      }
    },
    "params": {
      "Region": "us-west-2",
      "UseFIPS": false,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For region us-west-2 with FIPS enabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-fips.us-west-2.amazonaws.com"
      }
    },
    "params": {
      "Region": "us-west-2",
      "UseFIPS": true,
      "UseDualStack": false
    }
  },

```

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{
  "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager-fips.us-east-1.api.aws"
    }
  },
  "params": {
    "Region": "us-east-1",
    "UseFIPS": true,

    "UseDualStack": true
  }
},
{
  "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager.us-east-1.api.aws"
    }
  },
  "params": {
    "Region": "us-east-1",
    "UseFIPS": false,
    "UseDualStack": true
  }
},
{
  "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url":
"https://license-manager.cn-north-1.amazonaws.com.cn"
    }
  },
  "params": {
    "Region": "cn-north-1",
    "UseFIPS": false,
    "UseDualStack": false
  }
},
{
  "documentation": "For region cn-northwest-1 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager.cn-northwest-1.amazonaws.com.cn"
    }
  },

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    "params": {
      "Region": "cn-northwest-1",
      "UseFIPS": false,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-fips.cn-north-1.api.amazonwebservices.com.cn"
      }
    },
    "params": {
      "Region": "cn-north-1",
      "UseFIPS": true,
      "UseDualStack": true
    }
  },
  {
    "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-fips.cn-north-1.amazonaws.com.cn"
      }
    },
    "params": {
      "Region": "cn-north-1",
      "UseFIPS": true,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager.cn-north-1.api.amazonwebservices.com.cn"
      }
    },
    "params": {
      "Region": "cn-north-1",
      "UseFIPS": false,
      "UseDualStack": true
    }
  }
},

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```

{
  "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager.us-gov-east-1.amazonaws.com"
    }
  },
  "params": {
    "Region": "us-gov-east-1",
    "UseFIPS": false,
    "UseDualStack": false
  }
},
{
  "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager-fips.us-gov-east-1.amazonaws.com"
    }
  },
  "params": {
    "Region": "us-gov-east-1",
    "UseFIPS": true,
    "UseDualStack": false
  }
},
{
  "documentation": "For region us-gov-west-1 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager.us-gov-west-1.amazonaws.com"
    }
  },
  "params": {
    "Region": "us-gov-west-1",
    "UseFIPS": false,
    "UseDualStack": false
  }
},
{
  "documentation":
"\"For region us-gov-west-1 with FIPS enabled and DualStack disabled\",
  "expect": {
    "endpoint": {
      "url": "https://license-manager-fips.us-gov-west-1.amazonaws.com"
    }
  },
  "params": {

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```

        "Region": "us-gov-west-1",
        "UseFIPS": true,
        "UseDualStack": false
    }
},
{
    "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager-fips.us-gov-east-1.api.aws"
        }
    },
    "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": true,
        "UseDualStack": true
    }
},
{
    "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager.us-gov-east-1.api.aws"
        }
    },
    "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": false,
        "UseDualStack": true
    }
},
{
    "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack
disabled",
    "expect": {
        "endpoint": {
            "url": "https://license-manager.us-iso-east-1.c2s.ic.gov"
        }
    },
    "params": {
        "Region": "us-iso-east-1",
        "UseFIPS": false,
        "UseDualStack": false
    }
},
{
    "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",

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"expect": {
  "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
},
"params": {
  "Region": "us-iso-east-1",
  "UseFIPS": true,
  "UseDualStack": true
}
},
{
  "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager-fips.us-iso-east-1.c2s.ic.gov"
    }
  },
  "params": {
    "Region": "us-iso-east-1",
    "UseFIPS": true,
    "UseDualStack": false
  }
},
{
  "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
  "expect": {
    "error": "DualStack is enabled
but this partition does not support DualStack"
  },
  "params": {
    "Region": "us-iso-east-1",
    "UseFIPS": false,
    "UseDualStack": true
  }
},
{
  "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager.us-isob-east-1.sc2s.sgov.gov"
    }
  },
  "params": {
    "Region": "us-isob-east-1",
    "UseFIPS": false,
    "UseDualStack": false
  }
},

```



```

    {
      "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
      "expect": {
        "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
      },
      "params": {
        "Region": "us-isob-east-1",
        "UseFIPS": true,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-fips.us-isob-east-1.sc2s.sgov.gov"
        }
      },
      "params": {
        "Region": "us-isob-east-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
      "expect": {
        "error": "DualStack is enabled but this partition does not support DualStack"
      },
      "params": {
        "Region": "us-isob-east-1",
        "UseFIPS": false,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
      "expect": {
        "endpoint": {
          "url": "https://example.com"
        }
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": false,
        "UseDualStack": false,

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        "Endpoint": "https://example.com"
    }
},
{
    "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
    "expect": {
        "endpoint": {
            "url": "https://example.com"
        }
    },
    "params": {
        "UseFIPS": false,

"UseDualStack": false,
        "Endpoint": "https://example.com"
    }
},
{
    "documentation": "For custom endpoint with fips enabled and dualstack disabled",
    "expect": {
        "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
    },
    "params": {
        "Region": "us-east-1",
        "UseFIPS": true,
        "UseDualStack": false,
        "Endpoint": "https://example.com"
    }
},
{
    "documentation": "For custom endpoint with fips disabled and dualstack enabled",
    "expect": {
        "error":
"Invalid Configuration: Dualstack and custom endpoint are not supported"
    },
    "params": {
        "Region": "us-east-1",
        "UseFIPS": false,
        "UseDualStack": true,
        "Endpoint": "https://example.com"
    }
},
{
    "documentation": "Missing region",
    "expect": {
        "error": "Invalid Configuration: Missing Region"
    }
}

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        }
      ],
      "version": "1.0"
    }
  },
  "com.amazonaws.licensemanager#AcceptGrant": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#AcceptGrantRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#AcceptGrantResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
      },
      {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ServerInternalException"
      },
      {
        "target": "com.amazonaws.licensemanager#ValidationException"
      }
    ]
  },
  "traits": {
    "smithy.api#documentation": "<p>Accepts the specified grant.</p>"
  },
  "com.amazonaws.licensemanager#AcceptGrantRequest": {
    "type": "structure",
    "members": {
      "GrantArn": {
        "target": "com.amazonaws.licensemanager#Arn",

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    "traits": {
      "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
      "smithy.api#required": {}
    }
  },
  "traits": {
    "smithy.api#input": {}
  }
},
"com.amazonaws.licensemanager#AcceptGrantResponse": {
  "type": "structure",
  "members": {
    "GrantArn": {
      "target": "com.amazonaws.licensemanager#Arn",
      "traits": {
        "smithy.api#documentation": "<p>Grant
ARN.</p>"
      }
    },
    "Status": {
      "target": "com.amazonaws.licensemanager#GrantStatus",
      "traits": {
        "smithy.api#documentation": "<p>Grant status.</p>"
      }
    },
    "Version": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Grant version.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#AccessDeniedException": {
  "type": "structure",
  "members": {
    "Message": {
      "target": "com.amazonaws.licensemanager#Message"
    }
  },
  "traits": {
    "aws.protocols#awsQueryError": {}
  }
}

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"code": "ServiceAccessDenied",
  "httpResponseCode": 401
},
"smithy.api#documentation": "<p>Access to resource denied.</p>",
"smithy.api#error": "client",
"smithy.api#httpError": 401
}
},
"com.amazonaws.licensemanager#ActivationOverrideBehavior": {
  "type": "enum",
  "members": {
    "DISTRIBUTED_GRANTS_ONLY": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "DISTRIBUTED_GRANTS_ONLY"
      }
    },
    "ALL_GRANTS_PERMITTED_BY_ISSUER": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "ALL_GRANTS_PERMITTED_BY_ISSUER"
      }
    }
  }
},
"com.amazonaws.licensemanager#AllowedOperation": {
  "type": "enum",
  "members": {
    "CREATE_GRANT": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "CreateGrant"
      }
    },
    "CHECKOUT_LICENSE": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "CheckoutLicense"
      }
    },
    "CHECKOUT_BORROW_LICENSE": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "CheckoutBorrowLicense"
      }
    },
    "CHECK_IN_LICENSE": {

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        "target": "smithy.api#Unit",
        "traits": {
            "smithy.api#enumValue": "CheckInLicense"
        }
    },
    "EXTEND_CONSUMPTION_LICENSE": {
        "target": "smithy.api#Unit",
        "traits": {
            "smithy.api#enumValue": "ExtendConsumptionLicense"
        }
    },
    "LIST_PURCHASED_LICENSES": {
        "target": "smithy.api#Unit",
        "traits": {
            "smithy.api#enumValue": "ListPurchasedLicenses"
        }
    },
    "CREATE_TOKEN": {
        "target": "smithy.api#Unit",
        "traits": {
            "smithy.api#enumValue": "CreateToken"
        }
    }
},
"com.amazonaws.licensemanager#AllowedOperationList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#AllowedOperation"
    },
    "traits": {
        "smithy.api#length": {
            "min": 1,
            "max":
7
        }
    }
},
"com.amazonaws.licensemanager#Arn": {
    "type": "string",
    "traits": {
        "smithy.api#length": {
            "min": 0,
            "max": 2048
        },
        "smithy.api#pattern": "^arn:aws(-(cn|us-gov|iso-b|iso-c|iso-d))?:[A-Za-z0-9][A-Za-z0-9_/.-]{0,62}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9][A-Za-z0-9:/_+=,@.-]{0,1023}$"
    }
}

```

```

    }
  },
  "com.amazonaws.licensemanager#ArnList": {
    "type": "list",
    "member": {
      "target": "com.amazonaws.licensemanager#Arn"
    }
  },
  "com.amazonaws.licensemanager#AuthorizationException": {
    "type": "structure",
    "members": {
      "Message": {
        "target": "com.amazonaws.licensemanager#Message"
      }
    },
    "traits": {
      "aws.protocols#awsQueryError": {
        "code": "AuthorizationFailure",
        "httpResponseCode": 403
      },
      "smithy.api#documentation": "<p>The Amazon Web Services user account does not have permission to perform the action. Check the IAM\n      policy associated with this account.</p>",
      "smithy.api#error": "client",
      "smithy.api#httpError": 403
    }
  },
  "com.amazonaws.licensemanager#AutomatedDiscoveryInformation": {
    "type": "structure",
    "members": {
      "LastRunTime": {
        "target": "com.amazonaws.licensemanager#DateTime",
        "traits": {
          "smithy.api#documentation": "<p>Time that automated discovery last ran.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#documentation": "<p>Describes automated discovery.</p>"
    }
  },
  "com.amazonaws.licensemanager#Boolean": {
    "type": "boolean",
    "traits": {
      "smithy.api#default": false
    }
  },

```

```

"com.amazonaws.licensemanager#BorrowConfiguration": {
  "type": "structure",
  "members": {
    "AllowEarlyCheckIn": {
      "target": "com.amazonaws.licensemanager#BoxBoolean",
      "traits": {
        "smithy.api#documentation": "<p>Indicates whether early check-ins are allowed.</p>",
        "smithy.api#required": {}
      }
    },
    "MaxTimeToLiveInMinutes": {
      "target": "com.amazonaws.licensemanager#BoxInteger",
      "traits": {
        "smithy.api#documentation": "<p>Maximum time for the borrow configuration, in minutes.</p>",
        "smithy.api#required": {}
      }
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>Details about a borrow configuration.</p>"
  }
},
"com.amazonaws.licensemanager#BoxBoolean": {
  "type": "boolean"
},
"com.amazonaws.licensemanager#BoxInteger": {
  "type": "integer"
},
"com.amazonaws.licensemanager#BoxLong": {
  "type": "long"
},
"com.amazonaws.licensemanager#CheckInLicense": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#CheckInLicenseRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#CheckInLicenseResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    }
  ]
}

```



```

    },
    {
      "target": "com.amazonaws.licensemanager#ConflictException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    },
    {
      "target": "com.amazonaws.licensemanager#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Checks in the specified license. Check in a license when it is no longer
in use.</p>"
  }
},
"com.amazonaws.licensemanager#CheckInLicenseRequest":
{
  "type": "structure",
  "members": {
    "LicenseConsumptionToken": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>License consumption token.</p>",
        "smithy.api#required": {}
      }
    },
    "Beneficiary": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>License beneficiary.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#input": {}
  }
},
"com.amazonaws.licensemanager#CheckInLicenseResponse": {

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    "type": "structure",
    "members": {},
    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanager#CheckoutBorrowLicense":
  {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#EntitlementNotAllowedException"
      },
      {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
      },
      {
        "target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
      },
      {
        "target":
"com.amazonaws.licensemanager#RateLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#RedirectException"
      },
      {
        "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
      },
      {
        "target": "com.amazonaws.licensemanager#ServerInternalException"
      },
      {
        "target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
      },
      {

```

```

        "target": "com.amazonaws.licensemanager#ValidationException"
    }
],
"traits": {
    "smithy.api#documentation": "<p>Checks out the specified license for offline use.</p>"
}
},
"com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest": {
    "type": "structure",
    "members":
    {
        "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license. The license must use the borrow consumption configuration.</p>",
                "smithy.api#required": {}
            }
        },
        "Entitlements": {
            "target": "com.amazonaws.licensemanager#EntitlementDataList",
            "traits": {
                "smithy.api#documentation": "<p>License entitlements. Partial checkouts are not supported.</p>",
                "smithy.api#required": {}
            }
        },
        "DigitalSignatureMethod": {
            "target": "com.amazonaws.licensemanager#DigitalSignatureMethod",
            "traits": {
                "smithy.api#documentation": "<p>Digital signature method. The possible value is JSON Web Signature (JWS) algorithm PS384.\n    For more information, see <a href='\"https://tools.ietf.org/html/rfc7518#section-3.5\"'>RFC 7518 Digital Signature with RSASSA-PSS</a>.</p>",
                "smithy.api#required": {}
            }
        },
        "NodeId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Node ID.</p>"
            }
        },
        "CheckoutMetadata": {
            "target": "com.amazonaws.licensemanager#MetadataList",
            "traits": {
                "smithy.api#documentation": "<p>Information about constraints.</p>"
            }
        },
        "ClientToken": {

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        "target": "com.amazonaws.licensemanager#ClientToken",
        "traits": {
            "smithy.api#documentation":
"<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
            "smithy.api#required": {}
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse": {
    "type": "structure",
    "members": {
        "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
            }
        },
        "LicenseConsumptionToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>License consumption token.</p>"
            }
        },
        "EntitlementsAllowed":
{
            "target": "com.amazonaws.licensemanager#EntitlementDataList",
            "traits": {
                "smithy.api#documentation": "<p>Allowed license entitlements.</p>"
            }
        },
        "NodeId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Node ID.</p>"
            }
        },
        "SignedToken": {
            "target": "com.amazonaws.licensemanager#SignedToken",
            "traits": {
                "smithy.api#documentation": "<p>Signed token.</p>"
            }
        },
        "IssuedAt": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",

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    "traits": {
      "smithy.api#documentation": "<p>Date and time at which the license checkout
is issued.</p>"
    }
  },
  "Expiration": {
    "target": "com.amazonaws.licensemanager#ISO8601DateTime",
    "traits": {
      "smithy.api#documentation": "<p>Date and time at which the license checkout expires.</p>"
    }
  },
  "CheckoutMetadata": {
    "target": "com.amazonaws.licensemanager#MetadataList",
    "traits": {
      "smithy.api#documentation": "<p>Information about constraints.</p>"
    }
  }
},
"traits": {
  "smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CheckoutLicense": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#CheckoutLicenseRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#CheckoutLicenseResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#RedirectException"
    }
  ]
}

```

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    },
    {
      "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
    },
    {
      "target":
"com.amazonaws.licensemanager#ServerInternalException"
    },
    {
      "target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
    },
    {
      "target": "com.amazonaws.licensemanager#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Checks out the specified license.</p>\n      <note>\n      <p>If the
account that created the license is the same that is performing the check out, you must\n      specify the account
as the beneficiary.</p>\n      </note>"
  }
},
"com.amazonaws.licensemanager#CheckoutLicenseRequest": {
  "type": "structure",
  "members": {
    "ProductSKU": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Product
SKU.</p>",
        "smithy.api#required": {}
      }
    },
    "CheckoutType": {
      "target": "com.amazonaws.licensemanager#CheckoutType",
      "traits": {
        "smithy.api#documentation": "<p>Checkout type.</p>",
        "smithy.api#required": {}
      }
    }
  },
  "KeyFingerprint": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Key fingerprint identifying the license.</p>",
      "smithy.api#required": {}
    }
  },
  "Entitlements": {
    "target": "com.amazonaws.licensemanager#EntitlementDataList",

```

```

    "traits": {
      "smithy.api#documentation": "<p>License entitlements.</p>",
    }
  "smithy.api#required": {}
},
"ClientToken": {
  "target": "com.amazonaws.licensemanager#ClientToken",
  "traits": {
    "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
    "smithy.api#required": {}
  }
},
"Beneficiary": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>License beneficiary.</p>"
  }
},
"NodeId": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>Node ID.</p>"
  }
},
"traits": {
  "smithy.api#input": {}
},
"com.amazonaws.licensemanager#CheckoutLicenseResponse": {
  "type": "structure",
  "members": {
    "CheckoutType": {
      "target": "com.amazonaws.licensemanager#CheckoutType",
      "traits": {
        "smithy.api#documentation": "<p>Checkout type.</p>"
      }
    },
    "LicenseConsumptionToken": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>License consumption token.</p>"
      }
    },
    "EntitlementsAllowed": {

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```

    "target": "com.amazonaws.licensemanager#EntitlementDataList",
    "traits": {
      "smithy.api#documentation": "<p>Allowed license entitlements.</p>"
    }
  },
  "SignedToken": {
    "target": "com.amazonaws.licensemanager#SignedToken",
    "traits": {
      "smithy.api#documentation": "<p>Signed token.</p>"
    }
  },
  "NodeId": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Node ID.</p>"
    }
  },
  "IssuedAt": {
    "target": "com.amazonaws.licensemanager#ISO8601DateTime",
    "traits": {
      "smithy.api#documentation": "<p>Date and time at which the license checkout is issued.</p>"
    }
  },
  "Expiration": {
    "target": "com.amazonaws.licensemanager#ISO8601DateTime",
    "traits": {
      "smithy.api#documentation": "<p>Date and
time at which the license checkout expires.</p>"
    }
  },
  "LicenseArn": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the checkout license.</p>"
    }
  }
},
"traits": {
  "smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CheckoutType": {
  "type": "enum",
  "members": {
    "PROVISIONAL": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "PROVISIONAL"
      }
    }
  }
}

```



```

    }
  },
  "PERPETUAL": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "PERPETUAL"
    }
  }
},
"com.amazonaws.licensemanager#ClientRequestToken": {
  "type": "string",
  "traits": {
    "smithy.api#length": {
      "min": 1,
      "max": 36
    }
  }
},
"com.amazonaws.licensemanager#ClientToken": {
  "type": "string",
  "traits": {
    "smithy.api#length": {
      "min": 0,
      "max": 2048
    },
    "smithy.api#pattern": "^\\S+$"
  }
},
"com.amazonaws.licensemanager#ConflictException": {
  "type": "structure",
  "members": {
    "Message": {
      "target": "com.amazonaws.licensemanager#Message"
    }
  },
  "traits": {
    "aws.protocols#awsQueryError": {
      "code": "ConflictException",
      "httpResponseCode":
409
    },
    "smithy.api#documentation": "<p>There was a conflict processing the request. Try your request
again.</p>",
    "smithy.api#error": "client",
    "smithy.api#httpError": 409
  }
},

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"com.amazonaws.licensemanager#ConsumedLicenseSummary": {
  "type": "structure",
  "members": {
    "ResourceType": {
      "target": "com.amazonaws.licensemanager#ResourceType",
      "traits": {
        "smithy.api#documentation": "<p>Resource type of the resource consuming a license.</p>"
      }
    },
    "ConsumedLicenses": {
      "target": "com.amazonaws.licensemanager#BoxLong",
      "traits": {
        "smithy.api#documentation": "<p>Number of licenses consumed by the resource.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>Details about license consumption.</p>"
  }
},
"com.amazonaws.licensemanager#ConsumedLicenseSummaryList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanager#ConsumedLicenseSummary"
  }
},
"com.amazonaws.licensemanager#ConsumptionConfiguration": {
  "type": "structure",
  "members": {
    "RenewType": {
      "target": "com.amazonaws.licensemanager#RenewType",
      "traits": {
        "smithy.api#documentation": "<p>Renewal frequency.</p>"
      }
    },
    "ProvisionalConfiguration": {
      "target": "com.amazonaws.licensemanager#ProvisionalConfiguration",
      "traits": {
        "smithy.api#documentation": "<p>Details about a provisional configuration.</p>"
      }
    },
    "BorrowConfiguration": {
      "target": "com.amazonaws.licensemanager#BorrowConfiguration",
      "traits": {
        "smithy.api#documentation": "<p>Details about a borrow configuration.</p>"
      }
    }
  }
}

```

```

    },
    "traits": {
      "smithy.api#documentation": "<p>Details about a consumption configuration.</p>"
    }
  },
  "com.amazonaws.licensemanager#CreateGrant": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#CreateGrantRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#CreateGrantResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target":
"com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
      },
      {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ServerInternalException"
      },
      {
        "target": "com.amazonaws.licensemanager#ValidationException"
      }
    ]
  },
  "traits": {
    "smithy.api#documentation": "<p>Creates a grant for the specified license. A grant shares the use of
license\n entitlements with a specific Amazon Web Services account, an organization, or an\n
organizational unit (OU). For more
information, see <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/granted-
licenses.html\">Granted licenses in License Manager</a> in the <i>License Manager User Guide</i>.</p>"
  }
},
"com.amazonaws.licensemanager#CreateGrantRequest": {
  "type": "structure",
  "members": {

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"ClientToken": {
  "target": "com.amazonaws.licensemanager#ClientToken",
  "traits": {
    "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the
idempotency of the request.</p>",
    "smithy.api#required": {}
  }
},
"GrantName": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>Grant name.</p>",
    "smithy.api#required": {}
  }
}
},
"LicenseArn": {
  "target": "com.amazonaws.licensemanager#Arn",
  "traits": {
    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
    "smithy.api#required": {}
  }
},
"Principals": {
  "target": "com.amazonaws.licensemanager#PrincipalArnList",
  "traits": {
    "smithy.api#documentation": "<p>The grant principals. You can specify one of the following as an
Amazon Resource Name (ARN):</p>
<ul>
<li><p>An Amazon Web Services
account, which includes only the account specified.</p>
</li>
<li><p>An organizational unit (OU), which includes all accounts in the OU.</p>
</li>
<li><p>An organization, which will include all accounts across your organization.</p>
</li>
</ul>",
    "smithy.api#required": {}
  }
},
"HomeRegion": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>Home Region of the grant.</p>",
    "smithy.api#required": {}
  }
},
"AllowedOperations": {
  "target": "com.amazonaws.licensemanager#AllowedOperationList",
  "traits": {
    "smithy.api#documentation": "<p>Allowed operations for the grant.</p>",
    "smithy.api#required": {}
  }
}

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    }
  },
  "traits": {
    "smithy.api#input": {}
  }
},

"com.amazonaws.licensemanager#CreateGrantResponse": {
  "type": "structure",
  "members": {
    "GrantArn": {
      "target": "com.amazonaws.licensemanager#Arn",
      "traits": {
        "smithy.api#documentation": "<p>Grant ARN.</p>"
      }
    },
    "Status": {
      "target": "com.amazonaws.licensemanager#GrantStatus",
      "traits": {
        "smithy.api#documentation": "<p>Grant status.</p>"
      }
    },
    "Version": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Grant version.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#output": {}
  }
},

"com.amazonaws.licensemanager#CreateGrantVersion":
{
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#CreateGrantVersionRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#CreateGrantVersionResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {

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    "target": "com.amazonaws.licensemanager#AuthorizationException"
  },
  {
    "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
  },
  {
    "target": "com.amazonaws.licensemanager#RateLimitExceededException"
  },
  {
    "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
  },
  {
    "target": "com.amazonaws.licensemanager#ServerInternalException"
  },
  {
    "target": "com.amazonaws.licensemanager#ValidationException"
  }
],
"traits": {
  "smithy.api#documentation": "<p>Creates a new version of the specified grant. For more information, see\n    <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/granted-licenses.html\">Granted licenses in License Manager</a> in the <i>License Manager User Guide</i>.</p>"
}
},
"com.amazonaws.licensemanager#CreateGrantVersionRequest": {
  "type": "structure",
  "members": {
    "ClientToken": {
      "target": "com.amazonaws.licensemanager#ClientToken",
      "traits": {
        "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
      }
    }
  }
},
"GrantArn": {
  "target": "com.amazonaws.licensemanager#Arn",
  "traits": {
    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
    "smithy.api#required": {}
  }
},
"GrantName": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>Grant name.</p>"
  }
}

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    },
    "AllowedOperations": {
      "target": "com.amazonaws.licensemanager#AllowedOperationList",
      "traits": {
        "smithy.api#documentation": "<p>Allowed operations for the grant.</p>"
      }
    },
    "Status": {
      "target": "com.amazonaws.licensemanager#GrantStatus",
      "traits": {
        "smithy.api#documentation": "<p>Grant status.</p>"
      }
    },
    "StatusReason": {
      "target": "com.amazonaws.licensemanager#StatusReasonMessage",
      "traits": {
        "smithy.api#documentation": "<p>Grant status reason.</p>"
      }
    },
    "SourceVersion": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Current version of the grant.</p>"
      }
    },
    "Options": {
      "target": "com.amazonaws.licensemanager#Options",
      "traits": {
        "smithy.api#documentation": "<p>The options specified for the grant.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#input": {}
  }
},
"com.amazonaws.licensemanager#CreateGrantVersionResponse": {
  "type": "structure",
  "members": {
    "GrantArn": {
      "target": "com.amazonaws.licensemanager#Arn",
      "traits": {
        "smithy.api#documentation": "<p>Grant ARN.</p>"
      }
    },
    "Status": {
      "target": "com.amazonaws.licensemanager#GrantStatus",
      "traits": {

```

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        "smithy.api#documentation": "<p>Grant status.</p>"
    }
},
"Version": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
        "smithy.api#documentation": "<p>New version of the grant.</p>"
    }
}
},
"traits":
{
    "smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CreateLicense": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#CreateLicenseRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#CreateLicenseResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#RedirectException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Creates a license.</p>"
    }
}

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    }
  },
  "com.amazonaws.licensemanager#CreateLicenseConfiguration": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#CreateLicenseConfigurationRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#CreateLicenseConfigurationResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
      },
      {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ServerInternalException"
      }
    ],
    "traits": {
      "smithy.api#documentation": "<p>Creates a license configuration.</p>\n    <p>A license configuration is an abstraction of a customer license agreement that can be\n    consumed and enforced by License Manager. Components include specifications for the license\n    type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n    Dedicated Instance, Dedicated Host, or all of these), license affinity to host (how long a \n    license must be associated with a host), and the number of licenses purchased and used.</p>"
    }
  },
  "com.amazonaws.licensemanager#CreateLicenseConfigurationRequest": {
    "type": "structure",
    "members": {
      "Name": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Name of the license configuration.</p>",
          "smithy.api#required": {}
        }
      }
    }
  }
}

```

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},
"Description": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>Description of the license configuration.</p>"
  }
},
"LicenseCountingType": {
  "target": "com.amazonaws.licensemanager#LicenseCountingType",
  "traits": {
    "smithy.api#documentation": "<p>Dimension used to track the license inventory.</p>",
    "smithy.api#required": {}
  }
},
"LicenseCount": {
  "target": "com.amazonaws.licensemanager#BoxLong",
  "traits": {
    "smithy.api#documentation": "<p>Number of licenses managed by the license configuration.</p>"
  }
},
"LicenseCountHardLimit": {
  "target": "com.amazonaws.licensemanager#BoxBoolean",
  "traits": {
    "smithy.api#documentation": "<p>Indicates whether hard or soft license enforcement is used. Exceeding a hard limit\n blocks the launch of new instances.</p>"
  }
},
"LicenseRules": {
  "target":
"com.amazonaws.licensemanager#StringList",
  "traits": {
    "smithy.api#documentation": "<p>License rules. The syntax is #name=value (for example, #allowedTenancy=EC2-DedicatedHost). The available rules \n vary by dimension, as follows.</p>\n
<ul>\n
  <li>\n
    <p>\n
      <code>Cores</code> dimension: <code>allowedTenancy</code> |\n
      <code>licenseAffinityToHost</code> |\n
      <code>maximumCores</code> |\n
      <code>minimumCores</code>\n
    </li>\n
    <li>\n
      <p>\n
      <code>Instances</code> dimension: <code>allowedTenancy</code> |\n
      <code>maximumCores</code> |\n
      <code>minimumCores</code> |\n
      <code>maximumSockets</code> | <code>minimumSockets</code> |\n
      <code>maximumVcpus</code> | <code>minimumVcpus</code>\n
    </li>\n
    <li>\n
      <p>\n
      <code>Sockets</code> dimension: <code>allowedTenancy</code> |\n
      <code>licenseAffinityToHost</code> |\n
      <code>maximumSockets</code> |\n
      <code>minimumSockets</code>\n
    </li>\n
    <li>\n
      <p>\n
      <code>vCPUs</code> dimension: <code>allowedTenancy</code> |\n
      <code>honorVcpuOptimization</code> |\n
      <code>maximumVcpus</code> |\n
      <code>minimumVcpus</code>\n
    </li>\n
  </ul>\n
  <p>The unit for <code>licenseAffinityToHost</code> is days and the range is 1 to 180. The possible \n values for <code>allowedTenancy</code> are <code>EC2-Default</code>, <code>EC2-DedicatedHost</code>, and \n

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<code>EC2-DedicatedInstance</code>. The possible values for <code>honorVcpuOptimization</code> are \n <code>True</code> and <code>False</code>.</p>"

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    }
  },

  "Tags": {
    "target": "com.amazonaws.licensemanager#TagList",
    "traits": {
      "smithy.api#documentation": "<p>Tags to add to the license configuration.</p>"
    }
  },
  "DisassociateWhenNotFound": {
    "target": "com.amazonaws.licensemanager#BoxBoolean",
    "traits": {
      "smithy.api#documentation": "<p>When true, disassociates a resource when software is
uninstalled.</p>"
    }
  },
  "ProductInformationList": {
    "target": "com.amazonaws.licensemanager#ProductInformationList",
    "traits": {
      "smithy.api#documentation": "<p>Product information.</p>"
    }
  }
},
"traits": {
  "smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseConfigurationResponse":
{
  "type": "structure",
  "members": {
    "LicenseConfigurationArn": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest"
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    },
    "output": {
      "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
      },
      {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ServerInternalException"
      },
      {
        "target": "com.amazonaws.licensemanager#ValidationException"
      }
    ],
    "traits": {
      "smithy.api#documentation": "<p>Creates a new license conversion task.</p>"
    }
  },
  "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest": {
    "type": "structure",
    "members": {
      "ResourceArn": {
        "target": "com.amazonaws.licensemanager#Arn",
        "traits": {
          "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource you are converting the license type for.</p>",
          "smithy.api#required": {}
        }
      },
      "SourceLicenseContext": {
        "target": "com.amazonaws.licensemanager#LicenseConversionContext",
        "traits": {
          "smithy.api#documentation": "<p>Information that identifies the license type you are converting from. \n\n For the structure of the source license, see <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/conversion-procedures.html#conversion-cli\">Convert a license type using the CLI </a> in the <i>License Manager User Guide</i>.</p>",
          "smithy.api#required": {}
        }
      }
    }
  }
}

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    }
  },
  "DestinationLicenseContext":
{
  "target": "com.amazonaws.licensemanager#LicenseConversionContext",
  "traits": {
    "smithy.api#documentation": "<p>Information that identifies the license type you are converting to.
For the structure of the destination license, see <a href=\"https://docs.aws.amazon.com/license-
manager/latest/userguide/conversion-procedures.html#conversion-cli\">Convert a license type using the CLI </a> in
the <i>License Manager User Guide</i>.</p>",
    "smithy.api#required": {}
  }
}
},
"traits": {
  "smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse": {
  "type": "structure",
  "members": {
    "LicenseConversionTaskId": {
      "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",

"traits": {
  "smithy.api#documentation": "<p>The ID of the created license type conversion task.</p>"
}
}
},
"traits": {
  "smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    }
  ],

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    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    },
    {
      "target": "com.amazonaws.licensemanager#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Creates a report generator.</p>"
  }
},
"com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest": {
  "type": "structure",
  "members": {
    "ReportGeneratorName":
    {
      "target": "com.amazonaws.licensemanager#ReportGeneratorName",
      "traits": {
        "smithy.api#documentation": "<p>Name of the report generator.</p>",
        "smithy.api#required": {}
      }
    },
    "Type": {
      "target": "com.amazonaws.licensemanager#ReportTypeList",
      "traits": {
        "smithy.api#documentation": "<p>Type of reports to generate. The following report types an be generated:</p>\n
        <ul>\n
        <li>\n
        <p>License configuration report - Reports the number and details of consumed licenses for a license configuration.</p>\n
        </li>\n
        <li>\n
        <p>Resource report - Reports the tracked licenses and resource consumption for a license configuration.</p>\n
        </li>\n
        </ul>",
        "smithy.api#required": {}
      }
    }
  }
},
"ReportContext": {
  "target": "com.amazonaws.licensemanager#ReportContext",

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    "traits": {
      "smithy.api#documentation": "<p>Defines the type of license configuration the report generator
tracks.</p>",
      "smithy.api#required": {}
    }
  },
  "ReportFrequency": {
    "target": "com.amazonaws.licensemanager#ReportFrequency",
    "traits": {
      "smithy.api#documentation": "<p>Frequency by which reports are generated. Reports can be
generated daily, monthly, or weekly.</p>",
      "smithy.api#required": {}
    }
  },
  "ClientToken": {
    "target": "com.amazonaws.licensemanager#ClientRequestToken",
    "traits": {
      "smithy.api#documentation": "<p>Unique,
case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
      "smithy.api#required": {}
    }
  },
  "Description": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Description of the report generator.</p>"
    }
  },
  "Tags": {
    "target": "com.amazonaws.licensemanager#TagList",
    "traits": {
      "smithy.api#documentation": "<p>Tags to add to the report generator.</p>"
    }
  },
  "traits": {
    "smithy.api#input": {}
  }
},
"com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse": {
  "type": "structure",
  "members": {
    "LicenseManagerReportGeneratorArn":
{
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the new report
generator.</p>"

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    }
  },
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#CreateLicenseRequest": {
  "type": "structure",
  "members": {
    "LicenseName": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>License name.</p>",
        "smithy.api#required": {}
      }
    },
    "ProductName": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Product
name.</p>",
        "smithy.api#required": {}
      }
    },
    "ProductSKU": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Product SKU.</p>",
        "smithy.api#required": {}
      }
    },
    "Issuer": {
      "target": "com.amazonaws.licensemanager#Issuer",
      "traits": {
        "smithy.api#documentation": "<p>License issuer.</p>",
        "smithy.api#required": {}
      }
    },
    "HomeRegion": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Home Region for the license.</p>",
        "smithy.api#required": {}
      }
    }
  }
},
"Validity": {

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```

    "target": "com.amazonaws.licensemanager#DatetimeRange",
    "traits": {
      "smithy.api#documentation": "<p>Date and time range during which the license is valid, in ISO8601-
UTC format.</p>",
      "smithy.api#required": {}
    }
  },
  "Entitlements": {
    "target": "com.amazonaws.licensemanager#EntitlementList",
    "traits": {
      "smithy.api#documentation": "<p>License entitlements.</p>",
      "smithy.api#required": {}
    }
  },
  "Beneficiary": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>License beneficiary.</p>",
      "smithy.api#required": {}
    }
  },
  "ConsumptionConfiguration": {
    "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
    "traits": {
      "smithy.api#documentation": "<p>Configuration for consumption of the license. Choose a provisional
configuration for workloads\n      running with continuous connectivity. Choose a borrow configuration for
workloads with offline\n      usage.</p>",
      "smithy.api#required": {}
    }
  },
  "LicenseMetadata": {
    "target": "com.amazonaws.licensemanager#MetadataList",
    "traits": {
      "smithy.api#documentation": "<p>Information about the license.</p>"
    }
  },
  "ClientToken": {
    "target": "com.amazonaws.licensemanager#ClientToken",
    "traits": {
      "smithy.api#documentation":
      "<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
      "smithy.api#required": {}
    }
  }
},
"traits": {
  "smithy.api#input": {}
}

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},
"com.amazonaws.licensemanager#CreateLicenseResponse": {
  "type": "structure",
  "members": {
    "LicenseArn": {
      "target": "com.amazonaws.licensemanager#Arn",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
      }
    },
    "Status": {
      "target": "com.amazonaws.licensemanager#LicenseStatus",
      "traits": {
        "smithy.api#documentation": "<p>License status.</p>"
      }
    },
    "Version": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>License version.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#CreateLicenseVersion": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#CreateLicenseVersionRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#CreateLicenseVersionResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#ConflictException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    }
  ],

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    {
      "target": "com.amazonaws.licensemanager#RedirectException"
    },
    {
      "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    },
    {
      "target": "com.amazonaws.licensemanager#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Creates a new version of the specified license.</p>"
  }
},
"com.amazonaws.licensemanager#CreateLicenseVersionRequest": {
  "type": "structure",
  "members": {
    "LicenseArn": {
      "target":
"com.amazonaws.licensemanager#Arn",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
        "smithy.api#required": {}
      }
    },
    "LicenseName": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>License name.</p>",
        "smithy.api#required": {}
      }
    },
    "ProductName": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Product name.</p>",
        "smithy.api#required": {}
      }
    },
    "Issuer": {
      "target": "com.amazonaws.licensemanager#Issuer",
      "traits": {
        "smithy.api#documentation": "<p>License issuer.</p>",
        "smithy.api#required": {}
      }
    }
  }
}

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    }
  },
  "HomeRegion": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Home Region of the license.</p>",
      "smithy.api#required": {}
    }
  },
  "Validity": {
    "target": "com.amazonaws.licensemanager#DatetimeRange",
    "traits": {
      "smithy.api#documentation": "<p>Date and time range during which the license is valid, in ISO8601-
UTC format.</p>",
      "smithy.api#required": {}
    }
  },
  "LicenseMetadata": {
    "target": "com.amazonaws.licensemanager#MetadataList",
    "traits": {
      "smithy.api#documentation": "<p>Information about the license.</p>"
    }
  },
  "Entitlements": {
    "target": "com.amazonaws.licensemanager#EntitlementList",
    "traits": {
      "smithy.api#documentation": "<p>License entitlements.</p>",
      "smithy.api#required": {}
    }
  },
  "ConsumptionConfiguration": {
    "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
    "traits": {
      "smithy.api#documentation": "<p>Configuration for consumption of the license. Choose a provisional
configuration for workloads\n    running with continuous connectivity. Choose a borrow configuration for
workloads with offline\n    usage.</p>",
      "smithy.api#required": {}
    }
  },
  "Status": {
    "target": "com.amazonaws.licensemanager#LicenseStatus",
    "traits": {
      "smithy.api#documentation": "<p>License status.</p>",
      "smithy.api#required": {}
    }
  },
  "ClientToken": {

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        "target": "com.amazonaws.licensemanager#ClientToken",
        "traits": {
            "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the
idempotency of the request.</p>",
            "smithy.api#required": {}
        }
    },
    "SourceVersion": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
            "smithy.api#documentation": "<p>Current version of the license.</p>"
        }
    }
},
"traits": {

"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseVersionResponse": {
    "type": "structure",
    "members": {
        "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>License ARN.</p>"
            }
        },
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>New version of the license.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#LicenseStatus",
            "traits": {
                "smithy.api#documentation": "<p>License status.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output":
    {}
}
},
"com.amazonaws.licensemanager#CreateToken": {
    "type": "operation",

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"input": {
  "target": "com.amazonaws.licensemanager#CreateTokenRequest"
},
"output": {
  "target": "com.amazonaws.licensemanager#CreateTokenResponse"
},
"errors": [
  {
    "target": "com.amazonaws.licensemanager#AccessDeniedException"
  },
  {
    "target": "com.amazonaws.licensemanager#AuthorizationException"
  },
  {
    "target": "com.amazonaws.licensemanager#RateLimitExceededException"
  },
  {
    "target": "com.amazonaws.licensemanager#RedirectException"
  },
  {
    "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
  },
  {
    "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
  },
  {
    "target": "com.amazonaws.licensemanager#ServerInternalException"
  },
  {
    "target": "com.amazonaws.licensemanager#ValidationException"
  }
],
"traits": {
  "smithy.api#documentation": "<p>Creates a long-lived token.</p>\n      <p>A refresh token is a JWT token used to get an access token. With an access token,\n      you can call AssumeRoleWithWebIdentity to get role credentials that you can use to\n      call License Manager to manage the specified license.</p>"
}
},
"com.amazonaws.licensemanager#CreateTokenRequest": {
  "type": "structure",
  "members": {
    "LicenseArn": {
      "target": "com.amazonaws.licensemanager#Arn",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license. The ARN is mapped to the aud claim of the\n      JWT token.</p>",

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    "smithy.api#required": {}
  },
  "RoleArns": {
    "target": "com.amazonaws.licensemanager#ArnList",
    "traits": {
      "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the IAM roles to embed in the
token. \n License Manager does not check whether the roles are in use.</p>"
    }
  },
  "ExpirationInDays": {
    "target": "com.amazonaws.licensemanager#Integer",
    "traits": {
      "smithy.api#documentation": "<p>Token expiration, in days, counted from token creation. The
default is 365 days.</p>"
    }
  },
  "TokenProperties": {
    "target": "com.amazonaws.licensemanager#MaxSize3StringList",
    "traits": {
      "smithy.api#documentation": "<p>Data specified by the caller to be included in the JWT token. The
data is mapped\n to the amr claim of the JWT token.</p>"
    }
  },
  "ClientToken": {
    "target": "com.amazonaws.licensemanager#ClientToken",
    "traits": {
      "smithy.api#documentation": "<p>Idempotency token, valid for 10 minutes.</p>",
      "smithy.api#required": {}
    }
  },
  "traits": {
    "smithy.api#input": {}
  },
  "com.amazonaws.licensemanager#CreateTokenResponse": {
    "type": "structure",
    "members": {
      "TokenId": {
        "target": "com.amazonaws.licensemanager#String",

        "traits": {
          "smithy.api#documentation": "<p>Token ID.</p>"
        }
      },
      "TokenType": {
        "target": "com.amazonaws.licensemanager#TokenType",

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    "traits": {
      "smithy.api#documentation": "<p>Token type.</p>"
    }
  },
  "Token": {
    "target": "com.amazonaws.licensemanager#TokenString",
    "traits": {
      "smithy.api#documentation": "<p>Refresh token, encoded as a JWT token.</p>"
    }
  }
},
"traits": {
  "smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#DateTime": {
  "type": "timestamp"
},
"com.amazonaws.licensemanager#DatetimeRange": {
  "type": "structure",
  "members": {
    "Begin": {
      "target": "com.amazonaws.licensemanager#ISO8601DateTime",
      "traits": {
        "smithy.api#documentation": "<p>Start of the time range.</p>",
        "smithy.api#required": {}
      }
    },
    "End": {
      "target": "com.amazonaws.licensemanager#ISO8601DateTime",
      "traits": {
        "smithy.api#documentation": "<p>End of the time range.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>Describes a time range, in ISO8601-UTC format.</p>"
  }
},
"com.amazonaws.licensemanager#DeleteGrant": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#DeleteGrantRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#DeleteGrantResponse"
  },
  "errors": [

```



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    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    },
    {
      "target": "com.amazonaws.licensemanager#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Deletes
the specified grant.</p>"
  }
},
"com.amazonaws.licensemanager#DeleteGrantRequest": {
  "type": "structure",
  "members": {
    "GrantArn": {
      "target": "com.amazonaws.licensemanager#Arn",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
        "smithy.api#required": {}
      }
    },
    "StatusReason": {
      "target": "com.amazonaws.licensemanager#StatusReasonMessage",
      "traits": {
        "smithy.api#documentation": "<p>The Status reason for the delete request.</p>"
      }
    }
  },
  "Version": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Current version of the

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grant.<p>",
    "smithy.api#required": {}
  }
},
"traits": {
  "smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#DeleteGrantResponse": {
  "type": "structure",
  "members": {
    "GrantArn": {
      "target": "com.amazonaws.licensemanager#Arn",
      "traits": {
        "smithy.api#documentation": "<p>Grant ARN.</p>"
      }
    },
    "Status": {
      "target": "com.amazonaws.licensemanager#GrantStatus",
      "traits": {
        "smithy.api#documentation": "<p>Grant status.</p>"
      }
    },
    "Version": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation":
"<p>Grant version.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#DeleteLicense": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#DeleteLicenseRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#DeleteLicenseResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    }
  ],

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    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#ConflictException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    }
  ],
  {
    "target": "com.amazonaws.licensemanager#RateLimitExceededException"
  },
  {
    "target": "com.amazonaws.licensemanager#RedirectException"
  },
  {
    "target": "com.amazonaws.licensemanager#ServerInternalException"
  },
  {
    "target": "com.amazonaws.licensemanager#ValidationException"
  }
],
"traits": {
  "smithy.api#documentation": "<p>Deletes the specified license.</p>"
}
},
"com.amazonaws.licensemanager#DeleteLicenseConfiguration": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse"
  },
}
"errors": [
  {
    "target": "com.amazonaws.licensemanager#AccessDeniedException"
  },
  {
    "target": "com.amazonaws.licensemanager#AuthorizationException"
  },
  {
    "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
  },
  {
    "target": "com.amazonaws.licensemanager#RateLimitExceededException"
  }
]

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    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Deletes the specified license configuration.</p>\n    <p>You cannot delete a license configuration that is in use.</p>"
  }
},
"com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest": {
  "type": "structure",
  "members":
{
  "LicenseConfigurationArn": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>ID of the license configuration.</p>",
      "smithy.api#required": {}
    }
  }
},
  "traits": {
    "smithy.api#input": {}
  }
},
"com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse": {
  "type": "structure",
  "members": {},
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    }
  ],

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    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    },
    {
      "target": "com.amazonaws.licensemanager#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Deletes the specified report generator.</p>\n    <p>This action deletes the report generator, which stops it from generating future reports.\n    The action cannot be reversed. It has no effect on the previous reports from this generator.</p>"
  }
},
"com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest": {
  "type": "structure",
  "members": {
    "LicenseManagerReportGeneratorArn": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator to be deleted.</p>",
        "smithy.api#required": {}
      }
    }
  },
  "traits": {
    "smithy.api#input": {}
  }
},
"com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse": {
  "type": "structure",
  "members": {},
  "traits": {
    "smithy.api#output": {}
  }
}

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    },
    "com.amazonaws.licensemanager#DeleteLicenseRequest": {
      "type": "structure",
      "members": {
        "LicenseArn": {
          "target": "com.amazonaws.licensemanager#Arn",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
            "smithy.api#required": {}
          }
        },
        "SourceVersion": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Current version of the license.</p>",
            "smithy.api#required": {}
          }
        }
      }
    },
    "traits": {
      "smithy.api#input": {}
    }
  },
  "com.amazonaws.licensemanager#DeleteLicenseResponse": {
    "type": "structure",
    "members": {
      "Status": {
        "target": "com.amazonaws.licensemanager#LicenseDeletionStatus",
        "traits": {
          "smithy.api#documentation": "<p>License status.</p>"
        }
      },
      "DeletionDate": {
        "target": "com.amazonaws.licensemanager#ISO8601DateTime",
        "traits": {
          "smithy.api#documentation": "<p>Date when the license is deleted.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanager#DeleteToken": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#DeleteTokenRequest"
    }
  }
}

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    },
    "output": {
      "target": "com.amazonaws.licensemanager#DeleteTokenResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#RedirectException"
      },
      {
        "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
      },
      {
        "target": "com.amazonaws.licensemanager#ServerInternalException"
      },
      {
        "target": "com.amazonaws.licensemanager#ValidationException"
      }
    ],
    "traits": {
      "smithy.api#documentation": "<p>Deletes the specified token. Must be called in the license home
Region.</p>"
    }
  },
  "com.amazonaws.licensemanager#DeleteTokenRequest": {
    "type": "structure",
    "members": {
      "TokenId": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Token ID.</p>",
          "smithy.api#required": {}
        }
      }
    },
    "traits": {
      "smithy.api#input": {}
    }
  },
},

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```

"com.amazonaws.licensemanager#DeleteTokenResponse": {
  "type": "structure",
  "members": {},
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#DigitalSignatureMethod": {
  "type": "enum",
  "members": {
    "JWT_PS384": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "JWT_PS384"
      }
    }
  }
},
"com.amazonaws.licensemanager#Entitlement": {
  "type": "structure",
  "members": {
    "Name": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Entitlement name.</p>",
        "smithy.api#required": {}
      }
    },
    "Value": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Entitlement resource. Use only
if the unit is None.</p>"
      }
    },
    "MaxCount": {
      "target": "com.amazonaws.licensemanager#Long",
      "traits": {
        "smithy.api#documentation": "<p>Maximum entitlement count. Use if the unit is not None.</p>"
      }
    },
    "Overage": {
      "target": "com.amazonaws.licensemanager#BoxBoolean",
      "traits": {
        "smithy.api#documentation": "<p>Indicates whether overages are allowed.</p>"
      }
    }
  }
},

```



```

    "Unit": {
      "target": "com.amazonaws.licensemanager#EntitlementUnit",
      "traits": {
        "smithy.api#documentation": "<p>Entitlement unit.</p>",
        "smithy.api#required": {}
      }
    },
    "AllowCheckIn": {
      "target":
"com.amazonaws.licensemanager#BoxBoolean",
      "traits": {
        "smithy.api#documentation": "<p>Indicates whether check-ins are allowed.</p>"
      }
    },
    "traits": {
      "smithy.api#documentation": "<p>Describes a resource entitled for use with a license.</p>"
    }
  },
  "com.amazonaws.licensemanager#EntitlementData": {
    "type": "structure",
    "members": {
      "Name": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Entitlement data name.</p>",
          "smithy.api#required": {}
        }
      },
      "Value": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Entitlement
data value.</p>"
        }
      }
    },
    "Unit": {
      "target": "com.amazonaws.licensemanager#EntitlementDataUnit",
      "traits": {
        "smithy.api#documentation": "<p>Entitlement data unit.</p>",
        "smithy.api#required": {}
      }
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>Data associated with an entitlement resource.</p>"
  }
},

```

```

"com.amazonaws.licensemanager#EntitlementDataList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanager#EntitlementData"
  }
},
"com.amazonaws.licensemanager#EntitlementDataUnit": {
  "type": "enum",
  "members": {
    "COUNT": {
      "target": "smithy.api#Unit",
      "traits": {
"smithy.api#enumValue": "Count"
      }
    },
    "NONE": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "None"
      }
    },
    "SECONDS": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "Seconds"
      }
    },
    "MICROSECONDS": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "Microseconds"
      }
    },
    "MILLISECONDS": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "Milliseconds"
      }
    },
    "BYTES": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "Bytes"
      }
    },
    "KILOBYTES": {
      "target": "smithy.api#Unit",

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    "traits": {
      "smithy.api#enumValue": "Kilobytes"
    }
  },
  "MEGABYTES": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Megabytes"
    }
  },
  "GIGABYTES": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Gigabytes"
    }
  },
  "TERABYTES": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Terabytes"
    }
  },
  "BITS":
{
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "Bits"
  }
},
  "KILOBITS": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Kilobits"
    }
  },
  "MEGABITS": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Megabits"
    }
  },
  "GIGABITS": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Gigabits"
    }
  },
  "TERABITS": {

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    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Terabits"
    }
  },
  "PERCENT": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Percent"
    }
  },
  "BYTES_PER_SECOND": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Bytes/Second"
    }
  },
  "KILOBYTES_PER_SECOND": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Kilobytes/Second"
    }
  },
  "MEGABYTES_PER_SECOND": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Megabytes/Second"
    }
  },
  "GIGABYTES_PER_SECOND": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Gigabytes/Second"
    }
  },
  "TERABYTES_PER_SECOND": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Terabytes/Second"
    }
  },
  "BITS_PER_SECOND": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Bits/Second"
    }
  },

```

```

"KILOBITS_PER_SECOND": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "Kilobits/Second"
  }
},
"MEGABITS_PER_SECOND": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue":
"Megabits/Second"
  }
},
"GIGABITS_PER_SECOND": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "Gigabits/Second"
  }
},
"TERABITS_PER_SECOND": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "Terabits/Second"
  }
},
"COUNT_PER_SECOND": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "Count/Second"
  }
}
},
"com.amazonaws.licensemanager#EntitlementList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanager#Entitlement"
  }
},
"com.amazonaws.licensemanager#EntitlementNotAllowedException":
{
  "type": "structure",
  "members": {
    "Message": {
      "target": "com.amazonaws.licensemanager#Message"
    }
  },
  "traits": {

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```

    "smithy.api#documentation": "<p>The entitlement is not allowed.</p>",
    "smithy.api#error": "client",
    "smithy.api#httpError": 400
  }
},
"com.amazonaws.licensemanager#EntitlementUnit": {
  "type": "enum",
  "members": {
    "COUNT": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "Count"
      }
    },
    "NONE": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "None"
      }
    },
    "SECONDS": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "Seconds"
      }
    },
    "MICROSECONDS": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "Microseconds"
      }
    },
    "MILLISECONDS": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "Milliseconds"
      }
    },
    "BYTES": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "Bytes"
      }
    },
    "KILOBYTES": {
      "target": "smithy.api#Unit",
      "traits": {

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    "smithy.api#enumValue": "Kilobytes"
  }
},
"MEGABYTES": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "Megabytes"
  }
},
"GIGABYTES": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "Gigabytes"
  }
},
"TERABYTES": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "Terabytes"
  }
},
"BITS": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "Bits"
  }
},
"KILOBITS": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "Kilobits"
  }
},
"MEGABITS": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "Megabits"
  }
},
"GIGABITS": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "Gigabits"
  }
},
"TERABITS": {
  "target": "smithy.api#Unit",

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    "traits": {
      "smithy.api#enumValue": "Terabits"
    }
  },
  "PERCENT": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Percent"
    }
  },
  "BYTES_PER_SECOND": {
    "target":
"smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Bytes/Second"
    }
  },
  "KILOBYTES_PER_SECOND": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Kilobytes/Second"
    }
  },
  "MEGABYTES_PER_SECOND": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Megabytes/Second"
    }
  },
  "GIGABYTES_PER_SECOND": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Gigabytes/Second"
    }
  },
  "TERABYTES_PER_SECOND": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Terabytes/Second"
    }
  },
  "BITS_PER_SECOND": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Bits/Second"
    }
  },

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```

"KILOBITS_PER_SECOND": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "Kilobits/Second"
  }
},
"MEGABITS_PER_SECOND": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "Megabits/Second"
  }
},
"GIGABITS_PER_SECOND": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "Gigabits/Second"
  }
},

"TERABITS_PER_SECOND": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "Terabits/Second"
  }
},
"COUNT_PER_SECOND": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "Count/Second"
  }
}
},
"com.amazonaws.licensemanager#EntitlementUsage": {
  "type": "structure",
  "members": {
    "Name": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Entitlement usage name.</p>",
        "smithy.api#required": {}
      }
    },
    "ConsumedValue": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Resource usage consumed.</p>",

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        "smithy.api#required": {}
    },
    "MaxCount": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
            "smithy.api#documentation": "<p>Maximum entitlement usage count.</p>"
        }
    },
    "Unit": {
        "target": "com.amazonaws.licensemanager#EntitlementDataUnit",
        "traits": {
            "smithy.api#documentation": "<p>Entitlement usage unit.</p>",
            "smithy.api#required": {}
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Usage associated with an entitlement resource.</p>"
    },
    "com.amazonaws.licensemanager#EntitlementUsageList":
    {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#EntitlementUsage"
        }
    },
    "com.amazonaws.licensemanager#ExtendLicenseConsumption": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            }
        ]
    }
}

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    },
    {
      "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    },
    {
      "target": "com.amazonaws.licensemanager#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Extends the expiration date for license consumption.</p>"
  }
},
"com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest": {
  "type": "structure",
  "members": {
    "LicenseConsumptionToken": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>License consumption token.</p>",
        "smithy.api#required": {}
      }
    }
  },
  "DryRun": {
    "target": "com.amazonaws.licensemanager#Boolean",
    "traits": {
      "smithy.api#default": false,
      "smithy.api#documentation": "<p>Checks whether you have the required permissions for the action, without actually making the request. Provides an error response if you do not have the required permissions.</p>"
    }
  }
},
"traits": {
  "smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse": {
  "type": "structure",
  "members": {
    "LicenseConsumptionToken": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>License consumption token.</p>"
      }
    }
  },

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    "Expiration": {
      "target": "com.amazonaws.licensemanager#ISO8601DateTime",
      "traits": {
        "smithy.api#documentation": "<p>Date and time at which the license consumption expires.</p>"
      }
    },
    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanager#FailedDependencyException": {
    "type": "structure",
    "members": {
      "Message": {
        "target": "com.amazonaws.licensemanager#Message"
      },
      "ErrorCode": {
        "target": "com.amazonaws.licensemanager#String"
      }
    },
    "traits": {
      "aws.protocols#awsQueryError": {
        "code": "FailedDependency",
        "httpResponseCode": 424
      },
      "smithy.api#documentation":
        "<p>A dependency required to run the API is missing.</p>",
      "smithy.api#error": "client",
      "smithy.api#httpError": 424
    }
  },
  "com.amazonaws.licensemanager#Filter": {
    "type": "structure",
    "members": {
      "Name": {
        "target": "com.amazonaws.licensemanager#FilterName",
        "traits": {
          "smithy.api#documentation": "<p>Name of the filter. Filter names are case-sensitive.</p>"
        }
      },
      "Values": {
        "target": "com.amazonaws.licensemanager#FilterValues",
        "traits": {
          "smithy.api#documentation": "<p>The value of the filter, which is case-sensitive. You can only specify one value for the filter.</p>"
        }
      }
    }
  }
}

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    }
  },
  "traits": {
    "smithy.api#documentation": "<p>A filter
name and value pair that is used to return more specific results from a\n    describe operation. Filters can be used
to match a set of resources by specific criteria,\n    such as tags, attributes, or IDs.</p>"
  }
},
"com.amazonaws.licensemanager#FilterLimitExceededException": {
  "type": "structure",
  "members": {
    "Message": {
      "target": "com.amazonaws.licensemanager#Message"
    }
  },
  "traits": {
    "aws.protocols#awsQueryError": {
      "code": "FilterLimitExceeded",
      "httpResponseCode": 400
    },
    "smithy.api#documentation": "<p>The request uses too many filters or too many filter values.</p>",
    "smithy.api#error": "client",
    "smithy.api#httpError": 400
  }
},
"com.amazonaws.licensemanager#FilterList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanager#Filter"
  }
},
"com.amazonaws.licensemanager#FilterName": {
  "type": "string"
},
"com.amazonaws.licensemanager#FilterValue": {
  "type": "string"
},
"com.amazonaws.licensemanager#FilterValues": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanager#FilterValue",
    "traits": {
      "smithy.api#xmlName": "item"
    }
  }
},
"com.amazonaws.licensemanager#Filters": {
  "type": "list",

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"member": {
  "target": "com.amazonaws.licensemanager#Filter",
  "traits": {
    "smithy.api#xmlName": "item"
  }
},
"com.amazonaws.licensemanager#GetAccessToken": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#GetAccessTokenRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#GetAccessTokenResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    },
    {
      "target": "com.amazonaws.licensemanager#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Gets a temporary access token to use with
AssumeRoleWithWebIdentity. Access
tokens\n    are valid for one hour.</p>"
  }
},
"com.amazonaws.licensemanager#GetAccessTokenRequest": {
  "type": "structure",
  "members": {
    "Token": {
      "target": "com.amazonaws.licensemanager#TokenString",
      "traits": {
        "smithy.api#documentation": "<p>Refresh token, encoded as a JWT token.</p>",
        "smithy.api#required": {}
      }
    }
  },

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    "TokenProperties": {
      "target": "com.amazonaws.licensemanager#MaxSize3StringList",
      "traits": {
        "smithy.api#documentation": "<p>Token properties to validate against those present in the JWT
token.</p>"
      }
    },
    "traits": {
      "smithy.api#input": {}
    }
  },
  "com.amazonaws.licensemanager#GetAccessTokenResponse":
{
  "type": "structure",
  "members": {
    "AccessToken": {
      "target": "com.amazonaws.licensemanager#TokenString",
      "traits": {
        "smithy.api#documentation": "<p>Temporary access token.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#GetGrant": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#GetGrantRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#GetGrantResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    }
  ],
  {
    "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
  },
  {
    "target": "com.amazonaws.licensemanager#RateLimitExceededException"
  }
}

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    },
    {
      "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    },
    {
      "target": "com.amazonaws.licensemanager#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Gets detailed information about the specified grant.</p>"
  }
},
"com.amazonaws.licensemanager#GetGrantRequest": {
  "type": "structure",
  "members": {
    "GrantArn": {
      "target": "com.amazonaws.licensemanager#Arn",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
        "smithy.api#required": {}
      }
    },
    "Version": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Grant version.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#input": {}
  }
},
"com.amazonaws.licensemanager#GetGrantResponse": {
  "type": "structure",
  "members": {
    "Grant": {
      "target": "com.amazonaws.licensemanager#Grant",
      "traits": {
        "smithy.api#documentation": "<p>Grant details.</p>"
      }
    }
  },
  "traits": {

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"smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#GetLicense": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#GetLicenseRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#GetLicenseResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    }
  ],
  {
    "target": "com.amazonaws.licensemanager#ValidationException"
  }
],
"traits": {
  "smithy.api#documentation": "<p>Gets detailed information about the specified license.</p>"
}
},
"com.amazonaws.licensemanager#GetLicenseConfiguration": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#GetLicenseConfigurationRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#GetLicenseConfigurationResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
  ],

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    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Gets detailed information about the specified license configuration.</p>"
  }
},
"com.amazonaws.licensemanager#GetLicenseConfigurationRequest": {
  "type": "structure",
  "members": {
    "LicenseConfigurationArn": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>",
        "smithy.api#required": {}
      }
    }
  },
  "traits":
{
  "smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#GetLicenseConfigurationResponse": {
  "type": "structure",
  "members": {
    "LicenseConfigurationId": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Unique ID for the license configuration.</p>"
      }
    },
    "LicenseConfigurationArn": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
      }
    }
  }
}

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    }
  },
  "Name": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Name of the license configuration.</p>"
    }
  },
  "Description": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Description of the license configuration.</p>"
    }
  },
  "LicenseCountingType": {
    "target": "com.amazonaws.licensemanager#LicenseCountingType",
    "traits": {
      "smithy.api#documentation": "<p>Dimension for which the licenses are counted.</p>"
    }
  },
  "LicenseRules": {
    "target": "com.amazonaws.licensemanager#StringList",
    "traits": {
      "smithy.api#documentation": "<p>License rules.</p>"
    }
  },
  "LicenseCount": {
    "target": "com.amazonaws.licensemanager#BoxLong",

    "traits": {
      "smithy.api#documentation": "<p>Number of available licenses.</p>"
    }
  },
  "LicenseCountHardLimit": {
    "target": "com.amazonaws.licensemanager#BoxBoolean",
    "traits": {
      "smithy.api#documentation": "<p>Sets the number of available licenses as a hard limit.</p>"
    }
  },
  "ConsumedLicenses": {
    "target": "com.amazonaws.licensemanager#BoxLong",
    "traits": {
      "smithy.api#documentation": "<p>Number of licenses assigned to resources.</p>"
    }
  },
  "Status": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {

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    "smithy.api#documentation": "<p>License configuration status.</p>"
  }
},
"OwnerAccountId": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>Account ID of the owner of the license configuration.</p>"
  }
},
"ConsumedLicenseSummaryList": {
  "target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
  "traits": {
    "smithy.api#documentation": "<p>Summaries of the licenses consumed by resources.</p>"
  }
},
"ManagedResourceSummaryList": {
  "target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
  "traits": {
    "smithy.api#documentation": "<p>Summaries of the managed resources.</p>"
  }
},
"Tags": {
  "target": "com.amazonaws.licensemanager#TagList",
  "traits": {
    "smithy.api#documentation": "<p>Tags for the license configuration.</p>"
  }
},
"ProductInformationList": {
  "target": "com.amazonaws.licensemanager#ProductInformationList",
  "traits": {
    "smithy.api#documentation": "<p>Product information.</p>"
  }
},
"AutomatedDiscoveryInformation": {
  "target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
  "traits": {
    "smithy.api#documentation": "<p>Automated discovery information.</p>"
  }
},
"DisassociateWhenNotFound": {
  "target": "com.amazonaws.licensemanager#BoxBoolean",
  "traits": {
    "smithy.api#documentation": "<p>When
true, disassociates a resource when software is uninstalled.</p>"
  }
}
},

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    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanager#GetLicenseConversionTask": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#GetLicenseConversionTaskRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#GetLicenseConversionTaskResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
      },
      {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ServerInternalException"
      }
    ],
    "traits": {
      "smithy.api#documentation": "<p>Gets information about the specified license type conversion task.</p>"
    }
  },
  "com.amazonaws.licensemanager#GetLicenseConversionTaskRequest": {
    "type": "structure",
    "members": {
      "LicenseConversionTaskId": {
        "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
        "traits": {
          "smithy.api#documentation": "<p>ID of the license type conversion task to retrieve information on.</p>",
          "smithy.api#required": {}
        }
      }
    }
  },
  "traits": {
    "smithy.api#input": {}
  }
}

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    }
  },
  "com.amazonaws.licensemanager#GetLicenseConversionTaskResponse": {
    "type": "structure",
    "members": {
      "LicenseConversionTaskId": {
        "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
        "traits": {
          "smithy.api#documentation": "<p>ID of the license type conversion task.</p>"
        }
      },
      "ResourceArn": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the resources the license
conversion task is associated with.</p>"
        }
      },
      "SourceLicenseContext": {
        "target": "com.amazonaws.licensemanager#LicenseConversionContext",
        "traits": {
          "smithy.api#documentation": "<p>Information
about the license type converted from.</p>"
        }
      },
      "DestinationLicenseContext": {
        "target": "com.amazonaws.licensemanager#LicenseConversionContext",
        "traits": {
          "smithy.api#documentation": "<p>Information about the license type converted to.</p>"
        }
      },
      "StatusMessage": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>The status message for the conversion task.</p>"
        }
      },
      "Status": {
        "target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
        "traits": {
          "smithy.api#documentation": "<p>Status of the license type conversion task.</p>"
        }
      }
    },
    "StartTime": {
      "target": "com.amazonaws.licensemanager#DateTime",
      "traits": {
        "smithy.api#documentation": "<p>Time at which the license type conversion task was started .</p>"
      }
    }
  }
}

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    }
  },
  "LicenseConversionTime": {
    "target": "com.amazonaws.licensemanager#DateTime",
    "traits": {
      "smithy.api#documentation": "<p>Amount of time to complete the license type conversion.</p>"
    }
  },
  "EndTime": {
    "target": "com.amazonaws.licensemanager#DateTime",
    "traits": {
      "smithy.api#documentation": "<p>Time at which the license type conversion task was
completed.</p>"
    }
  },
  "traits": {
    "smithy.api#output": {}
  },
  "com.amazonaws.licensemanager#GetLicenseManagerReportGenerator":
{
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
    }
  ]
}

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    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    },
    {
      "target": "com.amazonaws.licensemanager#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Gets information about the specified report generator.</p>"
  }
},
"com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest": {
  "type": "structure",
  "members": {
    "LicenseManagerReportGeneratorArn": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator.</p>",
        "smithy.api#required":
      }
    }
  },
  "traits": {
    "smithy.api#input": {}
  }
},
"com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse": {
  "type": "structure",
  "members": {
    "ReportGenerator": {
      "target": "com.amazonaws.licensemanager#ReportGenerator",
      "traits": {
        "smithy.api#documentation": "<p>A report generator that creates periodic reports about your license configurations.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#GetLicenseRequest": {
  "type": "structure",
  "members": {
    "LicenseArn": {
      "target": "com.amazonaws.licensemanager#Arn",

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    "traits": {
"smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
      "smithy.api#required": {}
    },
    "Version": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>License version.</p>"
      }
    },
    "traits": {
      "smithy.api#input": {}
    },
  },
  "com.amazonaws.licensemanager#GetLicenseResponse": {
    "type": "structure",
    "members": {
      "License": {
        "target": "com.amazonaws.licensemanager#License",
        "traits": {
          "smithy.api#documentation": "<p>License details.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#output": {}
    },
  },
  "com.amazonaws.licensemanager#GetLicenseUsage": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#GetLicenseUsageRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#GetLicenseUsageResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {

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        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
        "target": "com.amazonaws.licensemanager#ServerInternalException"
    },
    {
"target": "com.amazonaws.licensemanager#ValidationException"
    }
],
"traits": {
    "smithy.api#documentation": "<p>Gets detailed information about the usage of the specified license.</p>"
}
},
"com.amazonaws.licensemanager#GetLicenseUsageRequest": {
    "type": "structure",
    "members": {
        "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#GetLicenseUsageResponse": {
    "type": "structure",
    "members": {
        "LicenseUsage": {
            "target":
"com.amazonaws.licensemanager#LicenseUsage",
            "traits": {
                "smithy.api#documentation": "<p>License usage details.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#GetServiceSettings": {

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"type": "operation",
"input": {
  "target": "com.amazonaws.licensemanager#GetServiceSettingsRequest"
},
"output": {
  "target": "com.amazonaws.licensemanager#GetServiceSettingsResponse"
},
"errors": [
  {
    "target": "com.amazonaws.licensemanager#AccessDeniedException"
  },
  {
    "target": "com.amazonaws.licensemanager#AuthorizationException"
  },
  {
    "target": "com.amazonaws.licensemanager#RateLimitExceededException"
  },
  {
    "target": "com.amazonaws.licensemanager#ServerInternalException"
  }
],
"traits": {
  "smithy.api#documentation": "<p>Gets the License Manager settings for the current Region.</p>"
}
},
"com.amazonaws.licensemanager#GetServiceSettingsRequest": {
  "type": "structure",
  "members": {},
  "traits": {
    "smithy.api#input": {}
  }
},
"com.amazonaws.licensemanager#GetServiceSettingsResponse": {
  "type": "structure",
  "members": {
    "S3BucketArn": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Regional S3 bucket path for storing reports, license trail event data,
discovery data,\n    and so on.</p>"
      }
    }
  },
  "SnsTopicArn": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>SNS topic configured to receive notifications from License
Manager.</p>"
    }
  }
}

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    }
  },
  "OrganizationConfiguration": {
    "target": "com.amazonaws.licensemanager#OrganizationConfiguration",
    "traits": {
      "smithy.api#documentation": "<p>Indicates whether Organizations is integrated with License
Manager for\n      cross-account discovery.</p>"
    }
  },
  "EnableCrossAccountsDiscovery": {
    "target": "com.amazonaws.licensemanager#BoxBoolean",
    "traits": {
      "smithy.api#documentation": "<p>Indicates whether cross-account discovery is enabled.</p>"
    }
  },
},
"LicenseManagerResourceShareArn": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource share. The License
Manager management account \n      provides member accounts with access to this share.</p>"
  }
}
},
"traits": {
  "smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#Grant": {
  "type": "structure",
  "members": {
    "GrantArn": {
      "target": "com.amazonaws.licensemanager#Arn",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
        "smithy.api#required": {}
      }
    }
  },
  "GrantName": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Grant name.</p>",
      "smithy.api#required": {}
    }
  },
  "ParentArn": {
    "target": "com.amazonaws.licensemanager#Arn",

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    "traits": {
      "smithy.api#documentation": "<p>Parent ARN.</p>",
      "smithy.api#required": {}
    }
  },
  "LicenseArn": {
    "target": "com.amazonaws.licensemanager#Arn",
    "traits": {
      "smithy.api#documentation": "<p>License ARN.</p>",
      "smithy.api#required": {}
    }
  },
  "GranteePrincipalArn": {
    "target": "com.amazonaws.licensemanager#Arn",
    "traits": {

"smithy.api#documentation": "<p>The grantee principal ARN.</p>",
      "smithy.api#required": {}
    }
  },
  "HomeRegion": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Home Region of the grant.</p>",
      "smithy.api#required": {}
    }
  },
  "GrantStatus": {
    "target": "com.amazonaws.licensemanager#GrantStatus",
    "traits": {
      "smithy.api#documentation": "<p>Grant status.</p>",
      "smithy.api#required": {}
    }
  },
  "StatusReason": {
    "target": "com.amazonaws.licensemanager#StatusReasonMessage",
    "traits": {
      "smithy.api#documentation": "<p>Grant status reason.</p>"
    }
  },
  "Version": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Grant version.</p>",
      "smithy.api#required": {}
    }
  },
  "GrantedOperations": {

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    "target": "com.amazonaws.licensemanager#AllowedOperationList",
    "traits": {
      "smithy.api#documentation": "<p>Granted operations.</p>",
      "smithy.api#required": {}
    }
  },
  "Options": {
    "target": "com.amazonaws.licensemanager#Options",
    "traits": {
      "smithy.api#documentation": "<p>The options specified for the grant.</p>"
    }
  }
},
"traits": {
  "smithy.api#documentation":
"<p>Describes a grant.</p>"
}
},
"com.amazonaws.licensemanager#GrantList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanager#Grant"
  }
},
"com.amazonaws.licensemanager#GrantStatus": {
  "type": "enum",
  "members": {
    "PENDING_WORKFLOW": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "PENDING_WORKFLOW"
      }
    },
    "PENDING_ACCEPT": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "PENDING_ACCEPT"
      }
    },
    "REJECTED": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "REJECTED"
      }
    }
  }
},
"ACTIVE": {
  "target": "smithy.api#Unit",

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    "traits": {
      "smithy.api#enumValue": "ACTIVE"
    }
  },
  "FAILED_WORKFLOW": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "FAILED_WORKFLOW"
    }
  },
  "DELETED": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "DELETED"
    }
  },
  "PENDING_DELETE": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "PENDING_DELETE"
    }
  },
  "DISABLED": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "DISABLED"
    }
  },
  "WORKFLOW_COMPLETED": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "WORKFLOW_COMPLETED"
    }
  }
},
"com.amazonaws.licensemanager#GrantedLicense": {
  "type": "structure",
  "members": {
    "LicenseArn": {
      "target": "com.amazonaws.licensemanager#Arn",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
      }
    },
    "LicenseName": {
      "target": "com.amazonaws.licensemanager#String",

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    "traits": {
      "smithy.api#documentation": "<p>License name.</p>"
    }
  },
  "ProductName": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Product name.</p>"
    }
  },
  "ProductSKU": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Product SKU.</p>"
    }
  },
  "Issuer": {
    "target": "com.amazonaws.licensemanager#IssuerDetails",
    "traits": {
      "smithy.api#documentation": "<p>Granted license issuer.</p>"
    }
  },
  "HomeRegion": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Home Region of the granted license.</p>"
    }
  },
  "Status": {
    "target": "com.amazonaws.licensemanager#LicenseStatus",
    "traits": {
      "smithy.api#documentation": "<p>Granted license status.</p>"
    }
  },
  "Validity": {
    "target": "com.amazonaws.licensemanager#DatetimeRange",
    "traits": {
      "smithy.api#documentation": "<p>Date and time range during which the granted license is valid, in ISO8601-UTC format.</p>"
    }
  },
  "Beneficiary": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Granted license beneficiary.</p>"
    }
  }
}

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```

    },
    "Entitlements": {
      "target": "com.amazonaws.licensemanager#EntitlementList",
      "traits": {
        "smithy.api#documentation": "<p>License entitlements.</p>"
      }
    },
    "ConsumptionConfiguration": {
      "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
      "traits": {
        "smithy.api#documentation": "<p>Configuration for consumption of the license.</p>"
      }
    },
    "LicenseMetadata": {
      "target": "com.amazonaws.licensemanager#MetadataList",
      "traits": {
        "smithy.api#documentation": "<p>Granted license metadata.</p>"
      }
    },
    "CreateTime": {
      "target": "com.amazonaws.licensemanager#ISO8601DateTime",
      "traits": {
        "smithy.api#documentation": "<p>Creation time of the granted license.</p>"
      }
    }
  }
},
"Version": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>Version of the granted license.</p>"
  }
},
"ReceivedMetadata": {
  "target": "com.amazonaws.licensemanager#ReceivedMetadata",
  "traits": {
    "smithy.api#documentation": "<p>Granted license received metadata.</p>"
  }
}
},
"traits": {
  "smithy.api#documentation": "<p>Describes a license that is granted to a grantee.</p>"
}
},
"com.amazonaws.licensemanager#GrantedLicenseList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanager#GrantedLicense"
  }
}

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    },
    "com.amazonaws.licensemanager#ISO8601DateTime":
    {
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
            },
            "smithy.api#pattern": "^(-(?:[1-9][0-9]*)?[0-9]{4})-(1[0-2]|0[1-9])-(3[0-1]|0[1-9]|[1-2][0-9])T(2[0-3]|[0-1][0-9]):([0-5][0-9]):([0-5][0-9])(\\.([0-9]+)?(?:Z|[-+](?:2[ 0-3]|[0-1][0-9]):[0-5][0-9])+)?"
        }
    },
    "com.amazonaws.licensemanager#Integer": {
        "type": "integer"
    },
    "com.amazonaws.licensemanager#InvalidParameterValueException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "InvalidParameterValueProvided",
                "httpResponseCode": 400
            },
            "smithy.api#documentation":
            "<p>One or more parameter values are not valid.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    },
    "com.amazonaws.licensemanager#InvalidResourceStateException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "InvalidResourceState",
                "httpResponseCode": 400
            },
            "smithy.api#documentation": "<p>License Manager cannot allocate a license to a resource because of its state.</p>\n    <p>For example, you cannot allocate a license to an instance in the process of shutting\n

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down.</p>",
  "smithy.api#error": "client",
  "smithy.api#httpError": 400
}
},

"com.amazonaws.licensemanager#InventoryFilter": {
  "type": "structure",
  "members": {
    "Name": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Name of the filter.</p>",
        "smithy.api#required": {}
      }
    },
    "Condition": {
      "target": "com.amazonaws.licensemanager#InventoryFilterCondition",
      "traits": {
        "smithy.api#documentation": "<p>Condition of the filter.</p>",
        "smithy.api#required": {}
      }
    },
    "Value": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Value of the filter.</p>"
      }
    }
  }
},

"traits": {
  "smithy.api#documentation": "<p>An inventory filter.</p>"
}
},

"com.amazonaws.licensemanager#InventoryFilterCondition": {
  "type": "enum",
  "members": {
    "EQUALS": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "EQUALS"
      }
    },
    "NOT_EQUALS": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "NOT_EQUALS"
      }
    }
  }
}

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    }
  },
  "BEGINS_WITH": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "BEGINS_WITH"
    }
  },
  "CONTAINS": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "CONTAINS"
    }
  }
}
},
"com.amazonaws.licensemanager#InventoryFilterList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanager#InventoryFilter"
  }
},
"com.amazonaws.licensemanager#Issuer": {
  "type": "structure",
  "members": {
    "Name": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Issuer name.</p>",
        "smithy.api#required": {}
      }
    },
    "SignKey": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Asymmetric KMS key from Key Management Service. The KMS
key must have a key usage
of sign and verify, \n      and support the RSASSA-PSS SHA-256 signing algorithm.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>Details about the issuer of a license.</p>"
  }
},
"com.amazonaws.licensemanager#IssuerDetails": {
  "type": "structure",
  "members": {

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    "Name": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Issuer name.</p>"
      }
    },
    "SignKey": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Asymmetric KMS key from Key Management Service. The KMS
key must have a key usage of sign and verify, \n      and support the RSASSA-PSS SHA-256 signing
algorithm.</p>"
      }
    },
    "KeyFingerprint": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Issuer key fingerprint.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>Details associated with the issuer of a license.</p>"
  }
},
"com.amazonaws.licensemanager#License": {
  "type": "structure",
  "members": {
    "LicenseArn": {
      "target": "com.amazonaws.licensemanager#Arn",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
      }
    },
    "LicenseName": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>License name.</p>"
      }
    },
    "ProductName": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Product name.</p>"
      }
    },
    "ProductSKU": {

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    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Product SKU.</p>"
    }
  },
  "Issuer": {
    "target": "com.amazonaws.licensemanager#IssuerDetails",
    "traits": {
      "smithy.api#documentation": "<p>License issuer.</p>"
    }
  },
  "HomeRegion": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Home Region of the license.</p>"
    }
  },
  "Status": {
    "target": "com.amazonaws.licensemanager#LicenseStatus",
    "traits": {
      "smithy.api#documentation": "<p>License status.</p>"
    }
  },
  "Validity": {
    "target": "com.amazonaws.licensemanager#DatetimeRange",
    "traits": {
      "smithy.api#documentation": "<p>Date and time range during which the license is valid, in ISO8601-
UTC format.</p>"
    }
  },
  "Beneficiary": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>License beneficiary.</p>"
    }
  },
  "Entitlements": {
    "target": "com.amazonaws.licensemanager#EntitlementList",
    "traits": {
      "smithy.api#documentation": "<p>License entitlements.</p>"
    }
  },
  "ConsumptionConfiguration": {
    "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
    "traits": {
      "smithy.api#documentation": "<p>Configuration for consumption of the license.</p>"
    }
  }
}

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    }
  },
  "LicenseMetadata": {
    "target": "com.amazonaws.licensemanager#MetadataList",
    "traits": {
      "smithy.api#documentation": "<p>License metadata.</p>"
    }
  },
  "CreateTime": {
    "target": "com.amazonaws.licensemanager#ISO8601DateTime",
    "traits": {
      "smithy.api#documentation": "<p>License
creation time.</p>"
    }
  },
  "Version": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>License version.</p>"
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>Software license that is managed in License Manager.</p>"
  }
},
"com.amazonaws.licensemanager#LicenseConfiguration": {
  "type": "structure",
  "members": {
    "LicenseConfigurationId": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Unique ID of the license configuration.</p>"
      }
    },
    "LicenseConfigurationArn": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
      }
    },
    "Name": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Name of the license configuration.</p>"
      }
    },
    "Description": {

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    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Description of the license configuration.</p>"
    }
  },
  "LicenseCountingType": {
    "target": "com.amazonaws.licensemanager#LicenseCountingType",
    "traits": {
      "smithy.api#documentation": "<p>Dimension to use to track the license inventory.</p>"
    }
  },
  "LicenseRules": {
    "target": "com.amazonaws.licensemanager#StringList",
    "traits": {
      "smithy.api#documentation": "<p>License rules.</p>"
    }
  },
  "LicenseCount": {
    "target": "com.amazonaws.licensemanager#BoxLong",
    "traits": {
      "smithy.api#documentation": "<p>Number of licenses managed by the license configuration.</p>"
    }
  },
  "LicenseCountHardLimit": {
    "target": "com.amazonaws.licensemanager#BoxBoolean",
    "traits": {
      "smithy.api#documentation": "<p>Number of available licenses as a hard limit.</p>"
    }
  },
  "DisassociateWhenNotFound": {
    "target": "com.amazonaws.licensemanager#BoxBoolean",
    "traits": {
      "smithy.api#documentation": "<p>When true, disassociates a resource when software is
uninstalled.</p>"
    }
  },
  "ConsumedLicenses": {
    "target": "com.amazonaws.licensemanager#BoxLong",
    "traits": {
      "smithy.api#documentation": "<p>Number of licenses consumed. </p>"
    }
  },
  "Status": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Status of the license configuration.</p>"
    }
  },

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"OwnerAccountId": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>Account ID of the license configuration's owner.</p>"
  }
},
"ConsumedLicenseSummaryList": {
  "target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
  "traits": {
    "smithy.api#documentation": "<p>Summaries for licenses consumed by various resources.</p>"
  }
},
"ManagedResourceSummaryList": {
  "target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
  "traits": {
    "smithy.api#documentation": "<p>Summaries for managed resources.</p>"
  }
},
"ProductInformationList": {
  "target": "com.amazonaws.licensemanager#ProductInformationList",
  "traits": {
    "smithy.api#documentation": "<p>Product information.</p>"
  }
},
"AutomatedDiscoveryInformation": {
  "target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
  "traits": {
    "smithy.api#documentation": "<p>Automated discovery information.</p>"
  }
},
"traits": {
  "smithy.api#documentation": "<p>A license configuration is an abstraction of a customer license agreement that can be consumed and enforced by License Manager. Components include specifications for the license type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n Dedicated Instance, Dedicated Host, or all of these), host affinity (how long a VM\n must be associated with a host), and the number of licenses purchased and used.</p>"
}
},
"com.amazonaws.licensemanager#LicenseConfigurationAssociation": {
  "type": "structure",
  "members": {
    "ResourceArn": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {

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        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
    }
},
"ResourceType": {
    "target": "com.amazonaws.licensemanager#ResourceType",
    "traits": {
        "smithy.api#documentation": "<p>Type of server resource.</p>"
    }
},
"ResourceOwnerId": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
        "smithy.api#documentation": "<p>ID of the Amazon Web Services account that owns the resource
consuming licenses.</p>"
    }
},
"AssociationTime": {
    "target": "com.amazonaws.licensemanager#DateTime",
    "traits": {
        "smithy.api#documentation": "<p>Time when the license configuration was associated with the resource.</p>"
    }
},
"AmiAssociationScope": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
        "smithy.api#documentation": "<p>Scope of AMI associations. The possible value is <code>cross-
account</code>.</p>"
    }
},
"traits": {
    "smithy.api#documentation": "<p>Describes an association with a license configuration.</p>"
}
},
"com.amazonaws.licensemanager#LicenseConfigurationAssociations": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#LicenseConfigurationAssociation"
    }
},
"com.amazonaws.licensemanager#LicenseConfigurationStatus": {
    "type": "enum",
    "members":
{
    "AVAILABLE": {
        "target": "smithy.api#Unit",
        "traits": {

```

```

        "smithy.api#enumValue": "AVAILABLE"
    }
},
"DISABLED": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "DISABLED"
    }
}
},
"com.amazonaws.licensemanager#LicenseConfigurationUsage": {
    "type": "structure",
    "members": {
        "ResourceArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
            }
        },
        "ResourceType": {
            "target": "com.amazonaws.licensemanager#ResourceType",
            "traits": {
                "smithy.api#documentation": "<p>Type of resource.</p>"
            }
        },
        "ResourceStatus": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Status of the resource.</p>"
            }
        },
        "ResourceOwnerId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>ID of the account that owns the resource.</p>"
            }
        },
        "AssociationTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Time when the license configuration was initially associated with the resource.</p>"
            }
        }
    }
},

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```

"ConsumedLicenses": {
  "target": "com.amazonaws.licensemanager#BoxLong",
  "traits": {
    "smithy.api#documentation": "<p>Number of licenses consumed by the resource.</p>"
  }
},
"traits": {
  "smithy.api#documentation": "<p>Details about the usage of a resource associated with a license configuration.</p>"
},
"com.amazonaws.licensemanager#LicenseConfigurationUsageList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanager#LicenseConfigurationUsage"
  }
},
"com.amazonaws.licensemanager#LicenseConfigurations": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanager#LicenseConfiguration"
  }
},
"com.amazonaws.licensemanager#LicenseConversionContext": {
  "type": "structure",
  "members": {
    "UsageOperation": {
      "target": "com.amazonaws.licensemanager#UsageOperation",
      "traits": {
        "smithy.api#documentation": "<p>The Usage operation value that corresponds to the license type you are converting your resource from. For more information about which platforms correspond to which usage operation values see <a href='\"https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/billing-info-fields.html#billing-info\">Sample data: usage operation by platform</a>\n  </p>"
      }
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>Information about a license type conversion task.</p>"
  }
},
"com.amazonaws.licensemanager#LicenseConversionTask": {
  "type": "structure",
  "members": {
    "LicenseConversionTaskId": {

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"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
  "traits": {
    "smithy.api#documentation": "<p>The ID of the license type conversion task.</p>"
  }
},
"ResourceArn": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource associated
with the license type\n      conversion task.</p>"
  }
},
"SourceLicenseContext": {
  "target": "com.amazonaws.licensemanager#LicenseConversionContext",
  "traits": {
    "smithy.api#documentation": "<p>Information about the license type this conversion task converted
from.</p>"
  }
},
"DestinationLicenseContext": {
  "target":
"com.amazonaws.licensemanager#LicenseConversionContext",
  "traits": {
    "smithy.api#documentation": "<p>Information about the license type this conversion task converted
to.</p>"
  }
},
"Status": {
  "target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
  "traits": {
    "smithy.api#documentation": "<p>The status of the conversion task.</p>"
  }
},
"StatusMessage": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>The status message for the conversion task.</p>"
  }
},
"StartTime": {
  "target": "com.amazonaws.licensemanager#DateTime",
  "traits": {
    "smithy.api#documentation":
"<p>The time the conversion task was started at.</p>"
  }
},
"LicenseConversionTime": {
  "target": "com.amazonaws.licensemanager#DateTime",

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    "traits": {
      "smithy.api#documentation": "<p>The time the usage operation value of the resource was
changed.</p>"
    }
  },
  "EndTime": {
    "target": "com.amazonaws.licensemanager#DateTime",
    "traits": {
      "smithy.api#documentation": "<p>The time the conversion task was completed.</p>"
    }
  }
},
"traits": {
  "smithy.api#documentation": "<p>Information about a license type conversion task.</p>"
}
},
"com.amazonaws.licensemanager#LicenseConversionTaskId": {
  "type": "string",
  "traits": {

    "smithy.api#length": {
      "min": 0,
      "max": 50
    },
    "smithy.api#pattern": "^\\ct-[a-zA-Z0-9]*$"
  }
},
"com.amazonaws.licensemanager#LicenseConversionTaskStatus": {
  "type": "enum",
  "members": {
    "IN_PROGRESS": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "IN_PROGRESS"
      }
    },
    "SUCCEEDED": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "SUCCEEDED"
      }
    },
    "FAILED": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "FAILED"
      }
    }
  }
}

```

```

    }
  },
  "com.amazonaws.licensemanager#LicenseConversionTasks":
  {
    "type": "list",
    "member": {
      "target": "com.amazonaws.licensemanager#LicenseConversionTask"
    }
  },
  "com.amazonaws.licensemanager#LicenseCountingType": {
    "type": "enum",
    "members": {
      "VCPU": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "vCPU"
        }
      },
      "INSTANCE": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "Instance"
        }
      },
      "CORE": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "Core"
        }
      },
      "SOCKET": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "Socket"
        }
      }
    }
  },
  "com.amazonaws.licensemanager#LicenseDeletionStatus": {
    "type": "enum",
    "members": {
      "PENDING_DELETE": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "PENDING_DELETE"
        }
      },
      "DELETED": {

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        "target": "smithy.api#Unit",
        "traits": {
            "smithy.api#enumValue": "DELETED"
        }
    },
    "com.amazonaws.licensemanager#LicenseList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#License"
        }
    },
    "com.amazonaws.licensemanager#LicenseOperationFailure": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
                }
            },
            "ResourceType": {
                "target": "com.amazonaws.licensemanager#ResourceType",
                "traits": {
                    "smithy.api#documentation": "<p>Resource type.</p>"
                }
            },
            "ErrorMessage": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Error message.</p>"
                }
            },
            "FailureTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Failure time.</p>"
                }
            },
            "OperationName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the operation.</p>"
                }
            }
        }
    },

```



```

"ResourceOwnerId": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>ID of the Amazon Web Services account that owns the
resource.</p>"
  }
},
"OperationRequestedBy": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>The requester is \"License Manager Automated Discovery\".</p>"
  }
},
"MetadataList": {
  "target": "com.amazonaws.licensemanager#MetadataList",
  "traits": {
    "smithy.api#documentation": "<p>Reserved.</p>"
  }
},
"traits": {
  "smithy.api#documentation": "<p>Describes the failure of a license operation.</p>"
}
},
"com.amazonaws.licensemanager#LicenseOperationFailureList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanager#LicenseOperationFailure"
  }
},
"com.amazonaws.licensemanager#LicenseSpecification": {
  "type": "structure",
  "members": {
    "LicenseConfigurationArn": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",

        "smithy.api#required": {}
      }
    },
    "AmiAssociationScope": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Scope of AMI associations. The possible value is <code>cross-
account</code>.</p>"
      }
    }
  }
}

```

```

    }
  }
},
"traits": {
  "smithy.api#documentation": "<p>Details for associating a license configuration with a resource.</p>"
}
},
"com.amazonaws.licensemanager#LicenseSpecifications": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanager#LicenseSpecification"
  }
},
"com.amazonaws.licensemanager#LicenseStatus": {
  "type": "enum",
  "members": {
    "AVAILABLE": {
      "target": "smithy.api#Unit",

      "traits": {
        "smithy.api#enumValue": "AVAILABLE"
      }
    },
    "PENDING_AVAILABLE": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "PENDING_AVAILABLE"
      }
    },
    "DEACTIVATED": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "DEACTIVATED"
      }
    },
    "SUSPENDED": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "SUSPENDED"
      }
    },
    "EXPIRED": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "EXPIRED"
      }
    }
  }
},

```

```

"PENDING_DELETE": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "PENDING_DELETE"
  }
},
"DELETED": {
  "target": "smithy.api#Unit",
  "traits": {
    "smithy.api#enumValue": "DELETED"
  }
}
},
"com.amazonaws.licensemanager#LicenseUsage": {
  "type": "structure",
  "members": {
    "EntitlementUsages": {
      "target": "com.amazonaws.licensemanager#EntitlementUsageList",
      "traits": {
        "smithy.api#documentation": "<p>License entitlement usages.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>Describes the entitlement usage associated with a license.</p>"
  }
},
"com.amazonaws.licensemanager#LicenseUsageException": {
  "type": "structure",
  "members": {
    "Message": {
      "target": "com.amazonaws.licensemanager#Message"
    }
  },
  "traits": {
    "aws.protocols#awsQueryError": {
      "code": "LicenseUsageFailure",
      "httpResponseCode": 412
    },
    "smithy.api#documentation": "<p>You do not have enough licenses available to support a new resource launch.</p>",
    "smithy.api#error": "client",
    "smithy.api#httpError": 412
  }
},
"com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration": {

```

```

"type": "operation",
"input": {
  "target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest"
},
"output": {
  "target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse"
},
"errors": [
  {
    "target": "com.amazonaws.licensemanager#AccessDeniedException"
  },
  {
    "target": "com.amazonaws.licensemanager#AuthorizationException"
  },
  {
    "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
  },
  {
    "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
  },
  {
    "target": "com.amazonaws.licensemanager#RateLimitExceededException"
  },
  {
    "target": "com.amazonaws.licensemanager#ServerInternalException"
  }
],
"traits": {
  "smithy.api#documentation": "<p>Lists the resource associations for the
specified license configuration.</p>\n    <p>Resource associations need not consume licenses from a license
configuration. \n    For example, an AMI or a stopped instance might not consume a license (depending on \n
the license rules).</p>"
}
},
"com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest": {
  "type": "structure",
  "members": {
    "LicenseConfigurationArn": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of a license configuration.</p>",
        "smithy.api#required": {}
      }
    },
    "MaxResults": {
      "target": "com.amazonaws.licensemanager#BoxInteger",
      "traits": {

```

```

    "smithy.api#documentation": "<p>Maximum number of results
to return in a single call.</p>"
  }
},
"NextToken": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
  }
}
},
"traits": {
  "smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse": {
  "type": "structure",
  "members": {
    "LicenseConfigurationAssociations": {
      "target": "com.amazonaws.licensemanager#LicenseConfigurationAssociations",
      "traits": {
        "smithy.api#documentation": "<p>Information about the associations for the license
configuration.</p>"
      }
    },
    "NextToken": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Token for the next set of results.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#ListDistributedGrants": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#ListDistributedGrantsRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#ListDistributedGrantsResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    }
  ]
}

```

```

    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    },
    {
      "target": "com.amazonaws.licensemanager#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Lists the grants distributed for the specified license.</p>"
  }
},
"com.amazonaws.licensemanager#ListDistributedGrantsRequest": {
  "type": "structure",
  "members": {
    "GrantArns": {
      "target": "com.amazonaws.licensemanager#ArnList",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the grants.</p>"
      }
    },
    "Filters": {
      "target": "com.amazonaws.licensemanager#FilterList",
      "traits": {
        "smithy.api#documentation": "<p>Filters to scope the results. The following filters are supported:</p>\n
        <ul>\n
        <li>\n
        <p>\n
        <code>LicenseArn</code>\n
        </p>\n
        </li>\n
        <li>\n
        <p>\n
        <code>GrantStatus</code>\n
        </p>\n
        </li>\n
        <li>\n
        <p>\n
        <code>GranteePrincipalARN</code>\n
        </p>\n
        </li>\n
        <li>\n
        <p>\n
        <code>ProductSKU</code>\n
        </p>\n
        </li>\n
        <li>\n
        <p>\n
        <code>LicenseIssuerName</code>\n
        </p>\n
        </li>\n
        </ul>"
      }
    }
  },
  "NextToken": {
    "target": "com.amazonaws.licensemanager#String",
  }
}

```

```

    "traits": {
      "smithy.api#documentation": "<p>Token for the next set of results.</p>"
    }
  },
  "MaxResults": {
    "target": "com.amazonaws.licensemanager#MaxSize100",
    "traits": {
      "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
    }
  }
},
"traits": {
  "smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListDistributedGrantsResponse": {
  "type": "structure",
  "members": {
    "Grants": {
      "target": "com.amazonaws.licensemanager#GrantList",

"traits": {
  "smithy.api#documentation": "<p>Distributed grant details.</p>"
}
},
"NextToken": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
  }
}
},
"traits": {
  "smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse"
  },
  "errors": [
    {

```

```

"target": "com.amazonaws.licensemanager#AccessDeniedException"
  },
  {
    "target": "com.amazonaws.licensemanager#AuthorizationException"
  },
  {
    "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
  },
  {
    "target": "com.amazonaws.licensemanager#RateLimitExceededException"
  },
  {
    "target": "com.amazonaws.licensemanager#ServerInternalException"
  }
],
"traits": {
  "smithy.api#documentation": "<p>Lists the license configuration operations that failed.</p>"
}
},
"com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest": {
  "type": "structure",
  "members": {
    "LicenseConfigurationArn": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name of the license configuration.</p>",
        "smithy.api#required": {}
      }
    },
    "MaxResults": {
      "target": "com.amazonaws.licensemanager#BoxInteger",
      "traits": {
        "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
      }
    },
    "NextToken": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Token for the next set of results.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#input": {}
  }
},
"com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse":

```



```

{
  "type": "structure",
  "members": {
    "LicenseOperationFailureList": {
      "target": "com.amazonaws.licensemanager#LicenseOperationFailureList",
      "traits": {
        "smithy.api#documentation": "<p>License configuration operations that failed.</p>"
      }
    },
    "NextToken": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Token for the next set of results.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#ListLicenseConfigurations": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#ListLicenseConfigurationsRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#ListLicenseConfigurationsResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    }
  ]
}

```

```

    ],
    "traits": {
      "smithy.api#documentation": "<p>Lists the license configurations
for your account.</p>"
    }
  },
  "com.amazonaws.licensemanager#ListLicenseConfigurationsRequest": {
    "type": "structure",
    "members": {
      "LicenseConfigurationArns": {
        "target": "com.amazonaws.licensemanager#StringList",
        "traits": {
          "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the license
configurations.</p>"
        }
      },
      "MaxResults": {
        "target": "com.amazonaws.licensemanager#BoxInteger",
        "traits": {
          "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
        }
      },
      "NextToken": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Token for the next
set of results.</p>"
        }
      },
      "Filters": {
        "target": "com.amazonaws.licensemanager#Filters",
        "traits": {
          "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical
operators\n are supported:</p>\n <ul>\n <li>\n <p>\n
<code>licenseCountingType</code> - The dimension for which licenses are counted.\n Possible values are
<code>vCPU</code> | <code>Instance</code> | <code>Core</code> | <code>Socket</code>.\n Logical
operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n </li>\n <li>\n
<p>\n <code>enforceLicenseCount</code> - A Boolean value that indicates whether hard license
enforcement is used. \n Logical operators are <code>EQUALS</code> |
<code>NOT_EQUALS</code>.</p>\n
</li>\n <li>\n <p>\n <code>usagelimitExceeded</code> - A Boolean value that
indicates whether the available licenses have been exceeded. \n Logical operators are
<code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n </li>\n </ul>"
        }
      }
    }
  },
  "traits": {
    "smithy.api#input": {}
  }
}

```

```

    }
  },
  "com.amazonaws.licensemanager#ListLicenseConfigurationsResponse": {
    "type": "structure",
    "members": {
      "LicenseConfigurations": {
        "target": "com.amazonaws.licensemanager#LicenseConfigurations",
        "traits": {
          "smithy.api#documentation": "<p>Information about the license configurations.</p>"
        }
      },
      "NextToken": {
        "target": "com.amazonaws.licensemanager#String",

        "traits": {
          "smithy.api#documentation": "<p>Token for the next set of results.</p>"
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
  },
  "com.amazonaws.licensemanager#ListLicenseConversionTasks": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#ListLicenseConversionTasksRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#ListLicenseConversionTasksResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
      },
      {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ServerInternalException"
      }
    ],
  },

```

```

    "traits": {
      "smithy.api#documentation": "<p>Lists the license type conversion tasks for your account.</p>"
    }
  },
  "com.amazonaws.licensemanager#ListLicenseConversionTasksRequest": {
    "type": "structure",
    "members": {
      "NextToken": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Token for the next set of results.</p>"
        }
      },
      "MaxResults": {
        "target": "com.amazonaws.licensemanager#BoxInteger",
        "traits": {
          "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
        }
      },
      "Filters": {
        "target": "com.amazonaws.licensemanager#Filters",
        "traits": {
          "smithy.api#documentation": "<p>\n    Filters to scope the results. Valid filters are
<code>ResourceArns</code> and <code>Status</code>.\n  </p>"
        }
      }
    },
    "traits": {
      "smithy.api#input": {}
    }
  },
  "com.amazonaws.licensemanager#ListLicenseConversionTasksResponse": {
    "type": "structure",
    "members": {
      "LicenseConversionTasks": {
        "target": "com.amazonaws.licensemanager#LicenseConversionTasks",
        "traits": {
          "smithy.api#documentation": "<p>Information about the license configuration tasks for your
account.</p>"
        }
      },
      "NextToken": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Token for the next set of results.</p>"
        }
      }
    }
  }
}

```

```

    },
    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanager#ListLicenseManagerReportGenerators": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target":
"com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
      },
      {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
      },
      {
        "target": "com.amazonaws.licensemanager#ServerInternalException"
      },
      {
        "target": "com.amazonaws.licensemanager#ValidationException"
      }
    ],
    "traits": {
      "smithy.api#documentation": "<p>Lists the report generators for your account.</p>"
    }
  },
  "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest":
{
  "type": "structure",
  "members": {

```

```

    "Filters": {
      "target": "com.amazonaws.licensemanager#FilterList",
      "traits": {
        "smithy.api#documentation": "<p>Filters to scope the results. The following filters are supported:
</p>\n      <ul>\n        <li>\n          <p>\n            <code>LicenseConfigurationArn</code>\n          </li>\n        </ul>\n      }
    },
    "NextToken": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Token for the next set of results.</p>"
      }
    },
    "MaxResults": {
      "target": "com.amazonaws.licensemanager#MaxSize100",
      "traits": {
        "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
      }
    },
    "traits": {
      "smithy.api#input": {}
    },
    "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse": {
      "type": "structure",
      "members": {
        "ReportGenerators": {
          "target": "com.amazonaws.licensemanager#ReportGeneratorList",
          "traits": {
            "smithy.api#documentation": "<p>A report generator that creates periodic reports about your license
configurations.</p>"
          }
        },
        "NextToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
          }
        }
      }
    },
    "traits": {
      "smithy.api#output": {}
    },
  },

```

```

"com.amazonaws.licensemanager#ListLicenseSpecificationsForResource": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Describes the license configurations for the specified resource.</p>"
  }
},
"com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest": {
  "type": "structure",
  "members": {
    "ResourceArn": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of a resource that has an associated license configuration.</p>",
        "smithy.api#required": {}
      }
    },
    "MaxResults": {
      "target": "com.amazonaws.licensemanager#BoxInteger",
      "traits": {
        "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
      }
    },
    "NextToken": {

```

```

    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Token for the next set of results.</p>"
    }
  },
  "traits": {
    "smithy.api#input": {}
  }
},
"com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse": {
  "type": "structure",
  "members": {
    "LicenseSpecifications": {
      "target": "com.amazonaws.licensemanager#LicenseSpecifications",
      "traits": {
        "smithy.api#documentation": "<p>License configurations associated with a resource.</p>"
      }
    },
    "NextToken": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Token for the next set of results.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#ListLicenseVersions": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#ListLicenseVersionsRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#ListLicenseVersionsResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    }
  ]
}

```



```

    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Lists all versions of the specified license.</p>"
  }
},
"com.amazonaws.licensemanager#ListLicenseVersionsRequest": {
  "type": "structure",
  "members": {
    "LicenseArn": {
      "target": "com.amazonaws.licensemanager#Arn",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
        "smithy.api#required": {}
      }
    },
    "NextToken": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Token for the next set of results.</p>"
      }
    },
    "MaxResults": {
      "target": "com.amazonaws.licensemanager#MaxSize100",
      "traits": {
        "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#input": {}
  }
},
"com.amazonaws.licensemanager#ListLicenseVersionsResponse": {
  "type": "structure",
  "members": {
    "Licenses": {
      "target": "com.amazonaws.licensemanager#LicenseList",
      "traits": {
        "smithy.api#documentation": "<p>License details.</p>"
      }
    }
  },
}

```

```

"NextToken": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
  }
},
"traits": {
  "smithy.api#output": {}
},
"com.amazonaws.licensemanager#ListLicenses": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#ListLicensesRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#ListLicensesResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    },
    {
      "target": "com.amazonaws.licensemanager#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Lists the licenses for your account.</p>"
  }
},
"com.amazonaws.licensemanager#ListLicensesRequest": {
  "type": "structure",
  "members": {
    "LicenseArns": {

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```

    "target": "com.amazonaws.licensemanager#ArnList",
    "traits": {
      "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the licenses.</p>"
    }
  },

  "Filters": {
    "target": "com.amazonaws.licensemanager#FilterList",
    "traits": {
      "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n  <ul>\n    <li>\n      <p>\n        <code>Beneficiary</code>\n      </p>\n    </li>\n    <li>\n      <p>\n        <code>ProductSKU</code>\n      </p>\n    </li>\n    <li>\n      <p>\n        <code>Fingerprint</code>\n      </p>\n    </li>\n    <li>\n      <p>\n        <code>Status</code>\n      </p>\n    </li>\n  </ul>"
    }
  },
  "NextToken": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Token
for the next set of results.</p>"
    }
  },
  "MaxResults": {
    "target": "com.amazonaws.licensemanager#MaxSize100",
    "traits": {
      "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
    }
  }
},
"traits": {
  "smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListLicensesResponse": {
  "type": "structure",
  "members": {
    "Licenses": {
      "target": "com.amazonaws.licensemanager#LicenseList",
      "traits": {
        "smithy.api#documentation": "<p>License details.</p>"
      }
    }
  },
  "NextToken": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {

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"smithy.api#documentation": "<p>Token for the next set of results.</p>"
  }
}
},
"traits": {
  "smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListReceivedGrants": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#ListReceivedGrantsRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#ListReceivedGrantsResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    },
    {
      "target": "com.amazonaws.licensemanager#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Lists grants that are received. Received grants are grants created while specifying the\n    recipient as this Amazon Web Services account, your organization, or an organizational unit\n    (OU) to which this member account belongs.</p>"
  }
},
"com.amazonaws.licensemanager#ListReceivedGrantsForOrganization": {
  "type": "operation",
  "input": {

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    "target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    },
    {
      "target":
"com.amazonaws.licensemanager#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Lists the grants received for all accounts in the organization.</p>"
  }
},
"com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest": {
  "type": "structure",
  "members": {
    "LicenseArn": {
      "target": "com.amazonaws.licensemanager#Arn",
      "traits": {
        "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the received license.</p>",
        "smithy.api#required": {}
      }
    },
    "Filters": {
      "target": "com.amazonaws.licensemanager#FilterList",
      "traits": {
        "smithy.api#documentation": "<p>Filters to scope the results. The following filters are supported:</p>\n"
      }
    }
  }
}

```

```

    <ul>\n      <li>\n        <p>\n          <code>ParentArn</code>\n        </p>\n      </li>\n    </ul>\n  }
},
  "NextToken": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Token for the next set of results.</p>"
    }
  },
  "MaxResults": {
    "target": "com.amazonaws.licensemanager#MaxSize100",
    "traits": {
      "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
    }
  }
},
  "traits": {
    "smithy.api#input": {}
  }
},
"com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse":
{
  "type": "structure",
  "members": {
    "Grants": {
      "target": "com.amazonaws.licensemanager#GrantList",
      "traits": {
        "smithy.api#documentation": "<p>Lists the grants the organization has received.</p>"
      }
    },
    "NextToken": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Token for the next set of results.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#ListReceivedGrantsRequest": {
  "type": "structure",
  "members": {
    "GrantArns": {
      "target": "com.amazonaws.licensemanager#ArnList",

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    "traits": {
      "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the grants.</p>"
    }
  },
  "Filters": {
    "target": "com.amazonaws.licensemanager#FilterList",
    "traits": {
      "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n  <ul>\n    <li>\n      <p>\n        <code>ProductSKU</code>\n      </p>\n    </li>\n    <li>\n      <p>\n        <code>LicenseIssuerName</code>\n      </p>\n    </li>\n    <li>\n      <p>\n        <code>LicenseArn</code>\n      </p>\n    </li>\n    <li>\n      <p>\n        <code>GrantStatus</code>\n      </p>\n    </li>\n  </ul>\n  <code>GranterAccountId</code>\n  </p>\n  </li>\n  </ul>"
    }
  },
  "NextToken": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Token for the next set of results.</p>"
    }
  },
  "MaxResults": {
    "target": "com.amazonaws.licensemanager#MaxSize100",
    "traits": {
      "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
    }
  }
},
"traits": {
  "smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListReceivedGrantsResponse": {
  "type": "structure",
  "members": {
    "Grants": {
      "target": "com.amazonaws.licensemanager#GrantList",
      "traits": {
        "smithy.api#documentation": "<p>Received grant details.</p>"
      }
    }
  },
  "NextToken": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Token for the next set of results.</p>"
    }
  }
}

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    },
    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanager#ListReceivedLicenses": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#ListReceivedLicensesRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#ListReceivedLicensesResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
      },
      {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ServerInternalException"
      },
      {
        "target": "com.amazonaws.licensemanager#ValidationException"
      }
    ],
    "traits": {
      "smithy.api#documentation": "<p>Lists received licenses.</p>"
    }
  },
  "com.amazonaws.licensemanager#ListReceivedLicensesForOrganization":
{
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse"
  }
}

```



```

    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
      },
      {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ServerInternalException"
      },
      {
        "target": "com.amazonaws.licensemanager#ValidationException"
      }
    ],
    "traits": {
      "smithy.api#documentation": "<p>Lists the licenses received for all accounts in the organization.</p>"
    }
  },
  "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest": {
    "type": "structure",
    "members": {
      "Filters": {
        "target": "com.amazonaws.licensemanager#FilterList",
        "traits": {
          "smithy.api#documentation": "<p>Filters to scope the results. The following filters are supported:</p>\n
          <ul>\n
            <li>\n
              <p>\n
                <code>Beneficiary</code>\n
              </li>\n
            <li>\n
              <p>\n
                <code>ProductSKU</code>\n
              </p>\n
            </li>\n
          </ul>"
        }
      },
      "NextToken": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Token for the next set of results.</p>"
        }
      }
    },
    "MaxResults": {

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```

    "target": "com.amazonaws.licensemanager#MaxSize100",
    "traits": {
      "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
    }
  },
  "traits": {
    "smithy.api#input": {}
  }
},
"com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse": {
  "type": "structure",
  "members": {
    "Licenses": {
      "target": "com.amazonaws.licensemanager#GrantedLicenseList",
      "traits": {
        "smithy.api#documentation": "<p>Lists the licenses the organization has received.</p>"
      }
    },
    "NextToken": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Token for the next set of results.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#ListReceivedLicensesRequest": {
  "type": "structure",
  "members": {
    "LicenseArns": {
      "target": "com.amazonaws.licensemanager#ArnList",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the licenses.</p>"
      }
    }
  },
  "traits": {
    "Filters": {
      "target": "com.amazonaws.licensemanager#FilterList",
      "traits": {
        "smithy.api#documentation": "<p>Filters to scope the results. The following filters are supported:</p>\n
        <ul>\n
          <li>\n
            <p>\n
              <code>ProductSKU</code>\n
            </li>\n
          <li>\n
            <p>\n
              <code>Status</code>\n
            </li>\n
          <li>\n
            <p>\n
              <code>Fingerprint</code>\n
            </li>\n
          <li>\n
            <p>\n
              <code>IssuerName</code>\n
            </li>\n
        </ul>\n
      }
    }
  }
}

```

```

<code>Beneficiary</code>\n      </p>\n    </li>\n  </ul>"
  }
},
"NextToken": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
  }
},
"MaxResults": {
  "target": "com.amazonaws.licensemanager#MaxSize100",
  "traits": {
    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
  }
}
},
"traits": {
  "smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListReceivedLicensesResponse": {
  "type": "structure",
  "members": {
    "Licenses": {
      "target": "com.amazonaws.licensemanager#GrantedLicenseList",
      "traits": {
        "smithy.api#documentation": "<p>Received license details.</p>"
      }
    }
  },
  "NextToken": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Token for the next set of results.</p>"
    }
  }
},
"traits": {
  "smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListResourceInventory": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#ListResourceInventoryRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#ListResourceInventoryResponse"
  }
}

```

```

    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#FailedDependencyException"
      },
      {
        "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
      },
      {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ServerInternalException"
      }
    ],
    "traits": {
      "smithy.api#documentation": "<p>Lists resources managed using Systems Manager inventory.</p>"
    }
  },
  "com.amazonaws.licensemanager#ListResourceInventoryRequest": {
    "type": "structure",
    "members": {
      "MaxResults": {
        "target": "com.amazonaws.licensemanager#BoxInteger",
        "traits": {
          "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
        }
      },
      "NextToken": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Token for the next set of results.</p>"
        }
      }
    },
    "Filters": {
      "target": "com.amazonaws.licensemanager#InventoryFilterList",
      "traits": {
        "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical operators are supported:</p>\n      <ul>\n        <li>\n          <p>\n            <code>account_id</code>"

```

- The ID of the Amazon Web Services account that owns the resource. Logical operators are `EQUALS` | `NOT_EQUALS`.

`application_name` - The name of the application. Logical operators are `EQUALS` | `BEGINS_WITH`.

`license_included` - The type of license included. Logical operators are `EQUALS` | `NOT_EQUALS`. Possible values are `sql-server-enterprise` | `sql-server-standard` | `sql-server-web` | `windows-server-datacenter`.

`platform` - The platform of the resource. Logical operators are `EQUALS` | `BEGINS_WITH`.

`resource_id` - The ID of the resource. Logical operators are `EQUALS` | `NOT_EQUALS`.

`tag:key` - The key/value combination of a tag assigned to the resource. Logical operators are `EQUALS` (single account) or `NOT_EQUALS` (cross account).

```

    }
  },
  "traits": {
    "smithy.api#input": {}
  },
  "com.amazonaws.licensemanager#ListResourceInventoryResponse": {
    "type": "structure",
    "members": {
      "ResourceInventoryList": {
        "target": "com.amazonaws.licensemanager#ResourceInventoryList",
        "traits": {
          "smithy.api#documentation": "<p>Information about the resources.</p>"
        }
      },
      "NextToken": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Token for the next set of results.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanager#ListTagsForResource": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#ListTagsForResourceRequest"
    },
  },

```

```

"output": {
  "target": "com.amazonaws.licensemanager#ListTagsForResourceResponse"
},
"errors": [
  {
    "target": "com.amazonaws.licensemanager#AccessDeniedException"
  },
  {
    "target": "com.amazonaws.licensemanager#AuthorizationException"
  },
  {
    "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
  },
  {
    "target": "com.amazonaws.licensemanager#RateLimitExceededException"
  },
  {
    "target": "com.amazonaws.licensemanager#ServerInternalException"
  }
],
"traits": {
  "smithy.api#documentation": "<p>Lists the tags for the specified license configuration.</p>"
}
},
"com.amazonaws.licensemanager#ListTagsForResourceRequest": {
  "type": "structure",
  "members": {
    "ResourceArn": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>",
        "smithy.api#required": {}
      }
    }
  },
  "traits": {
    "smithy.api#input": {}
  }
},
"com.amazonaws.licensemanager#ListTagsForResourceResponse": {
  "type": "structure",
  "members": {
    "Tags": {
      "target": "com.amazonaws.licensemanager#TagList",
      "traits": {
        "smithy.api#documentation": "<p>Information about the tags.</p>"
      }
    }
  }
}

```

```

    }
  }
},
"traits": {
  "smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListTokens": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#ListTokensRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#ListTokensResponse"
  },
  "errors":
[
  {
    "target": "com.amazonaws.licensemanager#AccessDeniedException"
  },
  {
    "target": "com.amazonaws.licensemanager#AuthorizationException"
  },
  {
    "target": "com.amazonaws.licensemanager#RateLimitExceededException"
  },
  {
    "target": "com.amazonaws.licensemanager#ServerInternalException"
  },
  {
    "target": "com.amazonaws.licensemanager#ValidationException"
  }
],
"traits": {
  "smithy.api#documentation": "<p>Lists your tokens.</p>"
}
},
"com.amazonaws.licensemanager#ListTokensRequest": {
  "type": "structure",
  "members": {
    "TokenIds": {
      "target": "com.amazonaws.licensemanager#StringList",
      "traits": {
        "smithy.api#documentation": "<p>Token IDs.</p>"
      }
    },
  },
  "Filters": {

```

```

        "target": "com.amazonaws.licensemanager#FilterList",
        "traits": {
            "smithy.api#documentation": "<p>Filters to scope the results. The following filter is supported:</p>\n
<ul>\n      <li>\n          <p>\n              <code>LicenseArns</code>\n          </p>\n          </li>\n        </ul>\n"
        }
    },
    "NextToken": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
        }
    },
    "MaxResults": {
        "target": "com.amazonaws.licensemanager#MaxSize100",
        "traits": {
            "smithy.api#documentation":
"<p>Maximum number of results to return in a single call.</p>"
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#ListTokensResponse": {
    "type": "structure",
    "members": {
        "Tokens": {
            "target": "com.amazonaws.licensemanager#TokenList",
            "traits": {
                "smithy.api#documentation": "<p>Received token details.</p>"
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListUsageForLicenseConfiguration":
{
    "type": "operation",

```



```

"input": {
  "target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest"
},
"output": {
  "target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse"
},
"errors": [
  {
    "target": "com.amazonaws.licensemanager#AccessDeniedException"
  },
  {
    "target": "com.amazonaws.licensemanager#AuthorizationException"
  },
  {
    "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
  },
  {
    "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
  },
  {
    "target": "com.amazonaws.licensemanager#RateLimitExceededException"
  },
  {
    "target": "com.amazonaws.licensemanager#ServerInternalException"
  }
],
"traits": {
  "smithy.api#documentation": "<p>Lists all license usage records for a license configuration, displaying license consumption details by resource at a selected point in time. Use this action to audit the current license consumption for any license inventory and configuration.</p>"
}
},
"com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest": {
  "type": "structure",
  "members": {
    "LicenseConfigurationArn": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>",
        "smithy.api#required": {}
      }
    },
    "MaxResults": {
      "target": "com.amazonaws.licensemanager#BoxInteger",
      "traits": {
        "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
      }
    }
  }
}

```

```

    },
    "NextToken": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Token for the next set of results.</p>"
      }
    },
    "Filters": {
      "target": "com.amazonaws.licensemanager#Filters",
      "traits": {
        "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical
operators\n    are supported:</p>\n    <ul>\n        <li>\n            <p>\n
<code>resourceArn</code> - The ARN of the license configuration resource.\n
        Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n        </li>\n
        <li>\n            <p>\n                <code>resourceType</code> - The resource type
(<code>EC2_INSTANCE</code> | <code>EC2_HOST</code> | <code>EC2_AMI</code> |
<code>SYSTEMS_MANAGER_MANAGED_INSTANCE</code>). \n                Logical operators are
<code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n            <p>\n                <code>resourceAccount</code> - The ID of the account that owns the resource. \n                Logical operators
are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n        </li>\n    </ul>"
      }
    }
  },
  "traits": {
    "smithy.api#input": {}
  }
},
"com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse": {
  "type": "structure",
  "members": {

"LicenseConfigurationUsageList": {
  "target": "com.amazonaws.licensemanager#LicenseConfigurationUsageList",
  "traits": {
    "smithy.api#documentation": "<p>Information about the license configurations.</p>"
  }
},
"NextToken": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
  }
}
},
"traits": {
  "smithy.api#output": {}
}
},

```

```

"com.amazonaws.licensemanager#Location": {
  "type": "string"
},
"com.amazonaws.licensemanager#Long": {
  "type": "long"
},
"com.amazonaws.licensemanager#ManagedResourceSummary": {
  "type": "structure",
  "members": {
    "ResourceType":
{
    "target": "com.amazonaws.licensemanager#ResourceType",
    "traits": {
      "smithy.api#documentation": "<p>Type of resource associated with a license.</p>"
    }
  },
  "AssociationCount": {
    "target": "com.amazonaws.licensemanager#BoxLong",
    "traits": {
      "smithy.api#documentation": "<p>Number of resources associated with licenses.</p>"
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>Summary information about a managed resource.</p>"
  }
},
"com.amazonaws.licensemanager#ManagedResourceSummaryList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanager#ManagedResourceSummary"
  }
},
"com.amazonaws.licensemanager#MaxSize100": {
  "type": "integer",
  "traits": {
    "smithy.api#range": {
      "min": 1,
      "max": 100
    }
  }
},
"com.amazonaws.licensemanager#MaxSize3StringList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanager#String"
  }
},

```

```

    "traits": {
      "smithy.api#length": {
        "min": 0,
        "max": 3
      }
    },
    "com.amazonaws.licensemanager#Message": {
      "type": "string"
    },
    "com.amazonaws.licensemanager#Metadata": {
      "type": "structure",
      "members": {
        "Name": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>The key name.</p>"
          }
        },
      },
    },
    "Value": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>The value.</p>"
      }
    },
    "traits": {
      "smithy.api#documentation": "<p>Describes key/value pairs.</p>"
    },
    "com.amazonaws.licensemanager#MetadataList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanager#Metadata"
      }
    },
    "com.amazonaws.licensemanager#NoEntitlementsAllowedException": {
      "type": "structure",
      "members": {
        "Message": {
          "target": "com.amazonaws.licensemanager#Message"
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>There are no entitlements found for this license, or the entitlement maximum count is reached.</p>",

```

```

    "smithy.api#error": "client",
    "smithy.api#httpError": 400
  }
},
"com.amazonaws.licensemanager#Options": {
  "type": "structure",
  "members": {
    "ActivationOverrideBehavior": {
      "target": "com.amazonaws.licensemanager#ActivationOverrideBehavior",
      "traits": {
        "smithy.api#documentation": "<p>An activation option for your grant that determines the behavior of
activating a grant.\n      Activation options can only be used with granted licenses sourced from the Amazon Web
Services Marketplace. Additionally, the operation must specify the value of <code>ACTIVE</code> for the\n
<code>Status</code> parameter.</p>\n      <ul>\n        <li>\n          <p>As a license administrator, you can
optionally specify an\n          <code>ActivationOverrideBehavior</code> when activating a grant.</p>\n
</li>\n        <li>\n          <p>As a grantor, you can optionally specify an\n
<code>ActivationOverrideBehavior</code> when you activate a grant for a grantee\n          account in your
organization.</p>\n        </li>\n        <li>\n          <p>As a grantee, if the grantor creating the distributed
grant doesnt specify an\n          <code>ActivationOverrideBehavior</code>, you can optionally specify one
when you\n          are activating the grant.</p>\n        </li>\n      </ul>\n      <dl>\n
<dt>DISTRIBUTED_GRANTS_ONLY</dt>\n        <dd>\n          <p>Use this value to activate a grant
without replacing any member accounts\n          active grants for the same product.</p>\n        </dd>\n
<dt>ALL_GRANTS_PERMITTED_BY_ISSUER</dt>\n        <dd>\n          <p>Use this value to activate a
grant and disable other active grants in any\n          member accounts
for the same product. This action will also replace their\n          previously activated grants with this activated
grant.</p>\n        </dd>\n      </dl>"
      }
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>The options you can specify when you create a new version of a grant,
such as activation\n      override behavior. For more information, see <a
href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/granted-licenses.html\">Granted licenses in
License Manager</a> in the <i>License Manager User Guide</i>.</p>"
  }
},
"com.amazonaws.licensemanager#OrganizationConfiguration": {
  "type": "structure",
  "members": {
    "EnableIntegration": {
      "target": "com.amazonaws.licensemanager#Boolean",
      "traits": {
        "smithy.api#default": false,
        "smithy.api#documentation":
"<p>Enables Organizations integration.</p>",
        "smithy.api#required": {}
      }
    }
  }
}

```

```

    },
    "traits": {
      "smithy.api#documentation": "<p>Configuration information for Organizations.</p>"
    }
  },
  "com.amazonaws.licensemanager#PrincipalArnList": {
    "type": "list",
    "member": {
      "target": "com.amazonaws.licensemanager#Arn"
    },
    "traits": {
      "smithy.api#length": {
        "min": 1,
        "max": 1
      }
    }
  },
  "com.amazonaws.licensemanager#ProductInformation": {
    "type": "structure",
    "members": {
      "ResourceType": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Resource type. The
possible values are <code>SSM_MANAGED</code> | <code>RDS</code>.</p>",
          "smithy.api#required": {}
        }
      },
      "ProductInformationFilterList": {
        "target": "com.amazonaws.licensemanager#ProductInformationFilterList",
        "traits": {
          "smithy.api#documentation": "<p>A Product information filter consists of a
<code>ProductInformationFilterComparator</code> which is a logical operator, a
<code>ProductInformationFilterName</code> which specifies the type of filter being declared, and a
<code>ProductInformationFilterValue</code> that specifies the value to filter on. </p>\n
<p>Accepted values
for <code>ProductInformationFilterName</code> are listed here along with descriptions and valid options for
<code>ProductInformationFilterComparator</code>. </p>\n
<p>The following filters and are supported when
the resource type \n
is <code>SSM_MANAGED</code>:</p>\n
<ul>\n
<li>\n
<p>\n
<code>Application Name</code> - The name of the
application.\n
Logical operator is <code>EQUALS</code>.</p>\n
</li>\n
<li>\n
<p>\n
<code>Application Publisher</code> - The publisher of the application.\n
Logical
operator is <code>EQUALS</code>.</p>\n
</li>\n
<li>\n
<p>\n
<code>Application Version</code> - The version of the application.\n
Logical operator is
<code>EQUALS</code>.</p>\n
</li>\n
<li>\n
<p>\n
<code>Platform
Name</code> - The name of the platform.\n
Logical operator is <code>EQUALS</code>.</p>\n
</li>\n
<li>\n
<p>\n
<code>Platform Type</code> - The platform type.\n
Logical operator is <code>EQUALS</code>.</p>\n

```

`Tag:key` - The key of a tag attached to an Amazon Web Services resource you wish to exclude from automated discovery. Logical operator is `NOT_EQUALS`. The key for your tag must be appended to `Tag:` following the example: `Tag:name-of-your-key`. `ProductInformationFilterValue` is optional if you are not using values for the key.

`AccountId` - The 12-digit ID of an Amazon Web Services account you wish to exclude from automated discovery. Logical operator is `NOT_EQUALS`.

`License Included` - The type of license included. Logical operators are `EQUALS` and `NOT_EQUALS`. Possible values are: `sql-server-enterprise` | `sql-server-standard` | `sql-server-web` | `windows-server-datacenter`.

The following filters and logical operators are supported when the resource type is `RDS`:

- `Engine Edition` - The edition of the database engine. Logical operator is `EQUALS`. Possible values are: `oracle-ee` | `oracle-se` | `oracle-se1` | `oracle-se2`.
- `License Pack` - The license pack. Logical operator is `EQUALS`. Possible values are: `data guard` | `diagnostic pack sqlt` | `tuning pack sqlt` | `ols` | `olap`.

```

</li>\n      </ul>",
      "smithy.api#required": {}
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>Describes product information for a license configuration.</p>"
  },
  "com.amazonaws.licensemanager#ProductInformationFilter": {
    "type": "structure",
    "members": {
      "ProductInformationFilterName": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Filter name.</p>",
          "smithy.api#required": {}
        }
      },
      "ProductInformationFilterValue": {
        "target": "com.amazonaws.licensemanager#StringList",
        "traits": {
          "smithy.api#documentation": "<p>Filter value.</p>"
        }
      },
      "ProductInformationFilterComparator": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {

```

```

        "smithy.api#documentation": "<p>Logical operator.</p>",
        "smithy.api#required": {}
    }
}
},
"traits": {
    "smithy.api#documentation": "<p>Describes product information filters.</p>"
}
},
"com.amazonaws.licensemanager#ProductInformationFilterList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ProductInformationFilter"
    }
},
"com.amazonaws.licensemanager#ProductInformationList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ProductInformation"
    }
},
"com.amazonaws.licensemanager#ProvisionalConfiguration": {
    "type": "structure",
    "members": {
        "MaxTimeToLiveInMinutes": {
            "target": "com.amazonaws.licensemanager#BoxInteger",
            "traits": {
                "smithy.api#documentation": "<p>Maximum time for the provisional configuration, in minutes.</p>",
                "smithy.api#required": {}
            }
        }
    }
},
"traits": {
    "smithy.api#documentation": "<p>Details about a provisional configuration.</p>"
}
},
"com.amazonaws.licensemanager#RateLimitExceededException": {
    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    }
},
"traits": {
    "aws.protocols#awsQueryError": {
        "code": "RateLimitExceeded",
        "httpResponseCode": 429
    }
},

```



```

    "smithy.api#documentation": "<p>Too many requests have been submitted. Try again after a brief
wait.</p>",
    "smithy.api#error": "client",
    "smithy.api#httpError": 429
  }
},
"com.amazonaws.licensemanager#ReceivedMetadata": {
  "type": "structure",
  "members": {
    "ReceivedStatus": {
      "target": "com.amazonaws.licensemanager#ReceivedStatus",
      "traits": {
        "smithy.api#documentation": "<p>Received status.</p>"
      }
    },
    "ReceivedStatusReason": {
      "target": "com.amazonaws.licensemanager#StatusReasonMessage",
      "traits": {
        "smithy.api#documentation": "<p>Received
status reason.</p>"
      }
    },
    "AllowedOperations": {
      "target": "com.amazonaws.licensemanager#AllowedOperationList",
      "traits": {
        "smithy.api#documentation": "<p>Allowed operations.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>Metadata associated with received licenses and grants.</p>"
  }
},
"com.amazonaws.licensemanager#ReceivedStatus": {
  "type": "enum",
  "members": {
    "PENDING_WORKFLOW": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "PENDING_WORKFLOW"
      }
    },
    "PENDING_ACCEPT": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue":
"PENDING_ACCEPT"
      }
    }
  }
}

```

```

    },
    "REJECTED": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "REJECTED"
      }
    },
    "ACTIVE": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "ACTIVE"
      }
    },
    "FAILED_WORKFLOW": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "FAILED_WORKFLOW"
      }
    },
    "DELETED": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "DELETED"
      }
    },
    "DISABLED": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "DISABLED"
      }
    },
    "WORKFLOW_COMPLETED": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "WORKFLOW_COMPLETED"
      }
    }
  }
},
"com.amazonaws.licensemanager#RedirectException": {
  "type": "structure",
  "members": {
    "Location": {
      "target": "com.amazonaws.licensemanager#Location",
      "traits": {
        "smithy.api#httpHeader": "Location"
      }
    }
  },

```

```

    "Message": {
      "target": "com.amazonaws.licensemanager#Message"
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>This is not the correct Region for the resource. Try again.</p>",
    "smithy.api#error": "client",
    "smithy.api#httpError": 308
  }
},
"com.amazonaws.licensemanager#RejectGrant": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#RejectGrantRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#RejectGrantResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target":
"com.amazonaws.licensemanager#ResourceLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    },
    {
      "target": "com.amazonaws.licensemanager#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Rejects the specified grant.</p>"
  }
},
"com.amazonaws.licensemanager#RejectGrantRequest": {
  "type": "structure",

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"members": {
  "GrantArn": {
    "target": "com.amazonaws.licensemanager#Arn",
    "traits": {
      "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
      "smithy.api#required": {}
    }
  }
},
"traits": {
  "smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#RejectGrantResponse": {
  "type": "structure",
  "members": {
    "GrantArn": {
      "target": "com.amazonaws.licensemanager#Arn",
      "traits": {
        "smithy.api#documentation": "<p>Grant ARN.</p>"
      }
    },
    "Status": {
      "target": "com.amazonaws.licensemanager#GrantStatus",
      "traits": {
        "smithy.api#documentation": "<p>Grant status.</p>"
      }
    },
    "Version": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Grant version.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#RenewType":
{
  "type": "enum",
  "members": {
    "NONE": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "None"
      }
    }
  }
}

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    }
  },
  "WEEKLY": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Weekly"
    }
  },
  "MONTHLY": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Monthly"
    }
  }
}
},
"com.amazonaws.licensemanager#ReportContext": {
  "type": "structure",
  "members": {
    "licenseConfigurationArns": {
      "target": "com.amazonaws.licensemanager#ArnList",
      "traits": {

        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration that this
generator reports on.</p>",
        "smithy.api#required": {}
      }
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>Details of the license configuration that this generator reports on.</p>"
  }
},
"com.amazonaws.licensemanager#ReportFrequency": {
  "type": "structure",
  "members": {
    "value": {
      "target": "com.amazonaws.licensemanager#Integer",
      "traits": {
        "smithy.api#documentation": "<p>Number of times within the frequency period that a report is
generated. \n    The only supported value is <code>1</code>.</p>"
      }
    }
  },
  "period": {
    "target": "com.amazonaws.licensemanager#ReportFrequencyType",

    "traits": {
      "smithy.api#documentation": "<p>Time period between each report. The period can be daily, weekly,

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or monthly.</p>"
    }
  }
},
"traits": {
  "smithy.api#documentation": "<p>Details about how frequently reports are generated.</p>"
}
},
"com.amazonaws.licensemanager#ReportFrequencyType": {
  "type": "enum",
  "members": {
    "DAY": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "DAY"
      }
    },
    "WEEK": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "WEEK"
      }
    },
    "MONTH": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "MONTH"
      }
    }
  }
},
"com.amazonaws.licensemanager#ReportGenerator": {
  "type": "structure",
  "members": {
    "ReportGeneratorName": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Name of the report generator.</p>"
      }
    },
    "ReportType": {
      "target": "com.amazonaws.licensemanager#ReportTypeList",
      "traits": {
        "smithy.api#documentation": "<p>Type of reports that are generated.</p>"
      }
    },
    "ReportContext": {

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        "target": "com.amazonaws.licensemanager#ReportContext",
        "traits": {
            "smithy.api#documentation": "<p>License
configuration type for this generator.</p>"
        }
    },
    "ReportFrequency": {
        "target": "com.amazonaws.licensemanager#ReportFrequency",
        "traits": {
            "smithy.api#documentation": "<p>Details about how frequently reports are generated.</p>"
        }
    },
    "LicenseManagerReportGeneratorArn": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator.</p>"
        }
    },
    "LastRunStatus": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
            "smithy.api#documentation": "<p>Status of the last report generation attempt.</p>"
        }
    },
    "LastRunFailureReason":
    {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
            "smithy.api#documentation": "<p>Failure message for the last report generation attempt.</p>"
        }
    },
    "LastReportGenerationTime": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
            "smithy.api#documentation": "<p>Time the last report was generated at.</p>"
        }
    },
    "ReportCreatorAccount": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
            "smithy.api#documentation": "<p>The Amazon Web Services account ID used to create the report
generator.</p>"
        }
    },
    "Description": {
        "target": "com.amazonaws.licensemanager#String",

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"traits": {
  "smithy.api#documentation": "<p>Description of the report generator.</p>"
},
"S3Location": {
  "target": "com.amazonaws.licensemanager#S3Location",
  "traits": {
    "smithy.api#documentation": "<p>Details of the S3 bucket that report generator reports are published to.</p>"
  }
},
"CreateTime": {
  "target": "com.amazonaws.licensemanager#String",
  "traits": {
    "smithy.api#documentation": "<p>Time the report was created.</p>"
  }
},
"Tags": {
  "target": "com.amazonaws.licensemanager#TagList",
  "traits": {
    "smithy.api#documentation": "<p>Tags associated with the report generator.</p>"
  }
}
},
"traits": {
  "smithy.api#documentation": "<p>Describe the details of a report generator.</p>"
},
"com.amazonaws.licensemanager#ReportGeneratorList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanager#ReportGenerator"
  }
},
"com.amazonaws.licensemanager#ReportGeneratorName": {
  "type": "string",
  "traits": {
    "smithy.api#length": {
      "min": 1,
      "max": 100
    }
  }
},
"com.amazonaws.licensemanager#ReportType": {
  "type": "enum",
  "members": {
    "LICENSE_CONFIGURATION_SUMMARY_REPORT": {

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        "target": "smithy.api#Unit",
        "traits": {
            "smithy.api#enumValue": "LicenseConfigurationSummaryReport"
        }
    },
    "LICENSE_CONFIGURATION_USAGE_REPORT": {
        "target": "smithy.api#Unit",
        "traits": {
            "smithy.api#enumValue": "LicenseConfigurationUsageReport"
        }
    }
},
"com.amazonaws.licensemanager#ReportTypeList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ReportType"
    }
},
"com.amazonaws.licensemanager#ResourceInventory": {
    "type": "structure",
    "members": {
        "ResourceId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>ID of the resource.</p>"
            }
        },
        "ResourceType": {
            "target": "com.amazonaws.licensemanager#ResourceType",
            "traits": {
                "smithy.api#documentation": "<p>Type of resource.</p>"
            }
        },
        "ResourceArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
            }
        },
        "Platform": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Platform of the resource.</p>"
            }
        }
    }
},

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    "PlatformVersion": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Platform version of the resource in the inventory.</p>"
      }
    },
    "ResourceOwningAccountId": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>ID of the account that owns the resource.</p>"
      }
    },
    "traits": {
      "smithy.api#documentation": "<p>Details about a resource.</p>"
    },
    "com.amazonaws.licensemanager#ResourceInventoryList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanager#ResourceInventory"
      }
    },
    "com.amazonaws.licensemanager#ResourceLimitExceededException": {
      "type": "structure",
      "members": {
        "Message": {
          "target": "com.amazonaws.licensemanager#Message"
        }
      },
      "traits": {
        "aws.protocols#awsQueryError": {
          "code": "ResourceLimitExceeded",

          "httpResponseCode": 400
        },
        "smithy.api#documentation": "<p>Your resource limits have been exceeded.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
      }
    },
    "com.amazonaws.licensemanager#ResourceNotFoundException": {
      "type": "structure",
      "members": {
        "Message": {
          "target": "com.amazonaws.licensemanager#Message"
        }
      }
    }
  }

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},
"traits": {
  "aws.protocols#awsQueryError": {
    "code": "InvalidResource.NotFound",
    "httpResponseCode": 400
  },
  "smithy.api#documentation": "<p>The resource cannot be found.</p>",
  "smithy.api#error": "client",
  "smithy.api#httpError": 400
}
},
"com.amazonaws.licensemanager#ResourceType": {
  "type": "enum",
  "members": {
    "EC2_INSTANCE": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "EC2_INSTANCE"
      }
    },
    "EC2_HOST": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "EC2_HOST"
      }
    },
    "EC2_AMI": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "EC2_AMI"
      }
    },
    "RDS": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "RDS"
      }
    },
    "SYSTEMS_MANAGER_MANAGED_INSTANCE": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "SYSTEMS_MANAGER_MANAGED_INSTANCE"
      }
    }
  }
},
"com.amazonaws.licensemanager#S3Location": {
  "type": "structure",

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"members": {
  "bucket": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Name of the S3 bucket reports are published to.</p>"
    }
  },
  "keyPrefix": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Prefix of the S3 bucket reports are published to.</p>"
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>Details of the S3 bucket that report generator reports are published to.</p>"
  },
  "com.amazonaws.licensemanager#ServerInternalException": {
    "type": "structure",
    "members": {
      "Message": {
        "target": "com.amazonaws.licensemanager#Message"
      }
    },
    "traits": {
      "aws.protocols#awsQueryError": {
        "code": "InternalServerError",
        "httpResponseCode": 500
      },
      "smithy.api#documentation": "<p>The server experienced an internal error. Try again.</p>",
      "smithy.api#error": "server",
      "smithy.api#httpError": 500
    }
  },
  "com.amazonaws.licensemanager#SignedToken": {
    "type": "string",
    "traits": {
      "smithy.api#length": {
        "min": 4096
      }
    }
  },
  "com.amazonaws.licensemanager#StatusReasonMessage": {
    "type": "string",
    "traits":

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{
  "smithy.api#length": {
    "min": 0,
    "max": 400
  },
  "smithy.api#pattern": "^[\s\S]+$"
}
},
"com.amazonaws.licensemanager#String": {
  "type": "string"
},
"com.amazonaws.licensemanager#StringList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanager#String"
  }
},
"com.amazonaws.licensemanager#Tag": {
  "type": "structure",
  "members": {
    "Key": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Tag key.</p>"
      }
    },
    "Value": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation":
"<p>Tag value.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>Details about a tag for a license configuration.</p>"
  }
},
"com.amazonaws.licensemanager#TagKeyList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanager#String"
  }
},
"com.amazonaws.licensemanager#TagList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanager#Tag"
  }
}
}

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    }
  },
  "com.amazonaws.licensemanager#TagResource": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#TagResourceRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#TagResourceResponse"
    },
    "errors": [
      {
        "target":
"com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
      },
      {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ServerInternalException"
      }
    ],
    "traits": {
      "smithy.api#documentation": "<p>Adds the specified tags to the specified license configuration.</p>"
    }
  },
  "com.amazonaws.licensemanager#TagResourceRequest": {
    "type": "structure",
    "members": {
      "ResourceArn": {
        "target": "com.amazonaws.licensemanager#String",
        "traits":
{
          "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
          "smithy.api#required": {}
        }
      },
      "Tags": {
        "target": "com.amazonaws.licensemanager#TagList",
        "traits": {
          "smithy.api#documentation": "<p>One or more tags.</p>",

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        "smithy.api#required": {}
    }
}
},
"traits": {
    "smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#TagResourceResponse": {
    "type": "structure",
    "members": {},
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#TokenData": {
    "type": "structure",
    "members": {
        "TokenId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token ID.</p>"
            }
        },
        "TokenType": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Type of token generated. The supported value is
<code>REFRESH_TOKEN</code>.</p>"
            }
        },
        "LicenseArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
            }
        },
        "ExpirationTime": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Token expiration time, in ISO8601-UTC
format.</p>"
            }
        },
        "TokenProperties": {
            "target": "com.amazonaws.licensemanager#MaxSize3StringList",
            "traits": {
                "smithy.api#documentation": "<p>Data specified by the caller.</p>"
            }
        }
    }
}

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    }
  },
  "RoleArns": {
    "target": "com.amazonaws.licensemanager#ArnList",
    "traits": {
      "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the roles included in the
token.</p>"
    }
  },
  "Status": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Token status. The possible values are
<code>AVAILABLE</code> and <code>DELETED</code>.</p>"
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>Describes a token.</p>"
  }
},
"com.amazonaws.licensemanager#TokenList": {
  "type": "list",
  "member": {
    "target": "com.amazonaws.licensemanager#TokenData"
  }
},
"com.amazonaws.licensemanager#TokenString": {
  "type": "string",
  "traits": {
    "smithy.api#length": {
      "min": 0,
      "max": 4096
    },
    "smithy.api#pattern": "^\\S+$"
  }
},
"com.amazonaws.licensemanager#TokenType": {
  "type": "enum",
  "members": {
    "REFRESH_TOKEN": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "REFRESH_TOKEN"
      }
    }
  }
}

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    },
    "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException":
    {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The digital signature method is unsupported. Try your request
again.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    },
    "com.amazonaws.licensemanager#UntagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#UntagResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#UntagResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Removes the specified tags from the specified license
configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#UntagResourceRequest": {
        "type": "structure",

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"members": {
  "ResourceArn": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
      "smithy.api#required": {}
    }
  },
  "TagKeys": {
    "target": "com.amazonaws.licensemanager#TagKeyList",
    "traits": {
      "smithy.api#documentation": "<p>Keys identifying the tags to remove.</p>",
      "smithy.api#required": {}
    }
  }
},
"traits": {
  "smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UntagResourceResponse": {
  "type": "structure",
  "members": {},
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#UpdateLicenseConfiguration": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {

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        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
        "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
    },
    {
        "target": "com.amazonaws.licensemanager#ServerInternalException"
    }
],
"traits": {
    "smithy.api#documentation": "<p>Modifies the attributes of an existing license configuration.</p>"
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest": {
    "type": "structure",
    "members": {
        "LicenseConfigurationArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "configuration.</p>",
                "smithy.api#required": {}
            }
        },
        "LicenseConfigurationStatus": {
            "target": "com.amazonaws.licensemanager#LicenseConfigurationStatus",
            "traits": {
                "smithy.api#documentation": "<p>New status of the license configuration.</p>"
            }
        },
        "LicenseRules": {
            "target": "com.amazonaws.licensemanager#StringList",
            "traits": {
                "smithy.api#documentation": "<p>New license rule. The only rule that you can add after you create a license\n configuration is licenseAffinityToHost.</p>"
            }
        },
        "LicenseCount": {
            "target": "com.amazonaws.licensemanager#BoxLong",
            "traits": {
                "smithy.api#documentation": "<p>New number of licenses managed by the license\n configuration.</p>"
            }
        },
        "LicenseCountHardLimit": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
            "traits": {

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        "smithy.api#documentation": "<p>New hard limit of the number of available licenses.</p>"
    }
},
"Name": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
        "smithy.api#documentation": "<p>New name
of the license configuration.</p>"
    }
},
"Description": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
        "smithy.api#documentation": "<p>New description of the license configuration.</p>"
    }
},
"ProductInformationList": {
    "target": "com.amazonaws.licensemanager#ProductInformationList",
    "traits": {
        "smithy.api#documentation": "<p>New product information.</p>"
    }
},
"DisassociateWhenNotFound": {
    "target": "com.amazonaws.licensemanager#BoxBoolean",
    "traits": {
        "smithy.api#documentation": "<p>When true, disassociates a resource when software is
uninstalled.</p>"
    }
}
},
"traits":
{
    "smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse": {
    "type": "structure",
    "members": {},
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest"
    },
    "output": {

```

```

    "target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    },
    {
      "target": "com.amazonaws.licensemanager#ValidationException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Updates a report generator.</p>\n    <p>After you make changes to a report generator, it starts generating new reports within 60 minutes of being updated.</p>"
  },
  "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest":
  {
    "type": "structure",
    "members": {
      "LicenseManagerReportGeneratorArn": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator to update.</p>",
          "smithy.api#required": {}
        }
      },
      "ReportGeneratorName": {
        "target": "com.amazonaws.licensemanager#ReportGeneratorName",
        "traits": {

```

```

        "smithy.api#documentation": "<p>Name of the report generator.</p>",
        "smithy.api#required": {}
    }
},
"Type": {
    "target": "com.amazonaws.licensemanager#ReportTypeList",
    "traits": {
        "smithy.api#documentation":
"<p>Type of reports to generate. The following report types are supported:</p>\n    <ul>\n        <li>\n<p>License configuration report - Reports the number and details of consumed licenses for a license
configuration.</p>\n    </li>\n        <li>\n        <p>Resource report - Reports the tracked licenses and
resource consumption for a license configuration.</p>\n    </li>\n    </ul>",
        "smithy.api#required": {}
    }
},
"ReportContext": {
    "target": "com.amazonaws.licensemanager#ReportContext",
    "traits": {
        "smithy.api#documentation": "<p>The report context.</p>",
        "smithy.api#required": {}
    }
},
"ReportFrequency": {
    "target": "com.amazonaws.licensemanager#ReportFrequency",
    "traits":
{
    "smithy.api#documentation": "<p>Frequency by which reports are generated.</p>",
    "smithy.api#required": {}
}
},
"ClientToken": {
    "target": "com.amazonaws.licensemanager#ClientRequestToken",
    "traits": {
        "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the
idempotency of the request.</p>",
        "smithy.api#required": {}
    }
},
"Description": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
        "smithy.api#documentation": "<p>Description of the report generator.</p>"
    }
}
},
"traits": {
    "smithy.api#input": {}
}
}

```

```

    },
    "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse":
    {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidResourceStateException"
            },
            {
                "target": "com.amazonaws.licensemanager#LicenseUsageException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Adds or removes the specified license configurations for the specified Amazon Web Services resource.</p>\n    <p>You can update the license specifications of AMIs, instances, and hosts.\n    You cannot update the license specifications for launch templates and CloudFormation templates, \n    as they send license configurations to the operation that creates the resource.</p>"
        }
    },

```

```

"com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest": {
  "type": "structure",
  "members": {
    "ResourceArn": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon Web Services
resource.</p>",
        "smithy.api#required": {}
      }
    },
    "AddLicenseSpecifications": {
      "target": "com.amazonaws.licensemanager#LicenseSpecifications",
      "traits": {
        "smithy.api#documentation": "<p>ARNs of the license configurations to add.</p>"
      }
    },
    "RemoveLicenseSpecifications": {
      "target": "com.amazonaws.licensemanager#LicenseSpecifications",
      "traits": {
        "smithy.api#documentation":
"<p>ARNs of the license configurations to remove.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#input": {}
  }
},
"com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse": {
  "type": "structure",
  "members": {},
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#UpdateServiceSettings": {
  "type": "operation",
  "input": {
    "target": "com.amazonaws.licensemanager#UpdateServiceSettingsRequest"
  },
  "output": {
    "target": "com.amazonaws.licensemanager#UpdateServiceSettingsResponse"
  },
  "errors": [
    {
      "target": "com.amazonaws.licensemanager#AccessDeniedException"
    }
  ]
}

```



```

    },
    {
      "target": "com.amazonaws.licensemanager#AuthorizationException"
    },
    {
      "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
    },
    {
      "target": "com.amazonaws.licensemanager#RateLimitExceededException"
    },
    {
      "target": "com.amazonaws.licensemanager#ServerInternalException"
    }
  ],
  "traits": {
    "smithy.api#documentation": "<p>Updates License Manager settings for the current Region.</p>"
  }
},
"com.amazonaws.licensemanager#UpdateServiceSettingsRequest": {
  "type": "structure",
  "members": {
    "S3BucketArn": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon S3 bucket where
the License
Manager information is stored.</p>"
      }
    },
    "SnsTopicArn": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon SNS topic used
for License Manager alerts.</p>"
      }
    }
  },
  "OrganizationConfiguration": {
    "target": "com.amazonaws.licensemanager#OrganizationConfiguration",
    "traits": {
      "smithy.api#documentation": "<p>Enables integration with Organizations for cross-account
discovery.</p>"
    }
  },
  "EnableCrossAccountsDiscovery": {
    "target": "com.amazonaws.licensemanager#BoxBoolean",
    "traits": {
      "smithy.api#documentation": "<p>Activates cross-account discovery.</p>"
    }
  }
}

```

```
}
  }
},
"traits": {
  "smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#UpdateServiceSettingsResponse": {
  "type": "structure",
  "members": {},
  "traits": {
    "smithy.api#output": {}
  }
},
"com.amazonaws.licensemanager#UsageOperation": {
  "type": "string",
  "traits": {
    "smithy.api#length": {
      "min": 0,
      "max": 50
    }
  }
},
"com.amazonaws.licensemanager#ValidationException": {
  "type": "structure",
  "members": {
    "Message": {
      "target": "com.amazonaws.licensemanager#Message"
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>The provided input is not valid. Try your request again.</p>",
    "smithy.api#error": "client",
    "smithy.api#httpError": 400
  }
}
}
}
// Code generated by smithy-go-codegen DO NOT EDIT.
```

```
package licensemanager
```

```
import (
    "context"
    "fmt"
    awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
    "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
```

```

"github.com/aws/smithy-go/middleware"
smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Deletes the specified license.
func (c *Client) DeleteLicense(ctx context.Context, params *DeleteLicenseInput, optFns ...func(*Options))
(*DeleteLicenseOutput, error) {
    if params == nil {
        params = &DeleteLicenseInput{}
    }

    result, metadata, err := c.invokeOperation(ctx, "DeleteLicense", params, optFns,
c.addOperationDeleteLicenseMiddlewares)
    if err != nil {
        return nil, err
    }

    out := result.(*DeleteLicenseOutput)
    out.ResultMetadata = metadata
    return out, nil
}

type DeleteLicenseInput struct {

    // Amazon Resource Name (ARN) of the license.
    //
    // This member is required.
    LicenseArn *string

    // Current version of the license.
    //
    // This member is required.
    SourceVersion
    *string

    noSmithyDocumentSerde
}

type DeleteLicenseOutput struct {

    // Date when the license is deleted.
    DeletionDate *string

    // License status.
    Status types.LicenseDeletionStatus

    // Metadata pertaining to the operation's result.
    ResultMetadata middleware.Metadata

```

```

noSmithyDocumentSerde
}

func (c *Client) addOperationDeleteLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
if err := stack.Serialize.Add(&setOperationInputMiddleware{ }, middleware.After); err != nil {
return err
}
err = stack.Serialize.Add(&awsAwsjson11_serializeOpDeleteLicense{ }, middleware.After)
if err != nil {
return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpDeleteLicense{ }, middleware.After)
if err != nil {
return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "DeleteLicense"); err != nil {
return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addLegacyEndpointContextSetter(stack, options); err !=
nil {
return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
return err
}
if err = addClientRequestID(stack); err != nil {
return err
}
if err = addComputeContentLength(stack); err != nil {
return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
return err
}
if err = addComputePayloadSHA256(stack); err != nil {
return err
}
if err = addRetry(stack, options); err != nil {
return err
}
if err = addRawResponseToMetadata(stack); err != nil {
return err
}
if err = addRecordResponseTiming(stack); err != nil {
return err
}
}

```

```

if err = addClientUserAgent(stack, options); err != nil {
    return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
    return err
}
if err = addOpDeleteLicenseValidationMiddleware(stack);
err != nil {
    return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDeleteLicense(options.Region),
middleware.Before); err != nil {
    return err
}
if err = addRecursionDetection(stack); err != nil {
    return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
    return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
    return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
    return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
    return err
}
return nil
}

func newServiceMetadataMiddleware_opDeleteLicense(region string) *awsmiddleware.RegisterServiceMetadata {
    return &awsmiddleware.RegisterServiceMetadata{
        Region:    region,
        ServiceID: ServiceID,
        OperationName: "DeleteLicense",
    }
}

```

# 1.114 google-flatbuffers 23.1.21+incompatible

## 1.114.1 Available under license :

509d67816165f974c468fc440b39080e

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Nyffenegger [rene.nyffenegger@adp-gmbh.ch](mailto:rene.nyffenegger@adp-gmbh.ch)

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# 1.116 johncgriffin-overflow 0.0.0-20211019200055-46fa312c352c

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# overflow

Check for int/int8/int16/int64/int32 integer overflow in Golang arithmetic.

### Install

...

```
go get github.com/johncgriffin/overflow
```

...

Note that because Go has no template types, the majority of repetitive code is generated by overflow\_template.sh. If you have to change an algorithm, change it there and regenerate the Go code via:

...

```
go generate
```

...

### Synopsis

...

```
package main
```

```
import "fmt"
```

```
import "math"
```

```
import "github.com/JohnCGriffin/overflow"
```

```
func main() {
```

```
    addend := math.MaxInt64 - 5
```

```
    for i := 0; i < 10; i++ {
```

```
        sum, ok := overflow.Add(addend, i)
```

```
        fmt.Printf("%v+%v -> (%v,%v)\n",
```

```
            addend, i, sum, ok)
```

```
    }
```

```
}
```

...

yields the output

...

```
9223372036854775802+0 -> (9223372036854775802,true)
```

```
9223372036854775802+1 -> (9223372036854775803,true)
```

```
9223372036854775802+2 -> (9223372036854775804,true)
```

```
9223372036854775802+3
```

```
-> (9223372036854775805,true)
9223372036854775802+4 -> (9223372036854775806,true)
9223372036854775802+5 -> (9223372036854775807,true)
9223372036854775802+6 -> (0,false)
9223372036854775802+7 -> (0,false)
9223372036854775802+8 -> (0,false)
9223372036854775802+9 -> (0,false)
...

```

For int, int64, and int32 types, provide Add, Add32, Add64, Sub, Sub32, Sub64, etc.  
Unsigned types not covered at the moment, but such additions are welcome.

### Stay calm and panic

There's a good case to be made that a panic is an unidiomatic but proper response. If you believe that there's no valid way to continue your program after math goes wayward, you can use the easier Addp, Mulp, Subp, and Divp versions which return the normal result or panic.

---

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```
* /opt/cola/permits/1744011661_1696011379.1067798/0/overflow-46fa312c352cdb9517817d04f2067d49f418e332-
zip/overflow-46fa312c352cdb9517817d04f2067d49f418e332/README.md
```

# 1.117 github.com/johncgriffin/overflow 0.0.0-20211019200055-46fa312c352c

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```
        fmt.Printf("%v+%v -> (%v,%v)\n",
```

```
            addend, i, sum, ok)
```

```
    }
```

```
}
```

...

yields the output

...

```
9223372036854775802+0 -> (9223372036854775802,true)
```

```
9223372036854775802+1 -> (9223372036854775803,true)
```

```
9223372036854775802+2 -> (9223372036854775804,true)
```

```
9223372036854775802+3
```

```
-> (9223372036854775805,true)
9223372036854775802+4 -> (9223372036854775806,true)
9223372036854775802+5 -> (9223372036854775807,true)
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```
* /opt/cola/permits/1744011673_1699075626.9223306/0/github-com-johncgriffin-overflow-v0-0-0-20211019200055-46fa312c352c-go-zip/github.com/johncgriffin/overflow@v0.0.0-20211019200055-46fa312c352c/README.md
```

# 1.118 grpc-go 1.56.2

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## 1.119 google-golang-org-grpc 1.56.2

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# 1.120 dlclark-regex2 1.10.0

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# 1.122 github.com/relvacode/iso8601 1.3.0

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## 1.124 x-net 0.14.0

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## 1.125 protobuf 1.31.0

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## 1.126 go.uber.org/atomi 1.7.0

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## 1.127 github.com/snowflakedb/gosnowflake

### 1.6.22

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## 1.134 google-uuid 1.3.1

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Paul Borman <borman@google.com>

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theory

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## 1.138

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## 1.139 grpc-gateway 1.16.0

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## 1.140 logrus 1.9.0

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```
<one line to give the program's name and a brief idea of what it does.>  
Copyright (C) <year> <name of author>
```

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Also add information on how to contact you by electronic and paper mail.

If the program is interactive, make it output a short notice

like this

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```
Gnomovision version 69, Copyright (C) year name of author
Gnomovision comes with ABSOLUTELY NO WARRANTY; for details type `show w'.
This is free software, and you are welcome to redistribute it
under certain conditions; type `show c' for details.
```

The hypothetical commands ``show w'` and ``show c'` should show the appropriate parts of the General Public License. Of course, the commands you use may be called something other than ``show w'` and ``show c'`; they could even be mouse-clicks or menu items--whatever suits your program.

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```
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`Gnomovision' (which makes passes at compilers) written by James Hacker.
```

```
<signature of Ty Coon>, 1 April 1989
Ty Coon, President of
Vice
```

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-----  
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## 1.149 golang-snappy 0.0.4

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```
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# Name <email address>

# Please keep the list sorted.
```

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Russ Cox <rsc@golang.org>
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## 1.150 backoff 4.2.1

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## 1.151 alpine-baselayout 3.4.3-r2

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```
# Automatically generated by apkbuild-cpan, template 3
# Contributor: Valery Kartel <valery.kartel@gmail.com>
# Maintainer: Celeste <cielesti@protonmail.com>
pkgname=perl-bsd-resource
```

```

#_pkgreal is used by apkbuild-cpan to find modules at MetaCpan
_pkgreal=BSD-Resource
pkgver=1.2911
pkgrel=9
pkgdesc="Perl extension implements the BSD process resource limit functions"
url="https://metacpan.org/release/BSD-Resource/"
arch="all"
license="Artistic-2.0 OR LGPL-2.0"
depends="perl"
makedepends="perl-dev"
subpackages="$pkgname-doc"
source="https://cpan.metacpan.org/authors/id/J/JH/JHI/BSD-Resource-$pkgver.tar.gz"
builddir="$srcdir/${_pkgreal}-${pkgver}"

build() {
    export CFLAGS=$(perl -MConfig -E 'say $Config{ccflags}')
    PERL_MM_USE_DEFAULT=1 perl -I. Makefile.PL INSTALLDIRS=vendor
    make
}

check() {
    export CFLAGS=$(perl -MConfig -E 'say $Config{ccflags}')
    make test
}

package() {
    make DESTDIR="$pkgdir" install
    find "$pkgdir" \( -name perllocal.pod -o -name .packlist \) -delete
}

sha512sums="
d0032d41c7c0468ed1c6d8f57b885f6cb97a5039d754c8cb60b2067daedaf53bd15fb6561a3d0f828df16dfa5417f663b
8065ba65f4fea16dc9262728b3b6b85
  BSD-Resource-1.2911.tar.gz
"
# Contributor: Dhruvin Gandhi <contact@dhruvin.dev>
# Maintainer: Patrycja Rosa <alpine@ptrcnull.me>
pkgname=py3-license-expression
_pkgname=license-expression
pkgver=30.2.0
pkgrel=0
pkgdesc="Library to parse, compare, simplify and normalize license expressions"
url="https://github.com/nexB/license-expression"
arch="noarch"
license="Apache-2.0"
depends="python3 py3-boolean.py"
makedepends="py3-setuptools py3-setuptools_scm py3-gpep517 py3-wheel"
checkdepends="py3-pytest py3-pytest-xdist"

```

```
subpackages="$pkgname-pyc"
source="https://files.pythonhosted.org/packages/source/l/${_pkgname}/${_pkgname}-${pkgver}.tar.gz"
builddir="$srcdir/${_pkgname}-${pkgver}"
```

```
build() {
    gpep517 build-wheel \
        --wheel-dir .dist \
        --output-fd 3 3>&1 >&2
}
```

```
check() {
    python3 -m venv --clear --without-pip --system-site-packages .testenv
    .testenv/bin/python3 -m installer .dist/*.whl
    .testenv/bin/python3 -m pytest
}
```

```
package() {
    python3 -m installer -d "$pkgdir" \
        .dist/*.whl
}
```

```
sha512sums="
7be7ebab1d980063ab846a228c5247570d0e23ed52f4362ef7d88eb7a59274e6f74653b4e9cff8225597693087d750c5
bf7fcf604440d8d3d2976ebcd7442c24
```

```
license-expression-30.2.0.tar.gz
```

```
"
```

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The Kohonen neural network code for color optimization was written by Anthony Dekker.

Parts Copyright (c) 1995 by C. Blanc and C. Schlick

The X-Spline code was written Carole Blanc (blanc@labri.u-bordeaux.fr) and Christophe Schlick (schlick@labri.u-bordeaux.fr) starting from an initial implementation done by C. Feuille, S. Grosbois, L. Maziere and L. Minihot as a student practice (Universite Bordeaux, France). For additional information about X-splines, see:

"X-Splines: A Spline Model Designed for the End User" by C. Blanc and C. Schlick, Proceedings of SIGGRAPH'95

<http://dept-info.labri.u-bordeaux.fr/~schlick/DOC/sig1.html>

# Maintainer: Jakub Panek <me@panekj.dev>

pkgname=cargo-license

pkgver=0.5.1

pkgrel=4

pkgdesc="Cargo subcommand to see license of dependencies"

url="https://github.com/onur/cargo-license"

arch="all !s390x !riscv64" # rust

license="MIT"

makedepends="cargo cargo-auditable"

source="\$pkgname-\$pkgver.tar.gz::https://crates.io/api/v1/crates/cargo-license/\$pkgver/download"

prepare() {

default\_prepare

cargo fetch --target="\$CTARGET" --locked

}

build() {

cargo auditable build --release --frozen

}

check() {

cargo test --frozen

}

package() {

install -Dm755 target/release/cargo-license -t "\$pkgdir"/usr/bin

}

sha512sums="

4d8d430df91c6aac53d2305d3125eae492324e85c4db29d33d452b3848f33a55088e71247c6c72c6a62f4e924a374a

115bf14b4f398e7950b9eb52415f2244 cargo-license-0.5.1.tar.gz

"

# Contributor: Maxim Karasev <begs@disroot.org>

# Maintainer: mio <miyopan@e.email>

pkgname=bsd-games

pkgver=3.3

pkgrel=1

pkgdesc="traditional text mode games from BSD"

url="https://bsd-games.sourceforge.io/"

```

arch="all"
license="BSD-3-Clause"
install="$pkgname.post-install"
makedepends="ncurses-dev coreutils" # configure causes busybox expr error
subpackages="$pkgname-doc"
source="https://sourceforge.net/projects/bsd-games/files/bsd-games-$pkgver.tar.gz"
options="!check" # no tests

build() {
# some GNU autoconf options are ignored, but it works
./configure \
--build=$CBUILD \
--host=$CHOST \
--prefix=/usr \
--sysconfdir=/etc \
--mandir=/usr/share/man \
--localstatedir=/var/lib # it really shouldn't be in /var
make
}

package() {
make DESTDIR="$pkgdir" install
install -Dm644 LICENSE "$pkgdir"/usr/share/licenses/bsd-games/LICENSE
}

sha512sums="
aaf36d09d4fe68514a5c279063d7e77a9a9a84c447037cba974b29faa07eb80c2aab2379d0699c196b5c27ffe1b2bb2c6
8d3390143e0e62d5e3d210ccfb61294
bsd-games-3.3.tar.gz
"
# Contributor: Carlo Landmeter <clandmeter@alpinelinux.org>
# Maintainer: Kevin Daudt <kdaudt@alpinelinux.org>
pkgname=spdx-licenses
pkgver=3.22
pkgrel=0
pkgdesc="Various data formats for the SPDX License List"
url="https://spdx.org/"
arch="noarch"
options="!check" # no test suite
license="CC-BY-3.0"
source="license-list-data-$pkgver.tar.gz::https://github.com/spdx/license-list-data/archive/v$pkgver.tar.gz"
builddir="$srcdir/license-list-data-$pkgver"
subpackages="$pkgname-list"

_types="html json rdfa rdft rdfturtle rdfxml template text"

for type in $_types; do
subpackages="$subpackages $pkgname-$type:_subpkg"

```

done

```
package() {  
  mkdir -p "$pkgdir"  
}
```

```
_subpkg() {  
  local type=${subpkgname/$pkgname-/  
  pkgdesc="$pkgdesc ($type)"  
  install_if="$pkgname"  
  mkdir -p "$subpkgdir"/usr/share/spdx  
  cp -r "$builddir"/$type "$subpkgdir"/usr/share/spdx/  
}
```

```
list() {  
  pkgdesc="$pkgdesc (licence list)"  
  mkdir -p "$subpkgdir"/usr/share/spdx  
  local i; for i in "$builddir"/text/*.txt; do  
    local license=${i##*/}  
    echo  
    ${license%. *} >> "$subpkgdir"/usr/share/spdx/license.lst  
  done  
}
```

sha512sums="

b213fe66699770d75a4c994a01a5c08325751423516c2fb871088a47e7e7ce605736064f5ce3a63dc1d3c462271832db  
7bc464ac968df1888f9823787964c786 license-list-data-3.22.tar.gz  
"

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vintagedreamworks@hotmail.com

<http://www.geocities.com/SiliconValley/Campus/8645/index.html>

<http://members.nbc.com/silicon39/>

<http://www.mp3.com/silicon39>

<https://analoguesque.x10host.com/>

# Contributor: Fabian Affolter <fabian@affolter-engineering.ch>

# Maintainer: Fabian Affolter <fabian@affolter-engineering.ch>

pkgname=py3-flake8-copyright

\_pkgname=flake8-copyright

pkgver=0.2.4

pkgrel=1

pkgdesc="Extension for flake8 which checks for copyrights"

options="!check" # No testsuite

url="https://github.com/savoirfairelinux/flake8-copyright"

arch="noarch"

license="MIT"

depends="py3-flake8 py3-setuptools"

subpackages="\$pkgname-pyc"

source="https://files.pythonhosted.org/packages/source/\${\_pkgname:0:1}/\${\_pkgname}/\${\_pkgname}-\${pkgver}.tar.gz"

builddir="\$srcdir"/\$\_pkgname-\$pkgver

replaces="py-flake8-copyright" # Backwards compatibility

provides="py-flake8-copyright=\$pkgver-r\$pkgrel" # Backwards compatibility

```
build() {  
  python3 setup.py build  
}
```

```
package() {  
  python3 setup.py install --skip-build --root="$pkgdir"
```



```

}

sha512sums="
a6ab47e1bb715618f075c51f398e18180404871b3b0faf1c2d30701d5203db6bc23771bf22ffb5bafcd8ee856b9b64237
b316bd503ae7dceed6ca284ccd5a74d flake8-copyright-0.2.4.tar.gz
"

# Maintainer: Natanael Copa <ncopa@alpinelinux.org>
pkgname=libart-lgpl
pkgver=2.3.21
pkgrel=8
pkgdesc="A library for high-performance 2D graphics"
url="https://www.levien.com/libart/"
arch="all"
options="!check" # No test suite.
license="LGPL-2.0-or-later"
subpackages="$pkgname-dev"
source="https://download.gnome.org/sources/libart-lgpl/2.3/libart-lgpl-$pkgver.tar.bz2"

builddir="$srcdir"/libart-lgpl-$pkgver

prepare() {
    update_config_sub
    default_prepare
}

build() {
    ./configure \
        --build=$CBUILD \
        --host=$CHOST \
        --prefix=/usr
    make
}

package() {
    make DESTDIR="$pkgdir" install
}

sha512sums="8a632a6a4da59e5e8c02ec2f5a57e36d182b325b46513765425e5f171ff9ae326af1b133725beba28f7e7
6654309e001aee9bace727b5b4c8589405256a3c020 libart-lgpl-2.3.21.tar.bz2"
mini_sendmail - accept email on behalf of real sendmail

```

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## 1.152 musl-utils 1.2.4\_git20230717-r4

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## 1.154 gcompat 1.1.0-r4

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## 1.159 alpine-baselayout-data 3.4.3-r2

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subpackages="$pkgname-doc"
source="https://cpan.metacpan.org/authors/id/J/JH/JHI/BSD-Resource-$pkgver.tar.gz"
builddir="$srcdir/${_pkgreal}-$pkgver"

build() {
    export CFLAGS=$(perl -MConfig -E 'say $Config{ccflags}')
    PERL_MM_USE_DEFAULT=1 perl -I. Makefile.PL INSTALLDIRS=vendor
    make
}

check() {
    export CFLAGS=$(perl -MConfig -E 'say $Config{ccflags}')
    make test
}

package() {
    make DESTDIR="$pkgdir" install
    find "$pkgdir" \( -name perllocal.pod -o -name .packlist \) -delete
}
```

```

sha512sums="
d0032d41c7c0468ed1c6d8f57b885f6cb97a5039d754c8cb60b2067daedaf53bd15fb6561a3d0f828df16dfa5417f663b
8065ba65f4fea16dc9262728b3b6b85
  BSD-Resource-1.2911.tar.gz
"
# Contributor: Dhruvin Gandhi <contact@dhruvin.dev>
# Maintainer: Patrycja Rosa <alpine@ptrcnull.me>
pkgname=py3-license-expression
_pkgname=license-expression
pkgver=30.2.0
pkgrel=0
pkgdesc="Library to parse, compare, simplify and normalize license expressions"
url="https://github.com/nexB/license-expression"
arch="noarch"
license="Apache-2.0"
depends="python3 py3-boolean.py"
makedepends="py3-setuptools py3-setuptools_scm py3-gpep517 py3-wheel"
checkdepends="py3-pytest py3-pytest-xdist"
subpackages="$pkgname-pyc"
source="https://files.pythonhosted.org/packages/source/l/${_pkgname}/${_pkgname}-${pkgver}.tar.gz"
builddir="$srcdir/${_pkgname}-${pkgver}"

build() {
  gpep517 build-wheel \
    --wheel-dir .dist \
    --output-fd 3 3>&1 >&2
}

check() {
  python3 -m venv --clear --without-pip --system-site-packages .testenv
  .testenv/bin/python3 -m installer .dist/*.whl
  .testenv/bin/python3 -m pytest
}

package() {
  python3 -m installer -d "$pkgdir" \
    .dist/*.whl
}

sha512sums="
7be7ebab1d980063ab846a228c5247570d0e23ed52f4362ef7d88eb7a59274e6f74653b4e9cff8225597693087d750c5
bf7fcf604440d8d3d2976ebcd7442c24
  license-expression-30.2.0.tar.gz
"

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```

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The X-Spline code was written Carole Blanc (blanc@labri.u-bordeaux.fr) and Christophe Schlick (schlick@labri.u-bordeaux.fr) starting from an initial implementation done by C. Feuille, S. Grosbois, L. Maziere and L. Minihot as a student practice (Universite Bordeaux, France). For additional information about X-splines, see:

"X-Splines: A Spline Model Designed for the End User" by C. Blanc and C. Schlick, Proceedings of SIGGRAPH'95

<http://dept-info.labri.u-bordeaux.fr/~schlick/DOC/sig1.html>

# Maintainer: Jakub Panek <me@panekj.dev>

pkgname=cargo-license

pkgver=0.5.1

pkgrel=4

pkgdesc="Cargo subcommand to see license of dependencies"

url="https://github.com/onur/cargo-license"

arch="all !s390x !riscv64" # rust

license="MIT"

makedepends="cargo cargo-auditable"

source="\$pkgname-\$pkgver.tar.gz::https://crates.io/api/v1/crates/cargo-license/\$pkgver/download"

```
prepare() {
```

```
  default_prepare
```

```
  cargo fetch --target="$CTARGET" --locked
```

```
}
```

```
build() {
```

```
  cargo auditable build --release --frozen
```

```
}
```

```

check() {
    cargo test --frozen
}

package() {
    install -Dm755 target/release/cargo-license -t "$pkgdir"/usr/bin
}

sha512sums="
4d8d430df91c6aac53d2305d3125eae492324e85c4db29d33d452b3848f33a55088e71247c6c72c6a62f4e924a374a
115bf14b4f398e7950b9eb52415f2244 cargo-license-0.5.1.tar.gz
"

# Contributor: Maxim Karasev <begs@disroot.org>
# Maintainer: mio <miyopan@e.email>
pkgname=bsd-games
pkgver=3.3
pkgrel=1
pkgdesc="traditional text mode games from BSD"
url="https://bsd-games.sourceforge.io/"
arch="all"
license="BSD-3-Clause"
install="$pkgname.post-install"
makedepends="ncurses-dev coreutils" # configure causes busybox expr error
subpackages="$pkgname-doc"
source="https://sourceforge.net/projects/bsd-games/files/bsd-games-$pkgver.tar.gz"
options="!check" # no tests

build() {
    # some GNU autoconf options are ignored, but it works
    ./configure \
        --build=$CBUILD \
        --host=$CHOST \
        --prefix=/usr \
        --sysconfdir=/etc \
        --mandir=/usr/share/man \
        --localstatedir=/var/lib # it really shouldn't be in /var
    make
}

package() {
    make DESTDIR="$pkgdir" install
    install -Dm644 LICENSE "$pkgdir"/usr/share/licenses/bsd-games/LICENSE
}

sha512sums="
aaf36d09d4fe68514a5c279063d7e77a9a9a84c447037cba974b29faa07eb80c2aab2379d0699c196b5c27ffe1b2bb2c6
8d3390143e0e62d5e3d210ccfb61294
"

```

```

    bsd-games-3.3.tar.gz
"
# Contributor: Carlo Landmeter <clandmeter@alpinelinux.org>
# Maintainer: Kevin Daudt <kdaudt@alpinelinux.org>
pkgname=spdx-licenses
pkgver=3.22
pkgrel=0
pkgdesc="Various data formats for the SPDX License List"
url="https://spdx.org/"
arch="noarch"
options="!check" # no test suite
license="CC-BY-3.0"
source="license-list-data-$pkgver.tar.gz::https://github.com/spdx/license-list-data/archive/v$pkgver.tar.gz"
builddir="$srcdir/license-list-data-$pkgver"
subpackages="$pkgname-list"

_types="html json rdfa rdfnt rdfturtle rdfxml template text"

for type in $_types; do
    subpackages="$subpackages $pkgname-$type:_subpkg"
done

package() {
    mkdir -p "$pkgdir"
}

_subpkg() {
    local type=${subpkgname/$pkgname-/}
    pkgdesc="$pkgdesc ($type)"
    install_if="$pkgname"
    mkdir -p "$subpkgdir"/usr/share/spdx
    cp -r "$builddir"/$type "$subpkgdir"/usr/share/spdx/
}

list() {
    pkgdesc="$pkgdesc (licence list)"
    mkdir -p "$subpkgdir"/usr/share/spdx
    local i; for i in "$builddir"/text/*.txt; do
        local license=${i##*/}
        echo
        ${license%. *} >> "$subpkgdir"/usr/share/spdx/license.lst
    done
}

sha512sums="
b213fe66699770d75a4c994a01a5c08325751423516c2fb871088a47e7e7ce605736064f5ce3a63dc1d3c462271832db
7bc464ac968df1888f9823787964c786 license-list-data-3.22.tar.gz
"

```

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vintagedreamworks@hotmail.com

<http://www.geocities.com/SiliconValley/Campus/8645/index.html>

<http://members.nbc.com/silicon39/>

<http://www.mp3.com/silicon39>

<https://analoguesque.x10host.com/>

# Contributor: Fabian Affolter <fabian@affolter-engineering.ch>

# Maintainer: Fabian Affolter <fabian@affolter-engineering.ch>

pkgname=py3-flake8-copyright

\_pkgname=flake8-copyright

pkgver=0.2.4

```

pkgrel=1
pkgdesc="Extension for flake8 which checks for copyrights"
options="!check" # No testsuite
url="https://github.com/savoirfairelinux/flake8-copyright"
arch="noarch"
license="MIT"
depends="py3-flake8 py3-setuptools"
subpackages="$pkgname-pyc"
source="https://files.pythonhosted.org/packages/source/${_pkgname:0:1}/${_pkgname}/${_pkgname}-${pkgver}.tar.gz"
builddir="$srcdir"/"${_pkgname}-${pkgver}"

replaces="py-flake8-copyright" # Backwards compatibility
provides="py-flake8-copyright=${pkgver}-r${pkgrel}" # Backwards compatibility

build() {
    python3 setup.py build
}

package() {
    python3 setup.py install --skip-build --root="$pkgdir"
}

sha512sums="
a6ab47e1bb715618f075c51f398e18180404871b3b0faf1c2d30701d5203db6bc23771bf22ffb5bafcd8ee856b9b64237
b316bd503ae7dceed6ca284ccd5a74d flake8-copyright-0.2.4.tar.gz
"

mini_sendmail - accept email on behalf of real sendmail

```

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```
# Maintainer: Natanael Copa <ncopa@alpinelinux.org>
```

```
pkgname=libart-lgpl
```

```
pkgver=2.3.21
```

```
pkgrel=8
```

```
pkgdesc="A library for high-performance 2D graphics"
```

```
url="https://www.levien.com/libart/"
```

```
arch="all"
```

```
options="!check" # No test suite.
```

```
license="LGPL-2.0-or-later"
```

```
subpackages="$pkgname-dev"
```

```
source="https://download.gnome.org/sources/libart-lgpl/2.3/libart-lgpl-$pkgver.tar.bz2"
```

```
"
```

```
builddir="$srcdir"/libart-lgpl-$pkgver
```

```
prepare() {  
  update_config_sub  
  default_prepare  
}
```

```
build() {  
  ./configure \  
  --build=$CBUILD \  
  --host=$CHOST \  
  --prefix=/usr  
  make  
}
```

```
package() {  
  make DESTDIR="$pkgdir" install  
}
```

```
sha512sums="8a632a6a4da59e5e8c02ec2f5a57e36d182b325b46513765425e5f171ff9ae326af1b133725beba28f7e7  
6654309e001aee9bace727b5b4c8589405256a3c020 libart-lgpl-2.3.21.tar.bz2"
```

# 1.160 pierrec-iz4 4.1.17

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## 1.161 x-sys 0.17.0

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## 1.162 golang-set 2.5.0

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## 1.163 github.com/deckarep/golang-set/v2

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## 1.164 [github.com/sashabaranov/go-openai](https://github.com/sashabaranov/go-openai)

### 1.16.0

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Version 2.0, January 2004

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# 1.165 [github.com/pkoukk/tiktoken-go](https://github.com/pkoukk/tiktoken-go) 0.1.6

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## 1.166 pkoukk-tiktoken-go 0.1.6

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Dynamic NDArray Developers list:

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## 1.172 [github.com/aws/aws-sdk-go-v2/service/internal/s3shared](https://github.com/aws/aws-sdk-go-v2/service/internal/s3shared) 1.14.0

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# 1.173 github.com/aws/aws-sdk-go-v2/service/internal/checksum 1.1.26

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# 1.176 [github.com/aws/aws-sdk-go-v2/internal/configsources](https://github.com/aws/aws-sdk-go-v2/internal/configsources) 1.1.31

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# 1.177 [github.com/aws/aws-sdk-go-v2/service/internal/accept-encoding](https://github.com/aws/aws-sdk-go-v2/service/internal/accept-encoding) 1.9.11

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## 1.179 [github.com/aws/aws-sdk-go- v2/aws/protocol/eventstream](https://github.com/aws/aws-sdk-go-v2/aws/protocol/eventstream) 1.4.10

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# 1.180 [github.com/aws/aws-sdk-go-v2/internal/endpoints/v2](https://github.com/aws/aws-sdk-go-v2/internal/endpoints/v2) 2.4.25

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# 1.181 aws-sdk-go-v2 1.19.0

## 1.181.1 Available under license :

```
// Code generated by smithy-go-codegen DO NOT EDIT.
```

```
package licensemanager
```

```
import (  
    "context"  
    awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"  
    "github.com/aws/aws-sdk-go-v2/aws/signer/v4"  
    "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"  
    "github.com/aws/smithy-go/middleware"  
    smithyhttp "github.com/aws/smithy-go/transport/http"  
)
```

```
// Lists received licenses.
```

```
func (c *Client) ListReceivedLicenses(ctx context.Context, params *ListReceivedLicensesInput, optFns  
...func(*Options)) (*ListReceivedLicensesOutput, error) {  
    if params == nil {  
        params = &ListReceivedLicensesInput{ }  
    }  
  
    result, metadata, err := c.invokeOperation(ctx, "ListReceivedLicenses", params, optFns,  
c.addOperationListReceivedLicensesMiddlewares)  
    if err != nil {  
        return nil, err  
    }  
  
    out := result.(*ListReceivedLicensesOutput)  
    out.ResultMetadata = metadata  
    return out, nil
```

```

}

type ListReceivedLicensesInput struct {

    // Filters to scope the results. The following filters are supported:
    //
    //
    // *
    // ProductSKU
    //
    // * Status
    //
    // * Fingerprint
    //
    // * IssuerName
    //
    // * Beneficiary
    Filters []types.Filter

    // Amazon Resource Names (ARNs) of the licenses.
    LicenseArns []string

    // Maximum number of results to return in a single call.
    MaxResults *int32

    // Token for the next set of results.
    NextToken *string

    noSmithyDocumentSerde
}

type ListReceivedLicensesOutput struct {

    // Received license details.
    Licenses []types.GrantedLicense

    // Token for the next set of results.
    NextToken *string

    // Metadata pertaining to the operation's result.
    ResultMetadata middleware.Metadata

    noSmithyDocumentSerde
}

func (c *Client) addOperationListReceivedLicensesMiddlewares(stack *middleware.Stack, options Options) (err
error) {
    err = stack.Serialize.Add(&awsAwsjson11_serializeOpListReceivedLicenses{ }, middleware.After)

```

```

if err != nil {
    return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListReceivedLicenses{ }, middleware.After)
if err != nil {
    return
err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
    return err
}
if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
    return err
}
if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
    return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
    return err
}
if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
    return err
}
if err = addRetryMiddlewares(stack, options); err != nil {
    return err
}
if err = addHTTPSignerV4Middleware(stack, options); err != nil {
    return err
}
if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
    return err
}
if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
    return err
}
if err = addClientUserAgent(stack); err != nil {
    return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err !=
nil {
    return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListReceivedLicenses(options.Region),
middleware.Before); err != nil {
    return err
}

```

```

}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
    return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
    return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
    return err
}
return nil
}

func newServiceMetadataMiddleware_opListReceivedLicenses(region string)
*awsmiddleware.RegisterServiceMetadata {
return &awsmiddleware.RegisterServiceMetadata{
    Region:    region,
    ServiceID: ServiceID,
    SigningName: "license-manager",
    OperationName: "ListReceivedLicenses",
}
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
    "context"
    awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
    "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
    "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
    "github.com/aws/smithy-go/middleware"
    smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license for offline use.
func (c *Client) CheckoutBorrowLicense(ctx context.Context, params *CheckoutBorrowLicenseInput, optFns
...func(*Options)) (*CheckoutBorrowLicenseOutput, error) {
    if params == nil {
        params = &CheckoutBorrowLicenseInput{}
    }

    result, metadata, err := c.invokeOperation(ctx, "CheckoutBorrowLicense", params, optFns,
c.addOperationCheckoutBorrowLicenseMiddlewares)
    if err != nil {
        return nil, err
    }
}

```

```
out := result.(*CheckoutBorrowLicenseOutput)
out.ResultMetadata = metadata
return out, nil
}
```

```
type CheckoutBorrowLicenseInput struct {
```

```
    // Unique, case-sensitive identifier that you
    // provide to ensure the idempotency of
    // the request.
```

```
    //
```

```
    // This member is required.
```

```
    ClientToken *string
```

```
    // Digital signature method. The possible value is JSON Web Signature (JWS)
```

```
    // algorithm PS384. For more information, see RFC 7518 Digital Signature with
```

```
    // RSASSA-PSS (https://tools.ietf.org/html/rfc7518#section-3.5).
```

```
    //
```

```
    // This member is required.
```

```
    DigitalSignatureMethod types.DigitalSignatureMethod
```

```
    // License entitlements. Partial checkouts are not supported.
```

```
    //
```

```
    // This member is required.
```

```
    Entitlements []types.EntitlementData
```

```
    // Amazon Resource Name (ARN) of the license. The license must use the borrow
```

```
    // consumption configuration.
```

```
    //
```

```
    // This member is required.
```

```
    LicenseArn *string
```

```
    // Information about constraints.
```

```
    CheckoutMetadata []types.Metadata
```

```
    // Node ID.
```

```
    NodeId *string
```

```
    noSmithyDocumentSerde
```

```
}
```

```
type CheckoutBorrowLicenseOutput struct {
```

```
    // Information about constraints.
```

```
    CheckoutMetadata []types.Metadata
```

```
    // Allowed license entitlements.
```

```
    EntitlementsAllowed
```

```

[]types.EntitlementData

// Date and time at which the license checkout expires.
Expiration *string

// Date and time at which the license checkout is issued.
IssuedAt *string

// Amazon Resource Name (ARN) of the license.
LicenseArn *string

// License consumption token.
LicenseConsumptionToken *string

// Node ID.
NodeId *string

// Signed token.
SignedToken *string

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutBorrowLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutBorrowLicense{ }, middleware.After)
if err != nil {
return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutBorrowLicense{ }, middleware.After)
if err != nil {
return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
return err
}
if err = awsmiddleware.AddClientRequestIDMiddleware(stack);
err != nil {
return err
}
if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
return err
}
}

```

```

}
if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
    return err
}
if err = addRetryMiddlewares(stack, options); err != nil {
    return err
}
if err = addHTTPSignerV4Middleware(stack, options); err != nil {
    return err
}
if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
    return err
}
if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
    return err
}
if err = addClientUserAgent(stack); err != nil {
    return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = addOpCheckoutBorrowLicenseValidationMiddleware(stack); err != nil {
    return err
}
if err
= stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutBorrowLicense(options.Region),
middleware.Before); err != nil {
    return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
    return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
    return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
    return err
}
return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
return &awsmiddleware.RegisterServiceMetadata{

```



```

Region:    region,
ServiceID: ServiceID,
SigningName: "license-manager",
OperationName: "CheckoutBorrowLicense",
}
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
    "context"
    awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
    "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
    "github.com/aws/smithy-go/middleware"
    smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks in the specified license. Check in a license when it is no longer in use.
func (c *Client) CheckInLicense(ctx context.Context, params *CheckInLicenseInput, optFns ...func(*Options))
(*CheckInLicenseOutput, error) {
    if params == nil {
        params = &CheckInLicenseInput{}
    }

    result, metadata, err := c.invokeOperation(ctx, "CheckInLicense", params, optFns,
c.addOperationCheckInLicenseMiddlewares)
    if err != nil {
        return nil, err
    }

    out := result.(*CheckInLicenseOutput)
    out.ResultMetadata = metadata
    return out, nil
}

type CheckInLicenseInput struct {

    // License consumption token.
    //
    // This member is required.
    LicenseConsumptionToken *string

    // License beneficiary.
    Beneficiary
    *string

    noSmithyDocumentSerde

```

```

}

type CheckInLicenseOutput struct {
// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationCheckInLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckInLicense{ }, middleware.After)
if err != nil {
return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckInLicense{ }, middleware.After)
if err != nil {
return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
return err
}
if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
return err
}
if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
return err
}
if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
return err
}
if err = addRetryMiddlewares(stack,
options); err != nil {
return err
}
if err = addHTTPSignerV4Middleware(stack, options); err != nil {
return err
}
if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
return err
}
if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
return err
}
if err = addClientUserAgent(stack); err != nil {
return err
}
}

```

```

}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = addOpCheckInLicenseValidationMiddleware(stack); err != nil {
    return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckInLicense(options.Region),
middleware.Before); err != nil {
    return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
    return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
    return err
}
if err = addRequestResponseLogging(stack, options); err != nil
{
    return err
}
return nil
}

func newServiceMetadataMiddleware_opCheckInLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
    return &awsmiddleware.RegisterServiceMetadata{
        Region:    region,
        ServiceID: ServiceID,
        SigningName: "license-manager",
        OperationName: "CheckInLicense",
    }
}
name: License Scan

on: [pull_request]

jobs:
  licensescan:
    name: License Scan
    runs-on: ubuntu-latest
    strategy:
      matrix:
        python-version: [3.9]

```

```

steps:
  - name: Checkout target
    uses: actions/checkout@v2
    with:
      path: sdkbase
      ref: ${{ github.base_ref }}
  - name: Checkout this ref
    uses: actions/checkout@v2
    with:
      path: new-ref
      fetch-depth: 0
  - name: Get Diff
    run: git --git-dir ./new-ref/.git diff --name-only --diff-filter=ACMRT ${{ github.event.pull_request.base.sha }}
${{ github.sha }} > refDiffFiles.txt
  - name: Get Target Files
    run: git --git-dir ./sdkbase/.git ls-files | grep -xf refDiffFiles.txt - > targetFiles.txt
  - name: Checkout scancode
    uses: actions/checkout@v2
    with:
      repository: nexB/scancode-toolkit
      path: scancode-toolkit
      fetch-depth: 1
  - name: Set up Python ${{ matrix.python-version }}
    uses: actions/setup-python@v2
    with:
      python-version: ${{ matrix.python-version }}
# ScanCode
  - name: Self-configure scancode
    working-directory: ./scancode-toolkit
    run: ./scancode --help
  - name: Run Scan code on target
    run: cat targetFiles.txt | while read filename; do echo ./sdkbase/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> old-licenses.txt
  - name: Run Scan code on pr ref
    run: cat refDiffFiles.txt | while read filename; do echo ./new-ref/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> new-licenses.txt
# compare
  - name: License test
    run: if ! cmp old-licenses.txt new-licenses.txt; then echo "Licenses differ! Failing."; exit -1; else echo "Licenses
are the same. Success."; exit 0; fi
// Code generated by smithy-go-codegen DO NOT EDIT.

```

package licensemanager

```

import (
    "context"
    awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
    "github.com/aws/aws-sdk-go-v2/aws/signer/v4"

```

```

"github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
"github.com/aws/smithy-go/middleware"
smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Creates a license.
func (c *Client) CreateLicense(ctx context.Context, params *CreateLicenseInput, optFns ...func(*Options))
(*CreateLicenseOutput, error) {
    if params == nil {
        params = &CreateLicenseInput{}
    }

    result, metadata, err := c.invokeOperation(ctx, "CreateLicense", params, optFns,
c.addOperationCreateLicenseMiddlewares)
    if err != nil {
        return nil, err
    }

    out := result.(*CreateLicenseOutput)
    out.ResultMetadata = metadata
    return out, nil
}

type CreateLicenseInput struct {

    // License beneficiary.
    //
    // This member is required.
    Beneficiary *string

    // Unique, case-sensitive identifier that you provide to ensure
    the idempotency of
    // the request.
    //
    // This member is required.
    ClientToken *string

    // Configuration for consumption of the license. Choose a provisional configuration
    // for workloads running with continuous connectivity. Choose a borrow
    // configuration for workloads with offline usage.
    //
    // This member is required.
    ConsumptionConfiguration *types.ConsumptionConfiguration

    // License entitlements.
    //
    // This member is required.
    Entitlements []types.Entitlement

```

```

// Home Region for the license.
//
// This member is required.
HomeRegion *string

// License issuer.
//
// This member is required.
Issuer *types.Issuer

// License name.
//
// This member is required.
LicenseName *string

// Product name.
//
// This member is required.
ProductName *string

// Product SKU.
//
// This member is required.
ProductSKU *string

// Date and time range during which the license is valid, in ISO8601-UTC format.
//
// This member is required.
Validity *types.DatetimeRange

//
// Information about the license.
LicenseMetadata []types.Metadata

noSmithyDocumentSerde
}

type CreateLicenseOutput struct {

// Amazon Resource Name (ARN) of the license.
LicenseArn *string

// License status.
Status types.LicenseStatus

// License version.
Version *string

```

```

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationCreateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
err = stack.Serialize.Add(&awsAwsjson11_serializeOpCreateLicense{ }, middleware.After)
if err != nil {
return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCreateLicense{ }, middleware.After)
if err != nil {
return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
return err
}
if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
return err
}
if err = smithyhttp.AddComputeContentLengthMiddleware(stack);
err != nil {
return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
return err
}
if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
return err
}
if err = addRetryMiddlewares(stack, options); err != nil {
return err
}
if err = addHTTPSignerV4Middleware(stack, options); err != nil {
return err
}
if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
return err
}
if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
return err
}
if err = addClientUserAgent(stack); err != nil {
return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {

```

```

    return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = addOpCreateLicenseValidationMiddleware(stack); err != nil {
    return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCreateLicense(options.Region),
middleware.Before); err != nil {
    return
err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
    return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
    return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
    return err
}
return nil
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
return &awsmiddleware.RegisterServiceMetadata{
    Region:    region,
    ServiceID: ServiceID,
    SigningName: "license-manager",
    OperationName: "CreateLicense",
}
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
    "context"
    awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
    "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
    "github.com/aws/aws-sdk-go-v2/service/grafana/types"
    "github.com/aws/smithy-go/middleware"
    smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Removes the Grafana Enterprise license from a workspace.
func (c *Client) DisassociateLicense(ctx context.Context, params *DisassociateLicenseInput, optFns

```



```

...func(*Options) (*DisassociateLicenseOutput, error) {
    if params == nil {
        params = &DisassociateLicenseInput{}
    }

    result, metadata, err := c.invokeOperation(ctx, "DisassociateLicense", params, optFns,
c.addOperationDisassociateLicenseMiddlewares)
    if err != nil {
        return nil, err
    }

    out := result.(*DisassociateLicenseOutput)
    out.ResultMetadata = metadata
    return out, nil
}

type DisassociateLicenseInput struct {

    // The type of license to remove from the workspace.
    //
    // This
    member is required.
    LicenseType types.LicenseType

    // The ID of the workspace to remove the Grafana Enterprise license from.
    //
    // This member is required.
    WorkspaceId *string

    noSmithyDocumentSerde
}

type DisassociateLicenseOutput struct {

    // A structure containing information about the workspace.
    //
    // This member is required.
    Workspace *types.WorkspaceDescription

    // Metadata pertaining to the operation's result.
    ResultMetadata middleware.Metadata

    noSmithyDocumentSerde
}

func (c *Client) addOperationDisassociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
    err = stack.Serialize.Add(&awsRestjson1_serializeOpDisassociateLicense{}, middleware.After)

```

```

if err != nil {
    return err
}
err = stack.Deserialize.Add(&awsRestjson1_deserializeOpDisassociateLicense{ }, middleware.After)
if err != nil {
    return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
    return err
}
if err = awsmiddleware.AddClientRequestIDMiddleware(stack);
err != nil {
    return err
}
if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
    return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
    return err
}
if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
    return err
}
if err = addRetryMiddlewares(stack, options); err != nil {
    return err
}
if err = addHTTPSignerV4Middleware(stack, options); err != nil {
    return err
}
if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
    return err
}
if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
    return err
}
if err = addClientUserAgent(stack); err != nil {
    return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = addOpDisassociateLicenseValidationMiddleware(stack); err != nil {
    return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDisassociateLicense(options.Region),

```

```

middleware.Before); err != nil {
    return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
    return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
    return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
    return err
}
return nil
}

func newServiceMetadataMiddleware_opDisassociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
return &awsmiddleware.RegisterServiceMetadata{
    Region:    region,
    ServiceID: ServiceID,
    SigningName: "grafana",
    OperationName: "DisassociateLicense",
}
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
    "context"
    awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
    "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
    "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
    "github.com/aws/smithy-go/middleware"
    smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Gets detailed information about the specified license.
func (c *Client) GetLicense(ctx context.Context, params *GetLicenseInput, optFns ...func(*Options))
(*GetLicenseOutput, error) {
    if params == nil {
        params = &GetLicenseInput{}
    }

    result, metadata, err := c.invokeOperation(ctx, "GetLicense", params, optFns,
c.addOperationGetLicenseMiddlewares)
    if err != nil {
        return nil, err
    }
}

```

```

}

out := result.(*GetLicenseOutput)
out.ResultMetadata = metadata
return out, nil
}

type GetLicenseInput struct {

    // Amazon Resource Name (ARN) of the license.
    //
    // This member is required.
    LicenseArn *string

    // License version.
    Version
    *string

    noSmithyDocumentSerde
}

type GetLicenseOutput struct {

    // License details.
    License *types.License

    // Metadata pertaining to the operation's result.
    ResultMetadata middleware.Metadata

    noSmithyDocumentSerde
}

func (c *Client) addOperationGetLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
    err = stack.Serialize.Add(&awsAwsjson11_serializeOpGetLicense{ }, middleware.After)
    if err != nil {
        return err
    }
    err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpGetLicense{ }, middleware.After)
    if err != nil {
        return err
    }
    if err = addSetLoggerMiddleware(stack, options); err != nil {
        return err
    }
    if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
        return err
    }
    if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {

```

```

return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
return err
}
if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
return err
}
if
err = addRetryMiddlewares(stack, options); err != nil {
return err
}
if err = addHTTPSignerV4Middleware(stack, options); err != nil {
return err
}
if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
return err
}
if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
return err
}
if err = addClientUserAgent(stack); err != nil {
return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
return err
}
if err = addOpGetLicenseValidationMiddleware(stack); err != nil {
return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opGetLicense(options.Region), middleware.Before);
err != nil {
return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
return err
}
if err = addRequestResponseLogging(stack,
options); err != nil {
return err
}
return nil

```

```

}

func newServiceMetadataMiddleware_opGetLicense(region string) *awsmiddleware.RegisterServiceMetadata {
return &awsmiddleware.RegisterServiceMetadata{
    Region:    region,
    ServiceID: ServiceID,
    SigningName: "license-manager",
    OperationName: "GetLicense",
}
}
}
AWS SDK for Go
Copyright 2015 Amazon.com, Inc. or its affiliates. All Rights Reserved.
Copyright 2014-2015 Stripe, Inc.
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
    "context"
    awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
    "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
    "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
    "github.com/aws/smithy-go/middleware"
    smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license.
func (c *Client) CheckoutLicense(ctx context.Context, params *CheckoutLicenseInput, optFns ...func(*Options))
(*CheckoutLicenseOutput, error) {
    if params == nil {
        params = &CheckoutLicenseInput{}
    }

    result, metadata, err := c.invokeOperation(ctx, "CheckoutLicense", params, optFns,
c.addOperationCheckoutLicenseMiddlewares)
    if err != nil {
        return nil, err
    }

    out := result.(*CheckoutLicenseOutput)
    out.ResultMetadata = metadata
    return out, nil
}

type CheckoutLicenseInput struct {

// Checkout type.
//

```

```

// This member is required.
CheckoutType types.CheckoutType

// Unique, case-sensitive
identifier that you provide to ensure the idempotency of
// the request.
//
// This member is required.
ClientToken *string

// License entitlements.
//
// This member is required.
Entitlements []types.EntitlementData

// Key fingerprint identifying the license.
//
// This member is required.
KeyFingerprint *string

// Product SKU.
//
// This member is required.
ProductSKU *string

// License beneficiary.
Beneficiary *string

// Node ID.
NodeId *string

noSmithyDocumentSerde
}

type CheckoutLicenseOutput struct {

// Checkout type.
CheckoutType types.CheckoutType

// Allowed license entitlements.
EntitlementsAllowed []types.EntitlementData

// Date and time at which the license checkout expires.
Expiration *string

// Date and time at which the license checkout is issued.
IssuedAt *string

```

```

// Amazon Resource Name (ARN) of the checkout license.
LicenseArn *string

// License consumption token.
LicenseConsumptionToken *string

// Node ID.
NodeId *string

//
Signed token.
SignedToken *string

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutLicense{ }, middleware.After)
if err != nil {
return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutLicense{ }, middleware.After)
if err != nil {
return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
return err
}
if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
return err
}
if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
return err
}
if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
return err
}
if err = addRetryMiddlewares(stack, options); err
!= nil {
return err
}
if err = addHTTPSignerV4Middleware(stack, options); err != nil {

```



```

return err
}
if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
return err
}
if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
return err
}
if err = addClientUserAgent(stack); err != nil {
return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
return err
}
if err = addOpCheckoutLicenseValidationMiddleware(stack); err != nil {
return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutLicense(options.Region),
middleware.Before); err != nil {
return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
return err
}
return
nil
}

func newServiceMetadataMiddleware_opCheckoutLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
return &awsmiddleware.RegisterServiceMetadata{
Region:    region,
ServiceID: ServiceID,
SigningName: "license-manager",
OperationName: "CheckoutLicense",
}
}
// Code generated by smithy-go-codegen DO NOT EDIT.

```

```

package licensemanager

import (
    "context"
    awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
    "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
    "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
    "github.com/aws/smithy-go/middleware"
    smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists the licenses for your account.
func (c *Client) ListLicenses(ctx context.Context, params *ListLicensesInput, optFns ...func(*Options))
(*ListLicensesOutput, error) {
    if params == nil {
        params = &ListLicensesInput{}
    }

    result, metadata, err := c.invokeOperation(ctx, "ListLicenses", params, optFns,
c.addOperationListLicensesMiddlewares)
    if err != nil {
        return nil, err
    }

    out := result.(*ListLicensesOutput)
    out.ResultMetadata = metadata
    return out, nil
}

type ListLicensesInput struct {

    // Filters to scope the results. The following filters are supported:
    //
    // *
    // Beneficiary
    //
    // * ProductSKU
    //
    // * Fingerprint
    //
    // * Status
    Filters []types.Filter

    // Amazon Resource Names (ARNs) of the licenses.
    LicenseArns []string

    // Maximum number of results to return in a single call.

```

```

MaxResults *int32

// Token for the next set of results.
NextToken *string

noSmithyDocumentSerde
}

type ListLicensesOutput struct {

// License details.
Licenses []types.License

// Token for the next set of results.
NextToken *string

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationListLicensesMiddlewares(stack *middleware.Stack, options Options) (err error) {
    err = stack.Serialize.Add(&awsAwsjson11_serializeOpListLicenses{ }, middleware.After)
    if err != nil {
        return err
    }
    err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListLicenses{ }, middleware.After)
    if err != nil {
        return err
    }
    if err = addSetLoggerMiddleware(stack, options); err != nil {
        return err
    }
    if err = awsmiddleware.AddClientRequestIDMiddleware(stack);
    err != nil {
        return err
    }
    if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
        return err
    }
    if err = addResolveEndpointMiddleware(stack, options); err != nil {
        return err
    }
    if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
        return err
    }
    if err = addRetryMiddlewares(stack, options); err != nil {

```

```

return err
}
if err = addHTTPSignerV4Middleware(stack, options); err != nil {
return err
}
if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
return err
}
if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
return err
}
if err = addClientUserAgent(stack); err != nil {
return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListLicenses(options.Region), middleware.Before);
err != nil {
return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
return err
}
return nil
}

```

```

func newServiceMetadataMiddleware_opListLicenses(region string) *awsmiddleware.RegisterServiceMetadata {
return &awsmiddleware.RegisterServiceMetadata{
Region:    region,
ServiceID: ServiceID,
SigningName: "license-manager",
OperationName: "ListLicenses",
}
}

```

// Code generated by smithy-go-codegen DO NOT EDIT.

```
package licensemanager
```

```

import (
    "context"
    awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
    "github.com/aws/aws-sdk-go-v2/aws/signer/v4"
    "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
    "github.com/aws/smithy-go/middleware"
    smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Deletes the specified license.
func (c *Client) DeleteLicense(ctx context.Context, params *DeleteLicenseInput, optFns ...func(*Options))
(*DeleteLicenseOutput, error) {
    if params == nil {
        params = &DeleteLicenseInput{}
    }

    result, metadata, err := c.invokeOperation(ctx, "DeleteLicense", params, optFns,
c.addOperationDeleteLicenseMiddlewares)
    if err != nil {
        return nil, err
    }

    out := result.(*DeleteLicenseOutput)
    out.ResultMetadata = metadata
    return out, nil
}

type DeleteLicenseInput struct {

    // Amazon Resource Name (ARN) of the license.
    //
    // This member is required.
    LicenseArn *string

    // Current version of the
    license.
    //
    // This member is required.
    SourceVersion *string

    noSmithyDocumentSerde
}

type DeleteLicenseOutput struct {

    // Date when the license is deleted.
    DeletionDate *string

```

```

// License status.
Status types.LicenseDeletionStatus

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationDeleteLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
    err = stack.Serialize.Add(&awsAwsjson11_serializeOpDeleteLicense{ }, middleware.After)
    if err != nil {
        return err
    }
    err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpDeleteLicense{ }, middleware.After)
    if err != nil {
        return err
    }
    if err = addSetLoggerMiddleware(stack, options); err != nil {
        return err
    }
    if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
        return err
    }
    if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
        return err
    }
    if err = addResolveEndpointMiddleware(stack,
options); err != nil {
        return err
    }
    if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
        return err
    }
    if err = addRetryMiddlewares(stack, options); err != nil {
        return err
    }
    if err = addHTTPSignerV4Middleware(stack, options); err != nil {
        return err
    }
    if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
        return err
    }
    if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
        return err
    }
    if err = addClientUserAgent(stack); err != nil {
        return err
    }
}

```

```

}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
    return err
}
if err = addOpDeleteLicenseValidationMiddleware(stack); err != nil {
    return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDeleteLicense(options.Region),
middleware.Before); err != nil {
    return err
}
if err = addRequestIDRetrieverMiddleware(stack);
err != nil {
    return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
    return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
    return err
}
return nil
}

func newServiceMetadataMiddleware_opDeleteLicense(region string) *awsmiddleware.RegisterServiceMetadata {
return &awsmiddleware.RegisterServiceMetadata{
    Region:    region,
    ServiceID: ServiceID,
    SigningName: "license-manager",
    OperationName: "DeleteLicense",
}
}

```

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// Code generated by smithy-go-codegen DO NOT EDIT.

```
package grafana
```

```
import (  
    "context"  
    awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"  
    "github.com/aws/aws-sdk-go-v2/aws/signer/v4"  
    "github.com/aws/aws-sdk-go-v2/service/grafana/types"  
    "github.com/aws/smithy-go/middleware"  
    smithyhttp "github.com/aws/smithy-go/transport/http"  
)
```

```
// Assigns a Grafana Enterprise license to a workspace. Upgrading to Grafana  
// Enterprise incurs additional fees. For more information, see Upgrade a workspace
```

```

// to Grafana Enterprise
// (https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-Grafana-Enterprise.html).
func (c *Client) AssociateLicense(ctx context.Context, params *AssociateLicenseInput, optFns ...func(*Options))
(*AssociateLicenseOutput, error) {
    if params == nil {
        params = &AssociateLicenseInput{}
    }

    result, metadata, err := c.invokeOperation(ctx, "AssociateLicense", params, optFns,
c.addOperationAssociateLicenseMiddlewares)
    if err != nil {
        return nil, err
    }

    out
    := result.(*AssociateLicenseOutput)
    out.ResultMetadata = metadata
    return out, nil
}

type AssociateLicenseInput struct {

    // The type of license to associate with the workspace.
    //
    // This member is required.
    LicenseType types.LicenseType

    // The ID of the workspace to associate the license with.
    //
    // This member is required.
    WorkspaceId *string

    noSmithyDocumentSerde
}

type AssociateLicenseOutput struct {

    // A structure containing data about the workspace.
    //
    // This member is required.
    Workspace *types.WorkspaceDescription

    // Metadata pertaining to the operation's result.
    ResultMetadata middleware.Metadata

    noSmithyDocumentSerde
}

```

```

func (c *Client) addOperationAssociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
    err = stack.Serialize.Add(&awsRestjson1_serializeOpAssociateLicense{ }, middleware.After)
    if err != nil {
        return err
    }
    err = stack.Deserialize.Add(&awsRestjson1_deserializeOpAssociateLicense{ }, middleware.After)
    if
    err != nil {
        return err
    }
    if err = addSetLoggerMiddleware(stack, options); err != nil {
        return err
    }
    if err = awsmiddleware.AddClientRequestIDMiddleware(stack); err != nil {
        return err
    }
    if err = smithyhttp.AddComputeContentLengthMiddleware(stack); err != nil {
        return err
    }
    if err = addResolveEndpointMiddleware(stack, options); err != nil {
        return err
    }
    if err = v4.AddComputePayloadSHA256Middleware(stack); err != nil {
        return err
    }
    if err = addRetryMiddlewares(stack, options); err != nil {
        return err
    }
    if err = addHTTPSignerV4Middleware(stack, options); err != nil {
        return err
    }
    if err = awsmiddleware.AddRawResponseToMetadata(stack); err != nil {
        return err
    }
    if err = awsmiddleware.AddRecordResponseTiming(stack); err != nil {
        return err
    }
    if err = addClientUserAgent(stack); err != nil {
        return err
    }
    if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
        return err
    }
    if err = smithyhttp.AddCloseResponseBodyMiddleware(stack);
    err != nil {
        return err
    }
    if err = addOpAssociateLicenseValidationMiddleware(stack); err != nil {

```

```

    return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opAssociateLicense(options.Region),
middleware.Before); err != nil {
    return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
    return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
    return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
    return err
}
return nil
}

func newServiceMetadataMiddleware_opAssociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
return &awsmiddleware.RegisterServiceMetadata{
    Region:    region,
    ServiceID: ServiceID,
    SigningName: "grafana",
    OperationName: "AssociateLicense",
}
}
}

```

# 1.182 xxhash 0.8.2-r2

## 1.182.1 Available under license :

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Version 2, June 1991

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under certain conditions; type `show c' for details.

The hypothetical commands `show w' and `show c' should show the appropriate  
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## 1.183 [github.com/pkoukk/tiktoken-go-loader](https://github.com/pkoukk/tiktoken-go-loader)

### 0.0.1

#### 1.183.1 Available under license :

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## 1.184 pkoukk-tiktoken-go-loader 0.0.1

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## 1.185 ca-certificates 20240226-r0

### 1.185.1 Available under license :

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/\* c\_rehash.c - Create hash symlinks for certificates

\* C implementation based on the original Perl and shell versions



```
*
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* All rights reserved.
*
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*/
```

Found in path(s):

```
*/opt/cola/permits/1919538345_1710807720.5754924/0/ca-certificates-20230506-tar-bz2/ca-certificates-20230506/c_rehash.c
```

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```
#
# This Source Code Form is subject to the terms of the Mozilla Public
# License, v. 2.0. If a copy of the MPL was not distributed with this
# file, You can obtain one at http://mozilla.org/MPL/2.0/.
```

```
#
# certdata.txt
#
# This file contains the object definitions for the certs and other
# information "built into" NSS.
#
# Object definitions:
#
# Certificates
#
# -- Attribute --      -- type --      -- value --
# CKA_CLASS            CK_OBJECT_CLASS  CKO_CERTIFICATE
# CKA_TOKEN            CK_BBOOL        CK_TRUE
# CKA_PRIVATE          CK_BBOOL        CK_FALSE
# CKA_MODIFIABLE       CK_BBOOL        CK_FALSE
# CKA_LABEL            UTF8            (varies)
# CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
# CKA_SUBJECT          DER+base64      (varies)
# CKA_ID               byte array      (varies)
#
# CKA_ISSUER           DER+base64      (varies)
# CKA_SERIAL_NUMBER    DER+base64      (varies)
# CKA_VALUE            DER+base64      (varies)
# CKA_NSS_EMAIL        ASCII7        (unused here)
# CKA_NSS_SERVER_DISTRUST_AFTER DER+base64      (varies)
# CKA_NSS_EMAIL_DISTRUST_AFTER DER+base64      (varies)
#
# Trust
#
# -- Attribute --      -- type --      -- value --
```

```

# CKA_CLASS          CK_OBJECT_CLASS  CKO_TRUST
# CKA_TOKEN          CK_BBOOL      CK_TRUE
# CKA_PRIVATE        CK_BBOOL      CK_FALSE
# CKA_MODIFIABLE     CK_BBOOL      CK_FALSE
# CKA_LABEL          UTF8          (varies)
# CKA_ISSUER         DER+base64    (varies)
# CKA_SERIAL_NUMBER  DER+base64    (varies)
# CKA_CERT_HASH      binary+base64 (varies)
# CKA_EXPIRES        CK_DATE

(not used here)
# CKA_TRUST_DIGITAL_SIGNATURE CK_TRUST      (varies)
# CKA_TRUST_NON_REPUDIATION  CK_TRUST      (varies)
# CKA_TRUST_KEY_ENCIPHERMENT CK_TRUST      (varies)
# CKA_TRUST_DATA_ENCIPHERMENT CK_TRUST      (varies)
# CKA_TRUST_KEY_AGREEMENT    CK_TRUST      (varies)
# CKA_TRUST_KEY_CERT_SIGN    CK_TRUST      (varies)
# CKA_TRUST_CRL_SIGN         CK_TRUST      (varies)
# CKA_TRUST_SERVER_AUTH      CK_TRUST      (varies)
# CKA_TRUST_CLIENT_AUTH      CK_TRUST      (varies)
# CKA_TRUST_CODE_SIGNING     CK_TRUST      (varies)
# CKA_TRUST_EMAIL_PROTECTION CK_TRUST      (varies)
# CKA_TRUST_IPSEC_END_SYSTEM CK_TRUST      (varies)
# CKA_TRUST_IPSEC_TUNNEL     CK_TRUST      (varies)
# CKA_TRUST_IPSEC_USER       CK_TRUST      (varies)
# CKA_TRUST_TIME_STAMPING    CK_TRUST      (varies)
# CKA_TRUST_STEP_UP_APPROVED CK_BBOOL      (varies)
# (other
trust attributes can be defined)
#

#
# The object to tell NSS that this is a root list and we don't
# have to go looking for others.
#
BEGINDATA
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_BUILTIN_ROOT_LIST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Mozilla Builtin Roots"

#
# Certificate "GlobalSign Root CA"
#
# Issuer: CN=GlobalSign Root CA,OU=Root CA,O=GlobalSign nv-sa,C=BE
# Serial Number:04:00:00:00:00:01:15:4b:5a:c3:94
# Subject: CN=GlobalSign Root CA,OU=Root CA,O=GlobalSign nv-sa,C=BE
# Not Valid Before: Tue Sep 01 12:00:00 1998

```

```
# Not Valid After : Fri Jan 28 12:00:00 2028
# Fingerprint (SHA-256):
EB:D4:10:40:E4:BB:3E:C7:42:C9:E3:81:D3:1E:F2:A4:1A:48:B6:68:5C:96:E7:CE:F3:C1:DF:6C:D4:33:1C:99
# Fingerprint (SHA1): B1:BC:96:8B:D4:F4:9D:62:2A:A8:9A:81:F2:15:01:52:A4:1D:82:9C
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "GlobalSign
Root CA"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\127\061\013\060\011\006\003\125\004\006\023\002\102\105\061
\031\060\027\006\003\125\004\012\023\020\107\154\157\142\141\154
\123\151\147\156\040\156\166\055\163\141\061\020\060\016\006\003
\125\004\013\023\007\122\157\157\164\040\103\101\061\033\060\031
\006\003\125\004\003\023\022\107\154\157\142\141\154\123\151\147
\156\040\122\157\157\164\040\103\101
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\127\061\013\060\011\006\003\125\004\006\023\002\102\105\061
\031\060\027\006\003\125\004\012\023\020\107\154\157\142\141\154
\123\151\147\156\040\156\166\055\163\141\061\020\060\016\006\003
\125\004\013\023\007\122\157\157\164\040\103\101\061\033\060\031
\006\003\125\004\003\023\022\107\154\157\142\141\154\123\151\147
\156\040\122\157\157\164\040\103\101
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\013\004\000\000\000\000\001\025\113\132\303\224
END
CKA_VALUE MULTILINE_OCTAL
\060\202\003\165\060\202\002\135\240\003\002\001\002\002\013\004
\000\000\000\000\001\025\113\132\303\224\060\015\006\011\052\206
\110\206\367\015\001\001\005\005\000\060\127\061\013\060\011\006
\003\125\004\006\023\002\102\105\061\031\060\027\006\003\125\004
\012\023\020\107\154\157\142\141\154\123\151\147\156\040\156\166
\055\163\141\061\020\060\016\006\003\125\004\013\023\007\122\157
\157\164\040\103\101\061\033\060\031\006\003\125\004\003\023\022
\107\154\157\142\141\154\123\151\147\156\040\122\157\157\164\040
\103\101\060\036\027\015\071\070\060\071\060\061\061\062\060\060
\060\060\132\027\015\062\070\060\061\062\070\061\062\060\060\060
\060\132\060\127\061\013\060\011\006\003\125\004\006\023\002\102
\105\061\031\060\027\006\003\125\004\012\023\020\107\154\157\142
\141\154\123\151\147\156\040\156\166\055\163\141\061\020\060\016
\006\003\125\004\013\023\007\122\157\157\164\040\103\101\061\033
\060\031\006\003\125\004\003\023\022\107\154\157\142\141\154\123
\151\147\156\040\122\157\157\164\040\103\101\060\202\001\042\060
```

\015\006\011\052\206\110\206\367\015\001\001\001\005\000\003\202  
\001\017\000\060\202\001\012\002\202\001\001\000\332\016\346\231  
\215\316\243\343\117\212\176\373\361\213\203\045\153\352\110\037  
\361\052\260\271\225\021\004\275\360\143\321\342\147\146\317\034  
\335\317\033\110\053\356\215\211\216\232\257\051\200\145\253\351  
\307\055\022\313\253\034\114\160\007\241\075\012\060\315\025\215  
\117\370\335\324\214\120\025\034\357\120\356\304\056\367\374\351  
\122\362\221\175\340\155\325\065\060\216\136\103\163\362\101\351  
\325\152\343\262\211\072\126\071\070\157\006\074\210\151\133\052  
\115\305\247\124\270\154\211\314\233\371\074\312\345\375\211\365  
\022\074\222\170\226\326\334\164\156\223\104\141\321\215\307\106  
\262\165\016\206\350\031\212\325\155\154\325\170\026\225\242\351  
\310\012\070\353\362\044\023\117\163\124\223\023\205\072\033\274  
\036\064\265\213\005\214\271\167\213\261\333\037\040\221\253\011  
\123\156\220\316\173\067\164\271\160\107\221\042\121\143\026\171  
\256\261\256\101\046\010\310\031\053\321\106\252\110\326\144\052  
\327\203\064\377\054\052\301\154\031\103\112\007\205\347\323\174  
\366\041\150\357\352\362\122\237\177\223\220\317\002\003\001\000  
\001\243\102\060\100\060\016\006\003\125\035\017\001\001\377\004  
\004\003\002\001\006\060\017\006\003\125\035\023\001\001\377\004  
\005\060\003\001\001\377\060\035\006\003\125\035\016\004\026\004  
\024\140\173\146\032\105\015\227\312\211\120\057\175\004\315\064  
\250\377\374\375\113\060\015\006\011\052\206\110\206\367\015\001  
\001\005\005\000\003\202\001\001\000\326\163\347\174\117\166\320  
\215\277\354\272\242\276\064\305\050\062\265\174\374\154\234\054  
\053\275\011\236\123\277\153\136\252\021\110\266\345\010\243\263  
\312\075\141\115\323\106\011\263\076\303\240\343\143\125\033\362  
\272\357\255\071\341\103\271\070\243\346\057\212\046\073\357\240  
\120\126\371\306\012\375\070\315\304\013\160\121\224\227\230\004  
\337\303\137\224\325\025\311\024\101\234\304\135\165\144\025\015  
\377\125\060\354\206\217\377\015\357\054\271\143\106\366\252\374  
\337\274\151\375\056\022\110\144\232\340\225\360\246\357\051\217  
\001\261\025\265\014\035\245\376\151\054\151\044\170\036\263\247  
\034\161\142\356\312\310\227\254\027\135\212\302\370\107\206\156  
\052\304\126\061\225\320\147\211\205\053\371\154\246\135\106\235  
\014\252\202\344\231\121\335\160\267\333\126\075\141\344\152\341  
\134\326\366\376\075\336\101\314\007\256\143\122\277\123\123\364  
\053\351\307\375\266\367\202\137\205\322\101\030\333\201\263\004  
\034\305\037\244\200\157\025\040\311\336\014\210\012\035\326\146  
\125\342\374\110\311\051\046\151\340

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "GlobalSign Root CA"

# Issuer: CN=GlobalSign Root CA,OU=Root CA,O=GlobalSign nv-sa,C=BE

```
# Serial Number:04:00:00:00:00:01:15:4b:5a:c3:94
# Subject: CN=GlobalSign Root CA,OU=Root CA,O=GlobalSign nv-sa,C=BE
# Not Valid Before: Tue Sep 01 12:00:00 1998
#
  Not Valid After : Fri Jan 28 12:00:00 2028
# Fingerprint (SHA-256):
EB:D4:10:40:E4:BB:3E:C7:42:C9:E3:81:D3:1E:F2:A4:1A:48:B6:68:5C:96:E7:CE:F3:C1:DF:6C:D4:33:1C:99
# Fingerprint (SHA1): B1:BC:96:8B:D4:F4:9D:62:2A:A8:9A:81:F2:15:01:52:A4:1D:82:9C
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "GlobalSign Root CA"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\261\274\226\213\324\364\235\142\052\250\232\201\362\025\001\122
\244\035\202\234
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\076\105\122\025\011\121\222\341\267\135\067\237\261\207\051\212
END
CKA_ISSUER MULTILINE_OCTAL
\060\127\061\013\060\011\006\003\125\004\006\023\002\102\105\061
\031\060\027\006\003\125\004\012\023\020\107\154\157\142\141\154
\123\151\147\156\040\156\166\055\163\141\061\020\060\016\006\003
\125\004\013\023\007\122\157\157\164\040\103\101\061\033\060\031
\006\003\125\004\003\023\022\107\154\157\142\141\154\123\151\147
\156\040\122\157\157\164\040\103\101
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\013\004\000\000\000\000\001\025\113\132\303\224
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "Verisign Class 1 Public Primary Certification Authority - G3"
#
# Issuer: CN=VeriSign Class 1 Public Primary Certification Authority - G3,OU="(c) 1999 VeriSign, Inc. - For
authorized use only",OU=VeriSign Trust Network,O="VeriSign, Inc.",C=US
# Serial Number:00:8b:5b:75:56:84:54:85:0b:00:cf:af:38:48:ce:b1:a4
# Subject: CN=VeriSign Class 1 Public Primary Certification Authority - G3,OU="(c) 1999 VeriSign, Inc. - For
authorized use only",OU=VeriSign Trust Network,O="VeriSign, Inc.",C=US
# Not Valid Before: Fri Oct 01 00:00:00 1999
# Not Valid After : Wed Jul 16 23:59:59 2036
# Fingerprint (SHA-256):
```

CB:B5:AF:18:5E:94:2A:24:02:F9:EA:CB:C0:ED:5B:B8:76:EE:A3:C1:22:36:23:D0:04:47:E4:F3:BA:55:4B:65

#

Fingerprint (SHA1): 20:42:85:DC:F7:EB:76:41:95:57:8E:13:6B:D4:B7:D1:E9:8E:46:A5

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_CERTIFICATE

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "Verisign Class 1 Public Primary Certification Authority - G3"

CKA\_CERTIFICATE\_TYPE CK\_CERTIFICATE\_TYPE CKC\_X\_509

CKA\_SUBJECT MULTILINE\_OCTAL

\060\201\312\061\013\060\011\006\003\125\004\006\023\002\125\123  
\061\027\060\025\006\003\125\004\012\023\016\126\145\162\151\123  
\151\147\156\054\040\111\156\143\056\061\037\060\035\006\003\125  
\004\013\023\026\126\145\162\151\123\151\147\156\040\124\162\165  
\163\164\040\116\145\164\167\157\162\153\061\072\060\070\006\003  
\125\004\013\023\061\050\143\051\040\061\071\071\071\040\126\145  
\162\151\123\151\147\156\054\040\111\156\143\056\040\055\040\106  
\157\162\040\141\165\164\150\157\162\151\172\145\144\040\165\163  
\145\040\157\156\154\171\061\105\060\103\006\003\125\004\003\023  
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CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# For Email Distrust After: Wed Aug 31 00:00:00 2022

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER MULTILINE\_OCTAL

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# Trust for "Verisign Class 1 Public Primary Certification Authority - G3"

# Issuer: CN=VeriSign Class 1 Public Primary Certification Authority - G3,OU="(c) 1999 VeriSign, Inc. - For authorized use only",OU=VeriSign Trust Network,O="VeriSign, Inc.",C=US

# Serial Number:00:8b:5b:75:56:84:54:85:0b:00:cf:af:38:48:ce:b1:a4

# Subject: CN=VeriSign Class 1 Public Primary Certification Authority - G3,OU="(c) 1999 VeriSign, Inc. - For authorized use only",OU=VeriSign Trust Network,O="VeriSign, Inc.",C=US

# Not Valid Before: Fri Oct 01 00:00:00 1999

# Not Valid After : Wed Jul 16 23:59:59 2036

# Fingerprint (SHA-256):

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# Fingerprint (SHA1): 20:42:85:DC:F7:EB:76:41:95:57:8E:13:6B:D4:B7:D1:E9:8E:46:A5

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CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "Verisign Class 1 Public Primary Certification Authority - G3"

CKA\_CERT\_SHA1\_HASH MULTILINE\_OCTAL

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CKA\_CERT\_MD5\_HASH MULTILINE\_OCTAL

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CKA\_TRUST\_EMAIL\_PROTECTION CK\_TRUST CKT\_NSS\_TRUSTED\_DELEGATOR

CKA\_TRUST\_CODE\_SIGNING CK\_TRUST CKT\_NSS\_MUST\_VERIFY\_TRUST

CKA\_TRUST\_STEP\_UP\_APPROVED CK\_BBOOL CK\_FALSE

#

# Certificate "Verisign Class 2 Public Primary Certification Authority - G3"

#

# Issuer: CN=VeriSign Class 2 Public Primary Certification Authority - G3,OU="(c) 1999 VeriSign, Inc. - For  
authorized use only",OU=VeriSign Trust Network,O="VeriSign, Inc.",C=US

# Serial Number:61:70:cb:49:8c:5f:98:45:29:e7:b0:a6:d9:50:5b:7a

# Subject: CN=VeriSign Class 2 Public Primary Certification Authority - G3,OU="(c) 1999 VeriSign, Inc. - For  
authorized use only",OU=VeriSign Trust Network,O="VeriSign, Inc.",C=US

# Not Valid Before: Fri Oct 01 00:00:00 1999

# Not Valid After : Wed Jul 16 23:59:59 2036

# Fingerprint (SHA-256):

92:A9:D9:83:3F:E1:94:4D:B3:66:E8:BF:AE:7A:95:B6:48:0C:2D:6C:6C:2A:1B:E6:5D:42:36:B6:08:FC:A1:BB

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CKA\_PRIVATE CK\_BBOOL CK\_FALSE

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\342\102\105\252\270\220\255\276\010\217\251\013\102\030\224\317
\162\071\341\261\103\340\050\317\267\347\132\154\023\153\111\263
\377\343\030\174\211\213\063\135\254\063\327\247\371\332\072\125
\311\130\020\371\252\357\132\266\317\113\113\337\052
```

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# For Email Distrust After: Wed Aug 31 00:00:00 2022

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER MULTILINE\_OCTAL

```
\062\062\060\070\063\061\060\060\060\060\060\060\132
```

END

# Trust for "Verisign Class 2 Public Primary Certification Authority - G3"

# Issuer: CN=VeriSign Class 2 Public Primary Certification Authority - G3,OU="(c) 1999 VeriSign, Inc. - For authorized use only",OU=VeriSign Trust Network,O="VeriSign, Inc.",C=US

# Serial Number:61:70:cb:49:8c:5f:98:45:29:e7:b0:a6:d9:50:5b:7a

#

Subject: CN=VeriSign Class 2 Public Primary Certification Authority - G3,OU="(c) 1999 VeriSign, Inc. - For authorized use only",OU=VeriSign Trust Network,O="VeriSign, Inc.",C=US

# Not Valid Before: Fri Oct 01 00:00:00 1999

# Not Valid After : Wed Jul 16 23:59:59 2036

# Fingerprint (SHA-256):

```
92:A9:D9:83:3F:E1:94:4D:B3:66:E8:BF:AE:7A:95:B6:48:0C:2D:6C:6C:2A:1B:E6:5D:42:36:B6:08:FC:A1:BB
```

# Fingerprint (SHA1): 61:EF:43:D7:7F:CA:D4:61:51:BC:98:E0:C3:59:12:AF:9F:EB:63:11

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "Verisign Class 2 Public Primary Certification Authority - G3"

CKA\_CERT\_SHA1\_HASH MULTILINE\_OCTAL

```
\141\357\103\327\177\312\324\141\121\274\230\340\303\131\022\257
\237\353\143\021
```

END

CKA\_CERT\_MD5\_HASH MULTILINE\_OCTAL

```
\370\276\304\143\042\311\250\106\164\213\270\035\036\112\053\366
```

END

CKA\_ISSUER MULTILINE\_OCTAL

```
\060\201\312\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\027\060\025\006\003\125\004\012\023\016\126\145\162\151\123
\151\147\156\054\040\111\156\143\056\061\037\060\035\006\003\125
\004\013\023\026\126\145\162\151\123\151\147\156\040\124\162\165
\163\164\040\116\145\164\167\157\162\153\061\072\060\070\006\003
\125\004\013\023\061\050\143\051\040\061\071\071\071\040\126\145
\162\151\123\151\147\156\054\040\111\156\143\056\040\055\040\106
```

```
\157\162\040\141\165\164\150\157\162\151\172\145\144\040\165\163
\145\040\157\156\154\171\061\105\060\103\006\003\125\004\003\023
\074\126\145\162\151\123\151\147\156\040\103\154\141\163\163\040
\062\040\120\165\142\154\151\143\040\120\162\151\155\141\162\171
\040\103\145\162\164\151\146\151\143\141\164\151\157\156\040\101
\165\164\150\157\162\151\164\171\040\055\040\107\063
```

END

CKA\_SERIAL\_NUMBER

MULTILINE\_OCTAL

```
\002\020\141\160\313\111\214\137\230\105\051\347\260\246\331\120
\133\172
```

END

CKA\_TRUST\_SERVER\_AUTH CK\_TRUST CKT\_NSS\_MUST\_VERIFY\_TRUST

CKA\_TRUST\_EMAIL\_PROTECTION

CK\_TRUST CKT\_NSS\_TRUSTED\_DELEGATOR

CKA\_TRUST\_CODE\_SIGNING CK\_TRUST CKT\_NSS\_MUST\_VERIFY\_TRUST

CKA\_TRUST\_STEP\_UP\_APPROVED CK\_BBOOL CK\_FALSE

#

# Certificate "Entrust.net Premium 2048 Secure Server CA"

#

# Issuer: CN=Entrust.net Certification Authority (2048),OU=(c) 1999 Entrust.net Limited,OU=www.entrust.net/CPS\_2048 incorp. by ref. (limits liab.),O=Entrust.net

# Serial Number: 946069240 (0x3863def8)

# Subject: CN=Entrust.net Certification Authority (2048),OU=(c) 1999 Entrust.net Limited,OU=www.entrust.net/CPS\_2048 incorp. by ref. (limits liab.),O=Entrust.net

# Not Valid Before: Fri Dec 24 17:50:51 1999

# Not Valid After : Tue Jul 24 14:15:12 2029

# Fingerprint (SHA-256):

6D:C4:71:72:E0:1C:BC:B0:BF:62:58:0D:89:5F:E2:B8:AC:9A:D4:F8:73:80:1E:0C:10:B9:C8:37:D2:1E:B1:77

# Fingerprint (SHA1): 50:30:06:09:1D:97:D4:F5:AE:39:F7:CB:E7:92:7D:7D:65:2D:34:31

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_CERTIFICATE

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL

UTF8 "Entrust.net Premium 2048 Secure Server CA"

CKA\_CERTIFICATE\_TYPE CK\_CERTIFICATE\_TYPE CKC\_X\_509

CKA\_SUBJECT MULTILINE\_OCTAL

```
\060\201\264\061\024\060\022\006\003\125\004\012\023\013\105\156
\164\162\165\163\164\056\156\145\164\061\100\060\076\006\003\125
\004\013\024\067\167\167\167\056\145\156\164\162\165\163\164\056
\156\145\164\057\103\120\123\137\062\060\064\070\040\151\156\143
\157\162\160\056\040\142\171\040\162\145\146\056\040\050\154\151
\155\151\164\163\040\154\151\141\142\056\051\061\045\060\043\006
\003\125\004\013\023\034\050\143\051\040\061\071\071\071\040\105
\156\164\162\165\163\164\056\156\145\164\040\114\151\155\151\164
\145\144\061\063\060\061\006\003\125\004\003\023\052\105\156\164
```

\162\165\163\164\056\156\145\164\040\103\145\162\164\151\146\151  
\143\141\164\151\157\156\040\101\165\164\150\157\162\151\164\171  
\040\050\062\060\064\070\051

END

CKA\_ID UTF8 "0"

CKA\_ISSUER MULTILINE\_OCTAL

\060\201\264\061\024\060\022\006\003\125\004\012\023\013\105\156  
\164\162\165\163\164\056\156\145\164\061\100\060\076\006\003\125  
\004\013\024\067\167\167\167\056\145\156\164\162\165\163\164\056  
\156\145\164\057\103\120\123\137\062\060\064\070\040\151\156\143  
\157\162\160\056\040\142\171\040\162\145\146\056\040\050\154\151  
\155\151\164\163\040\154\151\141\142\056\051\061\045\060\043\006  
\003\125\004\013\023\034\050\143\051\040\061\071\071\071\040\105  
\156\164\162\165\163\164\056\156\145\164\040\114\151\155\151\164  
\145\144\061\063\060\061\006\003\125\004\003\023\052\105\156\164  
\162\165\163\164\056\156\145\164\040\103\145\162\164\151\146\151  
\143\141\164\151\157\156\040\101\165\164\150\157\162\151\164\171  
\040\050\062\060\064\070\051

END

CKA\_SERIAL\_NUMBER

MULTILINE\_OCTAL

\002\004\070\143\336\370

END

CKA\_VALUE MULTILINE\_OCTAL

\060\202\004\052\060\202\003\022\240\003\002\001\002\002\004\070  
\143\336\370\060\015\006\011\052\206\110\206\367\015\001\001\005  
\005\000\060\201\264\061\024\060\022\006\003\125\004\012\023\013  
\105\156\164\162\165\163\164\056\156\145\164\061\100\060\076\006  
\003\125\004\013\024\067\167\167\167\056\145\156\164\162\165\163  
\164\056\156\145\164\057\103\120\123\137\062\060\064\070\040\151  
\156\143\157\162\160\056\040\142\171\040\162\145\146\056\040\050  
\154\151\155\151\164\163\040\154\151\141\142\056\051\061\045\060  
\043\006\003\125\004\013\023\034\050\143\051\040\061\071\071\071  
\040\105\156\164\162\165\163\164\056\156\145\164\040\114\151\155  
\151\164\145\144\061\063\060\061\006\003\125\004\003\023\052\105  
\156\164\162\165\163\164\056\156\145\164\040\103\145\162\164\151  
\146\151\143\141\164\151\157\156\040\101\165\164\150\157\162\151  
\164\171\040\050\062\060\064\070\051\060\036\027\015\071\071\061  
\062\062\064\061\067\065\060\065\061\132\027\015\062\071\060\067  
\062\064\061\064\061\065\061\062\132\060\201\264\061\024\060\022  
\006\003\125\004\012\023\013\105\156\164\162\165\163\164\056\156  
\145\164\061\100\060\076\006\003\125\004\013\024\067\167\167\167  
\056\145\156\164\162\165\163\164\056\156\145\164\057\103\120\123  
\137\062\060\064\070\040\151\156\143\157\162\160\056\040\142\171  
\040\162\145\146\056\040\050\154\151\155\151\164\163\040\154\151  
\141\142\056\051\061\045\060\043\006\003\125\004\013\023\034\050  
\143\051\040\061\071\071\071\040\105\156\164\162\165\163\164\056  
\156\145\164\040\114\151\155\151\164\145\144\061\063\060\061\006

\003\125\004\003\023\052\105\156\164\162\165\163\164\056\156\145  
\164\040\103\145\162\164\151\146\151\143\141\164\151\157\156\040  
\101\165\164\150\157\162\151\164\171\040\050\062\060\064\070\051  
\060\202\001\042\060\015\006\011\052\206\110\206\367\015\001\001  
\001\005\000\003\202\001\017\000\060\202\001\012\002\202\001\001  
\000\255\115\113\251\022\206\262\352\243\040\007\025\026\144\052  
\053\113\321\277\013\112\115\216\355\200\166\245\147\267\170\100  
\300\163\102\310\150\300\333\123\053\335\136\270\166\230\065\223  
\213\032\235\174\023\072\016\037\133\267\036\317\345\044\024\036  
\261\201\251\215\175\270\314\153\113\003\361\002\014\334\253\245  
\100\044\000\177\164\224\241\235\010\051\263\210\013\365\207\167  
\235\125\315\344\303\176\327\152\144\253\205\024\206\225\133\227  
\062\120\157\075\310\272\146\014\343\374\275\270\111\301\166\211  
\111\031\375\300\250\275\211\243\147\057\306\237\274\161\031\140  
\270\055\351\054\311\220\166\146\173\224\342\257\170\326\145\123  
\135\074\326\234\262\317\051\003\371\057\244\120\262\324\110\316  
\005\062\125\212\375\262\144\114\016\344\230\007\165\333\177\337  
\271\010\125\140\205\060\051\371\173\110\244\151\206\343\065\077  
\036\206\135\172\172\025\275\357\000\216\025\042\124\027\000\220  
\046\223\274\016\111\150\221\277\370\107\323\235\225\102\301\016  
\115\337\157\046\317\303\030\041\142\146\103\160\326\325\300\007  
\341\002\003\001\000\001\243\102\060\100\060\016\006\003\125\035  
\017\001\001\377\004\004\003\002\001\006\060\017\006\003\125\035  
\023\001\001\377\004\005\060\003\001\001\377\060\035\006\003\125  
\035\016\004\026\004\024\125\344\201\321\021\200\276\330\211\271  
\010\243\061\371\241\044\011\026\271\160\060\015\006\011\052\206  
\110\206\367\015\001\001\005\005\000\003\202\001\001\000\073\233  
\217\126\233\060\347\123\231\174\172\171\247\115\227\327\031\225  
\220\373\006\037\312\063\174\106\143\217\226\146\044\372\100\033  
\041\047\312\346\162\163\362\117\376\061\231\375\310\014\114\150  
\123\306\200\202\023\230\372\266\255\332\135\075\361\316\156\366  
\025\021\224\202\014\356\077\225\257\021\253\017\327\057\336\037  
\003\217\127\054\036\311\273\232\032\104\225\353\030\117\246\037  
\315\175\127\020\057\233\004\011\132\204\265\156\330\035\072\341  
\326\236\321\154\171\136\171\034\024\305\343\320\114\223\073\145  
\074\355\337\075\276\246\345\225\032\303\265\031\303\275\136\133  
\273\377\043\357\150\031\313\022\223\047\134\003\055\157\060\320  
\036\266\032\254\336\132\367\321\252\250\047\246\376\171\201\304  
\171\231\063\127\272\022\260\251\340\102\154\223\312\126\336\376  
\155\204\013\010\213\176\215\352\327\230\041\306\363\347\074\171  
\057\136\234\321\114\025\215\341\354\042\067\314\232\103\013\227  
\334\200\220\215\263\147\233\157\110\010\025\126\317\277\361\053  
\174\136\232\166\351\131\220\305\174\203\065\021\145\121

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

```
# Trust for "Entrust.net Premium 2048 Secure Server CA"
# Issuer: CN=Entrust.net Certification Authority (2048),OU=(c) 1999 Entrust.net
Limited,OU=www.entrust.net/CPS_2048 incorp. by ref. (limits liab.),O=Entrust.net
# Serial Number: 946069240 (0x3863def8)
# Subject: CN=Entrust.net Certification Authority (2048),OU=(c) 1999 Entrust.net
Limited,OU=www.entrust.net/CPS_2048 incorp. by ref. (limits liab.),O=Entrust.net
# Not Valid Before: Fri Dec 24 17:50:51 1999
# Not Valid After : Tue Jul 24 14:15:12 2029
# Fingerprint (SHA-256):
6D:C4:71:72:E0:1C:BC:B0:BF:62:58:0D:89:5F:E2:B8:AC:9A:D4:F8:73:80:1E:0C:10:B9:C8:37:D2:1E:B1:77
# Fingerprint (SHA1): 50:30:06:09:1D:97:D4:F5:AE:39:F7:CB:E7:92:7D:7D:65:2D:34:31
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN
CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Entrust.net Premium 2048 Secure Server CA"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\120\060\006\011\035\227\324\365\256\071\367\313\347\222\175\175
\145\055\064\061
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\356\051\061\274\062\176\232\346\350\265\367\121\264\064\161\220
END
CKA_ISSUER MULTILINE_OCTAL
\060\201\264\061\024\060\022\006\003\125\004\012\023\013\105\156
\164\162\165\163\164\056\156\145\164\061\100\060\076\006\003\125
\004\013\024\067\167\167\167\056\145\156\164\162\165\163\164\056
\156\145\164\057\103\120\123\137\062\060\064\070\040\151\156\143
\157\162\160\056\040\142\171\040\162\145\146\056\040\050\154\151
\155\151\164\163\040\154\151\141\142\056\051\061\045\060\043\006
\003\125\004\013\023\034\050\143\051\040\061\071\071\071\040\105
\156\164\162\165\163\164\056\156\145\164\040\114\151\155\151\164
\145\144\061\063\060\061\006\003\125\004\003\023\052\105\156\164
\162\165\163\164\056\156\145\164\040\103\145\162\164\151\146\151
\143\141\164\151\157\156\040\101\165\164\150\157\162\151\164\171
\040\050\062\060\064\070\051
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\004\070\143\336\370
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE
```



```

#
# Certificate "Baltimore CyberTrust Root"
#
# Issuer: CN=Baltimore CyberTrust Root,OU=CyberTrust,O=Baltimore,C=IE
# Serial Number: 33554617 (0x20000b9)
# Subject: CN=Baltimore CyberTrust Root,OU=CyberTrust,O=Baltimore,C=IE
# Not Valid Before: Fri May 12 18:46:00 2000
# Not Valid After : Mon May 12 23:59:00 2025
# Fingerprint (SHA-256):
16:AF:57:A9:F6:76:B0:AB:12:60:95:AA:5E:BA:DE:F2:2A:B3:11:19:D6:44:AC:95:CD:4B:93:DB:F3:F2:6A:EB
# Fingerprint (SHA1): D4:DE:20:D0:5E:66:FC:53:FE:1A:50:88:2C:78:DB:28:52:CA:E4:74
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN
CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Baltimore CyberTrust Root"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\132\061\013\060\011\006\003\125\004\006\023\002\111\105\061
\022\060\020\006\003\125\004\012\023\011\102\141\154\164\151\155
\157\162\145\061\023\060\021\006\003\125\004\013\023\012\103\171
\142\145\162\124\162\165\163\164\061\042\060\040\006\003\125\004
\003\023\031\102\141\154\164\151\155\157\162\145\040\103\171\142
\145\162\124\162\165\163\164\040\122\157\157\164
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\132\061\013\060\011\006\003\125\004\006\023\002\111\105\061
\022\060\020\006\003\125\004\012\023\011\102\141\154\164\151\155
\157\162\145\061\023\060\021\006\003\125\004\013\023\012\103\171
\142\145\162\124\162\165\163\164\061\042\060\040\006\003\125\004
\003\023\031\102\141\154\164\151\155\157\162\145\040\103\171\142
\145\162\124\162\165\163\164\040\122\157\157\164
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\004\002\000\000\271
END
CKA_VALUE MULTILINE_OCTAL
\060\202\003\167\060\202\002\137\240\003\002\001\002\002\004\002
\000\000\271\060\015\006\011\052\206\110\206\367\015\001\001\005
\005\000\060\132\061\013\060\011\006\003\125\004\006\023\002\111
\105\061\022\060\020\006\003\125\004\012\023\011\102\141\154\164
\151\155\157\162\145\061\023\060\021\006\003\125\004\013\023\012
\103\171\142\145\162\124\162\165\163\164\061\042\060\040\006\003
\125\004\003\023\031\102\141\154\164\151\155\157\162\145\040\103
\171\142\145\162\124\162\165\163\164\040\122\157\157\164\060\036

```

\027\015\060\060\060\065\061\062\061\070\064\066\060\060\132\027  
\015\062\065\060\065\061\062\062\063\065\071\060\060\132\060\132  
\061\013\060\011\006\003\125\004\006\023\002\111\105\061\022\060  
\020\006\003\125\004\012\023\011\102\141\154\164\151\155\157\162  
\145\061\023\060\021\006\003\125\004\013\023\012\103\171\142\145  
\162\124\162\165\163\164\061\042\060\040\006\003\125\004\003\023  
\031\102\141\154\164\151\155\157\162\145\040\103\171\142\145\162  
\124\162\165\163\164\040\122\157\157\164\060\202\001\042\060\015  
\006\011\052\206\110\206\367\015\001\001\001\005\000\003\202\001  
\017\000\060\202\001\012\002\202\001\001\000\243\004\273\042\253  
\230\075\127\350\046\162\232\265\171\324\051\342\341\350\225\200  
\261\260\343\133\216\053\051\232\144\337\241\135\355\260\011\005  
\155\333\050\056\316\142\242\142\376\264\210\332\022\353\070\353  
\041\235\300\101\053\001\122\173\210\167\323\034\217\307\272\271  
\210\265\152\011\347\163\350\021\100\247\321\314\312\142\215\055  
\345\217\013\246\120\322\250\120\303\050\352\365\253\045\207\212  
\232\226\034\251\147\270\077\014\325\367\371\122\023\057\302\033  
\325\160\160\360\217\300\022\312\006\313\232\341\331\312\063\172  
\167\326\370\354\271\361\150\104\102\110\023\322\300\302\244\256  
\136\140\376\266\246\005\374\264\335\007\131\002\324\131\030\230  
\143\365\245\143\340\220\014\175\135\262\006\172\363\205\352\353  
\324\003\256\136\204\076\137\377\025\355\151\274\371\071\066\162  
\165\317\167\122\115\363\311\220\054\271\075\345\311\043\123\077  
\037\044\230\041\134\007\231\051\275\306\072\354\347\156\206\072  
\153\227\164\143\063\275\150\030\061\360\170\215\166\277\374\236  
\216\135\052\206\247\115\220\334\047\032\071\002\003\001\000\001  
\243\105\060\103\060\035\006\003\125\035\016\004\026\004\024\345  
\235\131\060\202\107\130\314\254\372\010\124\066\206\173\072\265  
\004\115\360\060\022\006\003\125\035\023\001\001\377\004\010\060  
\006\001\001\377\002\001\003\060\016\006\003\125\035\017\001\001  
\377\004\004\003\002\001\006\060\015\006\011\052\206\110\206\367  
\015\001\001\005\005\000\003\202\001\001\000\205\014\135\216\344  
\157\121\150\102\005\240\335\273\117\047\045\204\003\275\367\144  
\375\055\327\060\343\244\020\027\353\332\051\051\266\171\077\166  
\366\031\023\043\270\020\012\371\130\244\324\141\160\275\004\141  
\152\022\212\027\325\012\275\305\274\060\174\326\351\014\045\215  
\206\100\117\354\314\243\176\070\306\067\021\117\355\335\150\061  
\216\114\322\263\001\164\356\276\165\136\007\110\032\177\160\377  
\026\134\204\300\171\205\270\005\375\177\276\145\021\243\017\300  
\002\264\370\122\067\071\004\325\251\061\172\030\277\240\052\364  
\022\231\367\243\105\202\343\074\136\365\235\236\265\310\236\174  
\056\310\244\236\116\010\024\113\155\375\160\155\153\032\143\275  
\144\346\037\267\316\360\362\237\056\273\033\267\362\120\210\163  
\222\302\342\343\026\215\232\062\002\253\216\030\335\351\020\021  
\356\176\065\253\220\257\076\060\224\172\320\063\075\247\145\017  
\365\374\216\236\142\317\107\104\054\001\135\273\035\265\062\322  
\107\322\070\056\320\376\201\334\062\152\036\265\356\074\325\374  
\347\201\035\031\303\044\102\352\143\071\251

```

END
CKA_NSS_MOZILLA_CA_POLICY
CK_BBOOL CK_TRUE
CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE
CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

# Trust for "Baltimore CyberTrust Root"
# Issuer: CN=Baltimore CyberTrust Root,OU=CyberTrust,O=Baltimore,C=IE
# Serial Number: 33554617
(0x20000b9)
# Subject: CN=Baltimore CyberTrust Root,OU=CyberTrust,O=Baltimore,C=IE
# Not Valid Before: Fri May 12 18:46:00 2000
# Not Valid After : Mon May 12 23:59:00 2025
# Fingerprint (SHA-256):
16:AF:57:A9:F6:76:B0:AB:12:60:95:AA:5E:BA:DE:F2:2A:B3:11:19:D6:44:AC:95:CD:4B:93:DB:F3:F2:6A:EB
# Fingerprint (SHA1): D4:DE:20:D0:5E:66:FC:53:FE:1A:50:88:2C:78:DB:28:52:CA:E4:74
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Baltimore CyberTrust Root"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\324\336\040\320\136\146\374\123\376\032\120\210\054\170\333\050
\122\312\344\164
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\254\266\224\245\234\027\340\327\221\122\233\261\227\006\246\344
END
CKA_ISSUER MULTILINE_OCTAL
\060\132\061\013\060\011\006\003\125\004\006\023\002\111\105\061
\022\060\020\006\003\125\004\012\023\011\102\141\154\164\151\155
\157\162\145\061\023\060\021\006\003\125\004\013\023\012\103\171
\142\145\162\124\162\165\163\164\061\042\060\040\006\003\125\004
\003\023\031\102\141\154\164\151\155\157\162\145\040\103\171\142
\145\162\124\162\165\163\164\040\122\157\157\164
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\004\002\000\000\271
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "Entrust Root Certification Authority"
#

```

# Issuer: CN=Entrust Root Certification Authority,OU="(c) 2006 Entrust, Inc.",OU=www.entrust.net/CPS is incorporated by reference,O="Entrust, Inc.",C=US  
# Serial Number: 1164660820 (0x456b5054)  
# Subject: CN=Entrust Root Certification Authority,OU="(c) 2006 Entrust, Inc.",OU=www.entrust.net/CPS is incorporated by reference,O="Entrust, Inc.",C=US  
# Not Valid Before: Mon Nov 27 20:23:42 2006  
# Not Valid After : Fri Nov 27 20:53:42 2026  
# Fingerprint (SHA-256):  
73:C1:76:43:4F:1B:C6:D5:AD:F4:5B:0E:76:E7:27:28:7C:8D:E5:76:16:C1:E6:E6:14:1A:2B:2C:BC:7D:8E:4C  
#

Fingerprint (SHA1): B3:1E:B1:B7:40:E3:6C:84:02:DA:DC:37:D4:4D:F5:D4:67:49:52:F9

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_CERTIFICATE  
CKA\_TOKEN CK\_BBOOL CK\_TRUE  
CKA\_PRIVATE CK\_BBOOL CK\_FALSE  
CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE  
CKA\_LABEL UTF8 "Entrust Root Certification Authority"  
CKA\_CERTIFICATE\_TYPE CK\_CERTIFICATE\_TYPE CKC\_X\_509  
CKA\_SUBJECT MULTILINE\_OCTAL  
\060\201\260\061\013\060\011\006\003\125\004\006\023\002\125\123  
\061\026\060\024\006\003\125\004\012\023\015\105\156\164\162\165  
\163\164\054\040\111\156\143\056\061\071\060\067\006\003\125\004  
\013\023\060\167\167\167\056\145\156\164\162\165\163\164\056\156  
\145\164\057\103\120\123\040\151\163\040\151\156\143\157\162\160  
\157\162\141\164\145\144\040\142\171\040\162\145\146\145\162\145  
\156\143\145\061\037\060\035\006\003\125\004\013\023\026\050\143  
\051\040\062\060\060\066\040\105\156\164\162\165\163\164\054\040  
\111\156\143\056\061\055\060\053\006\003\125\004\003\023\044\105  
\156\164\162\165\163\164\040\122\157\157\164\040\103\145\162\164  
\151\146\151\143\141\164\151\157\156\040\101\165\164\150\157\162  
\151\164\171  
END  
CKA\_ID  
UTF8 "0"  
CKA\_ISSUER MULTILINE\_OCTAL  
\060\201\260\061\013\060\011\006\003\125\004\006\023\002\125\123  
\061\026\060\024\006\003\125\004\012\023\015\105\156\164\162\165  
\163\164\054\040\111\156\143\056\061\071\060\067\006\003\125\004  
\013\023\060\167\167\167\056\145\156\164\162\165\163\164\056\156  
\145\164\057\103\120\123\040\151\163\040\151\156\143\157\162\160  
\157\162\141\164\145\144\040\142\171\040\162\145\146\145\162\145  
\156\143\145\061\037\060\035\006\003\125\004\013\023\026\050\143  
\051\040\062\060\060\066\040\105\156\164\162\165\163\164\054\040  
\111\156\143\056\061\055\060\053\006\003\125\004\003\023\044\105  
\156\164\162\165\163\164\040\122\157\157\164\040\103\145\162\164  
\151\146\151\143\141\164\151\157\156\040\101\165\164\150\157\162  
\151\164\171  
END  
CKA\_SERIAL\_NUMBER MULTILINE\_OCTAL

\002\004\105\153\120\124

END

CKA\_VALUE

MULTILINE\_OCTAL

\060\202\004\221\060\202\003\171\240\003\002\001\002\002\004\105  
\153\120\124\060\015\006\011\052\206\110\206\367\015\001\001\005  
\005\000\060\201\260\061\013\060\011\006\003\125\004\006\023\002  
\125\123\061\026\060\024\006\003\125\004\012\023\015\105\156\164  
\162\165\163\164\054\040\111\156\143\056\061\071\060\067\006\003  
\125\004\013\023\060\167\167\167\056\145\156\164\162\165\163\164  
\056\156\145\164\057\103\120\123\040\151\163\040\151\156\143\157  
\162\160\157\162\141\164\145\144\040\142\171\040\162\145\146\145  
\162\145\156\143\145\061\037\060\035\006\003\125\004\013\023\026  
\050\143\051\040\062\060\060\066\040\105\156\164\162\165\163\164  
\054\040\111\156\143\056\061\055\060\053\006\003\125\004\003\023  
\044\105\156\164\162\165\163\164\040\122\157\157\164\040\103\145  
\162\164\151\146\151\143\141\164\151\157\156\040\101\165\164\150  
\157\162\151\164\171\060\036\027\015\060\066\061\061\062\067\062  
\060\062\063\064\062\132\027\015\062\066\061\061\062\067\062\060  
\065\063\064\062\132\060\201\260\061\013\060\011\006\003\125\004  
\006\023\002\125\123\061\026\060\024\006\003\125\004\012\023\015  
\105\156\164\162\165\163\164\054\040\111\156\143\056\061\071\060  
\067\006\003\125\004\013\023\060\167\167\167\056\145\156\164\162  
\165\163\164\056\156\145\164\057\103\120\123\040\151\163\040\151  
\156\143\157\162\160\157\162\141\164\145\144\040\142\171\040\162  
\145\146\145\162\145\156\143\145\061\037\060\035\006\003\125\004  
\013\023\026\050\143\051\040\062\060\060\066\040\105\156\164\162  
\165\163\164\054\040\111\156\143\056\061\055\060\053\006\003\125  
\004\003\023\044\105\156\164\162\165\163\164\040\122\157\157\164  
\040\103\145\162\164\151\146\151\143\141\164\151\157\156\040\101  
\165\164\150\157\162\151\164\171\060\202\001\042\060\015\006\011  
\052\206\110\206\367\015\001\001\001\005\000\003\202\001\017\000  
\060\202\001\012\002\202\001\001\000\266\225\266\103\102\372\306  
\155\052\157\110\337\224\114\071\127\005\356\303\171\021\101\150  
\066\355\354\376\232\001\217\241\070\050\374\367\020\106\146\056  
\115\036\032\261\032\116\306\321\300\225\210\260\311\377\061\213  
\063\003\333\267\203\173\076\040\204\136\355\262\126\050\247\370  
\340\271\100\161\067\305\313\107\016\227\052\150\300\042\225\142  
\025\333\107\331\365\320\053\377\202\113\311\255\076\336\114\333  
\220\200\120\077\011\212\204\000\354\060\012\075\030\315\373\375  
\052\131\232\043\225\027\054\105\236\037\156\103\171\155\014\134  
\230\376\110\247\305\043\107\134\136\375\156\347\036\264\366\150  
\105\321\206\203\133\242\212\215\261\343\051\200\376\045\161\210  
\255\276\274\217\254\122\226\113\252\121\215\344\023\061\031\350  
\116\115\237\333\254\263\152\325\274\071\124\161\312\172\172\177  
\220\335\175\035\200\331\201\273\131\046\302\021\376\346\223\342  
\367\200\344\145\373\064\067\016\051\200\160\115\257\070\206\056  
\236\177\127\257\236\027\256\353\034\313\050\041\137\266\034\330

\347\242\004\042\371\323\332\330\313\002\003\001\000\001\243\201  
\260\060\201\255\060\016\006\003\125\035\017\001\001\377\004\004  
\003\002\001\006\060\017\006\003\125\035\023\001\001\377\004\005  
\060\003\001\001\377\060\053\006\003\125\035\020\004\044\060\042  
\200\017\062\060\060\066\061\061\062\067\062\060\062\063\064\062  
\132\201\017\062\060\062\066\061\061\062\067\062\060\065\063\064  
\062\132\060\037\006\003\125\035\043\004\030\060\026\200\024\150  
\220\344\147\244\246\123\200\307\206\146\244\361\367\113\103\373  
\204\275\155\060\035\006\003\125\035\016\004\026\004\024\150\220  
\344\147\244\246\123\200\307\206\146\244\361\367\113\103\373\204  
\275\155\060\035\006\011\052\206\110\206\366\175\007\101\000\004  
\020\060\016\033\010\126\067\056\061\072\064\056\060\003\002\004  
\220\060\015\006\011\052\206\110\206\367\015\001\001\005\005\000  
\003\202\001\001\000\223\324\060\260\327\003\040\052\320\371\143  
\350\221\014\005\040\251\137\031\312\173\162\116\324\261\333\320  
\226\373\124\132\031\054\014\010\367\262\274\205\250\235\177\155  
\073\122\263\052\333\347\324\204\214\143\366\017\313\046\001\221  
\120\154\364\137\024\342\223\164\300\023\236\060\072\120\343\264  
\140\305\034\360\042\104\215\161\107\254\310\032\311\351\233\232  
\000\140\023\377\160\176\137\021\115\111\033\263\025\122\173\311  
\124\332\277\235\225\257\153\232\330\236\351\361\344\103\215\342  
\021\104\072\277\257\275\203\102\163\122\213\252\273\247\051\317  
\365\144\034\012\115\321\274\252\254\237\052\320\377\177\177\332  
\175\352\261\355\060\045\301\204\332\064\322\133\170\203\126\354  
\234\066\303\046\342\021\366\147\111\035\222\253\214\373\353\377  
\172\356\205\112\247\120\200\360\247\134\112\224\056\137\005\231  
\074\122\101\340\315\264\143\317\001\103\272\234\203\334\217\140  
\073\363\132\264\264\173\256\332\013\220\070\165\357\201\035\146  
\322\367\127\160\066\263\277\374\050\257\161\045\205\133\023\376  
\036\177\132\264\074

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "Entrust Root Certification Authority"

# Issuer: CN=Entrust

Root Certification Authority,OU="(c) 2006 Entrust, Inc.",OU=www.entrust.net/CPS is incorporated by  
reference,O="Entrust, Inc.",C=US

# Serial Number: 1164660820 (0x456b5054)

# Subject: CN=Entrust Root Certification Authority,OU="(c) 2006 Entrust, Inc.",OU=www.entrust.net/CPS is  
incorporated by reference,O="Entrust, Inc.",C=US

# Not Valid Before: Mon Nov 27 20:23:42 2006

# Not Valid After : Fri Nov 27 20:53:42 2026

# Fingerprint (SHA-256):

73:C1:76:43:4F:1B:C6:D5:AD:F4:5B:0E:76:E7:27:28:7C:8D:E5:76:16:C1:E6:E6:14:1A:2B:2C:BC:7D:8E:4C

# Fingerprint (SHA1): B3:1E:B1:B7:40:E3:6C:84:02:DA:DC:37:D4:4D:F5:D4:67:49:52:F9

```

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Entrust Root Certification Authority"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\263\036\261\267\100\343\154\204\002\332\334\067\324\115\365\324
\147\111\122\371
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\326\245\303\355\135\335\076\000\301\075\207\222\037\035\077\344
END
CKA_ISSUER
MULTILINE_OCTAL
\060\201\260\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\026\060\024\006\003\125\004\012\023\015\105\156\164\162\165
\163\164\054\040\111\156\143\056\061\071\060\067\006\003\125\004
\013\023\060\167\167\167\056\145\156\164\162\165\163\164\056\156
\145\164\057\103\120\123\040\151\163\040\151\156\143\157\162\160
\157\162\141\164\145\144\040\142\171\040\162\145\146\145\162\145
\156\143\145\061\037\060\035\006\003\125\004\013\023\026\050\143
\051\040\062\060\060\066\040\105\156\164\162\165\163\164\054\040
\111\156\143\056\061\055\060\053\006\003\125\004\003\023\044\105
\156\164\162\165\163\164\040\122\157\157\164\040\103\145\162\164
\151\146\151\143\141\164\151\157\156\040\101\165\164\150\157\162
\151\164\171
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\004\105\153\120\124
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_CODE_SIGNING CK_TRUST
CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "Certum Root CA"
#
# Issuer: CN=Certum CA,O=Unizeto Sp. z o.o.,C=PL
# Serial Number: 65568 (0x10020)
# Subject: CN=Certum CA,O=Unizeto Sp. z o.o.,C=PL
# Not Valid Before: Tue Jun 11 10:46:39 2002
# Not Valid After : Fri Jun 11 10:46:39 2027
# Fingerprint (SHA-256):
D8:E0:FE:BC:1D:B2:E3:8D:00:94:0F:37:D2:7D:41:34:4D:99:3E:73:4B:99:D5:65:6D:97:78:D4:D8:14:36:24
# Fingerprint (SHA1): 62:52:DC:40:F7:11:43:A2:2F:DE:9E:F7:34:8E:06:42:51:B1:81:18
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE

```

```
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Certum Root CA"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\076\061\013\060\011\006\003\125\004\006\023\002\120\114\061
\033\060\031\006\003\125\004\012\023\022\125\156\151\172\145\164
\157\040\123\160\056\040\172\040\157\056\157\056\061\022\060\020
\006\003\125\004\003\023\011\103\145\162\164\165\155\040\103\101
END
CKA_ID
UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\076\061\013\060\011\006\003\125\004\006\023\002\120\114\061
\033\060\031\006\003\125\004\012\023\022\125\156\151\172\145\164
\157\040\123\160\056\040\172\040\157\056\157\056\061\022\060\020
\006\003\125\004\003\023\011\103\145\162\164\165\155\040\103\101
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\003\001\000\040
END
CKA_VALUE MULTILINE_OCTAL
\060\202\003\014\060\202\001\364\240\003\002\001\002\002\003\001
\000\040\060\015\006\011\052\206\110\206\367\015\001\001\005\005
\000\060\076\061\013\060\011\006\003\125\004\006\023\002\120\114
\061\033\060\031\006\003\125\004\012\023\022\125\156\151\172\145
\164\157\040\123\160\056\040\172\040\157\056\157\056\061\022\060
\020\006\003\125\004\003\023\011\103\145\162\164\165\155\040\103
\101\060\036\027\015\060\062\060\066\061\061\061\060\064\066\063
\071\132\027\015\062\067\060\066\061\061\061\060\064\066\063\071
\132\060\076\061\013\060\011\006\003\125\004\006\023\002\120\114
\061\033\060\031\006\003\125\004\012\023\022\125\156\151\172\145
\164\157\040\123\160\056\040\172\040\157\056\157\056\061\022\060
\020\006\003\125\004\003\023\011\103\145\162\164\165\155\040\103
\101\060\202\001\042\060\015\006\011\052\206\110\206\367\015\001
\001\001\005\000\003\202\001\017\000\060\202\001\012\002\202\001
\001\000\316\261\301\056\323\117\174\315\045\316\030\076\117\304
\214\157\200\152\163\310\133\121\370\233\322\334\273\000\134\261
\240\374\165\003\356\201\360\210\356\043\122\351\346\025\063\215
\254\055\011\305\166\371\053\071\200\211\344\227\113\220\245\250
\170\370\163\103\173\244\141\260\330\130\314\341\154\146\176\234
\363\011\136\125\143\204\325\250\357\363\261\056\060\150\263\304
\074\330\254\156\215\231\132\220\116\064\334\066\232\217\201\210
\120\267\155\226\102\011\363\327\225\203\015\101\113\260\152\153
\370\374\017\176\142\237\147\304\355\046\137\020\046\017\010\117
\360\244\127\050\316\217\270\355\105\366\156\356\045\135\252\156
\071\276\344\223\057\331\107\240\162\353\372\246\133\257\312\123
```



```
\077\342\016\306\226\126\021\156\367\351\146\251\046\330\177\225
\123\355\012\205\210\272\117\051\245\102\214\136\266\374\205\040
\000\252\150\013\241\032\205\001\234\304\106\143\202\210\266\042
\261\356\376\252\106\131\176\317\065\054\325\266\332\135\367\110
\063\024\124\266\353\331\157\316\315\210\326\253\033\332\226\073
\035\131\002\003\001\000\001\243\023\060\021\060\017\006\003\125
\035\023\001\001\377\004\005\060\003\001\001\377\060\015\006\011
\052\206\110\206\367\015\001\001\005\005\000\003\202\001\001\000
\270\215\316\357\347\024\272\317\356\260\104\222\154\264\071\076
\242\204\156\255\270\041\167\322\324\167\202\207\346\040\101\201
\356\342\370\021\267\143\321\027\067\276\031\166\044\034\004\032
\114\353\075\252\147\157\055\324\315\376\145\061\160\305\033\246
\002\012\272\140\173\155\130\302\232\111\376\143\062\013\153\343
\072\300\254\253\073\260\350\323\011\121\214\020\203\306\064\340
\305\053\340\032\266\140\024\047\154\062\167\214\274\262\162\230
\317\315\314\077\271\310\044\102\024\326\127\374\346\046\103\251
\035\345\200\220\316\003\124\050\076\367\077\323\370\115\355\152
\012\072\223\023\233\073\024\043\023\143\234\077\321\207\047\171
\345\114\121\343\001\255\205\135\032\073\261\325\163\020\244\323
\362\274\156\144\365\132\126\220\250\307\016\114\164\017\056\161
\073\367\310\107\364\151\157\025\362\021\136\203\036\234\174\122
\256\375\002\332\022\250\131\147\030\333\274\160\335\233\261\151
\355\200\316\211\100\110\152\016\065\312\051\146\025\041\224\054
\350\140\052\233\205\112\100\363\153\212\044\354\006\026\054\163
```

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "Certum Root CA"

# Issuer: CN=Certum CA,O=Unizeto Sp. z o.o.,C=PL

# Serial Number: 65568 (0x10020)

# Subject: CN=Certum CA,O=Unizeto Sp. z o.o.,C=PL

# Not Valid Before: Tue Jun 11 10:46:39 2002

# Not Valid After : Fri Jun 11

10:46:39 2027

# Fingerprint (SHA-256):

D8:E0:FE:BC:1D:B2:E3:8D:00:94:0F:37:D2:7D:41:34:4D:99:3E:73:4B:99:D5:65:6D:97:78:D4:D8:14:36:24

# Fingerprint (SHA1): 62:52:DC:40:F7:11:43:A2:2F:DE:9E:F7:34:8E:06:42:51:B1:81:18

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "Certum Root CA"

CKA\_CERT\_SHA1\_HASH MULTILINE OCTAL

```
\142\122\334\100\367\021\103\242\057\336\236\367\064\216\006\102
```

```
\121\261\201\030
```

```

END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\054\217\237\146\035\030\220\261\107\046\235\216\206\202\214\251
END
CKA_ISSUER MULTILINE_OCTAL
\060\076\061\013\060\011\006\003\125\004\006\023\002\120\114\061
\033\060\031\006\003\125\004\012\023\022\125\156\151\172\145\164
\157\040\123\160\056\040\172\040\157\056\157\056\061\022\060\020
\006\003\125\004\003\023\011\103\145\162\164\165\155\040\103\101
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\003\001\000\040
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_EMAIL_PROTECTION
CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "Comodo AAA Services root"
#
# Issuer: CN=AAA Certificate Services,O=Comodo CA Limited,L=Salford,ST=Greater Manchester,C=GB
# Serial Number: 1 (0x1)
# Subject: CN=AAA Certificate Services,O=Comodo CA Limited,L=Salford,ST=Greater Manchester,C=GB
# Not Valid Before: Thu Jan 01 00:00:00 2004
# Not Valid After : Sun Dec 31 23:59:59 2028
# Fingerprint (SHA-256):
D7:A7:A0:FB:5D:7E:27:31:D7:71:E9:48:4E:BC:DE:F7:1D:5F:0C:3E:0A:29:48:78:2B:C8:3E:E0:EA:69:9E:F4
# Fingerprint (SHA1): D1:EB:23:A4:6D:17:D6:8F:D9:25:64:C2:F1:F1:60:17:64:D8:E3:49
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Comodo AAA Services root"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\173\061\013\060\011\006\003\125\004\006\023\002\107\102\061
\033\060\031\006\003\125\004\010\014\022\107\162\145\141\164\145
\162\040\115\141\156\143\150\145\163\164\145\162\061\020\060\016
\006\003\125\004\007\014\007\123\141\154\146\157\162\144\061\032
\060\030\006\003\125\004\012\014\021\103\157\155\157\144\157\040
\103\101\040\114\151\155\151\164\145\144\061\041\060\037\006\003
\125\004\003\014\030\101\101\101\040\103\145\162\164\151\146\151
\143\141\164\145\040\123\145\162\166\151\143\145\163
END
CKA_ID

```

UTF8 "0"

CKA\_ISSUER MULTILINE\_OCTAL

\060\173\061\013\060\011\006\003\125\004\006\023\002\107\102\061  
\033\060\031\006\003\125\004\010\014\022\107\162\145\141\164\145  
\162\040\115\141\156\143\150\145\163\164\145\162\061\020\060\016  
\006\003\125\004\007\014\007\123\141\154\146\157\162\144\061\032  
\060\030\006\003\125\004\012\014\021\103\157\155\157\144\157\040  
\103\101\040\114\151\155\151\164\145\144\061\041\060\037\006\003  
\125\004\003\014\030\101\101\101\040\103\145\162\164\151\146\151  
\143\141\164\145\040\123\145\162\166\151\143\145\163

END

CKA\_SERIAL\_NUMBER

MULTILINE\_OCTAL

\002\001\001

END

CKA\_VALUE MULTILINE\_OCTAL

\060\202\004\062\060\202\003\032\240\003\002\001\002\002\001\001  
\060\015\006\011\052\206\110\206\367\015\001\001\005\005\000\060  
\173\061\013\060\011\006\003\125\004\006\023\002\107\102\061\033  
\060\031\006\003\125\004\010\014\022\107\162\145\141\164\145\162  
\040\115\141\156\143\150\145\163\164\145\162\061\020\060\016\006  
\003\125\004\007\014\007\123\141\154\146\157\162\144\061\032\060  
\030\006\003\125\004\012\014\021\103\157\155\157\144\157\040\103  
\101\040\114\151\155\151\164\145\144\061\041\060\037\006\003\125  
\004\003\014\030\101\101\101\040\103\145\162\164\151\146\151\143  
\141\164\145\040\123\145\162\166\151\143\145\163\060\036\027\015  
\060\064\060\061\060\061\060\060\060\060\060\132\027\015\062  
\070\061\062\063\061\062\063\065\071\065\071\132\060\173\061\013  
\060\011\006\003\125\004\006\023\002\107\102\061\033\060\031\006  
\003\125\004\010\014\022\107\162\145\141\164\145\162\040\115\141  
\156\143\150\145\163\164\145\162\061\020\060\016\006\003\125\004  
\007\014\007\123\141\154\146\157\162\144\061\032\060\030\006\003  
\125\004\012\014\021\103\157\155\157\144\157\040\103\101\040\114  
\151\155\151\164\145\144\061\041\060\037\006\003\125\004\003\014  
\030\101\101\101\040\103\145\162\164\151\146\151\143\141\164\145  
\040\123\145\162\166\151\143\145\163\060\202\001\042\060\015\006  
\011\052\206\110\206\367\015\001\001\001\005\000\003\202\001\017  
\000\060\202\001\012\002\202\001\001\000\276\100\235\364\156\341  
\352\166\207\034\115\105\104\216\276\106\310\203\006\235\301\052  
\376\030\037\216\344\002\372\363\253\135\120\212\026\061\013\232  
\006\320\305\160\042\315\111\055\124\143\314\266\156\150\106\013  
\123\352\313\114\044\300\274\162\116\352\361\025\256\364\124\232  
\022\012\303\172\262\063\140\342\332\211\125\363\042\130\363\336  
\334\317\357\203\206\242\214\224\117\237\150\362\230\220\106\204  
\047\307\166\277\343\314\065\054\213\136\007\144\145\202\300\110  
\260\250\221\371\141\237\166\040\120\250\221\307\146\265\353\170  
\142\003\126\360\212\032\023\352\061\243\036\240\231\375\070\366  
\366\047\062\130\157\007\365\153\270\373\024\053\257\267\252\314

\326\143\137\163\214\332\005\231\250\070\250\313\027\170\066\121  
\254\351\236\364\170\072\215\317\017\331\102\342\230\014\253\057  
\237\016\001\336\357\237\231\111\361\055\337\254\164\115\033\230  
\265\107\305\345\051\321\371\220\030\307\142\234\276\203\307\046  
\173\076\212\045\307\300\335\235\346\065\150\020\040\235\217\330  
\336\322\303\204\234\015\136\350\057\311\002\003\001\000\001\243  
\201\300\060\201\275\060\035\006\003\125\035\016\004\026\004\024  
\240\021\012\043\076\226\361\007\354\342\257\051\357\202\245\177  
\320\060\244\264\060\016\006\003\125\035\017\001\001\377\004\004  
\003\002\001\006\060\017\006\003\125\035\023\001\001\377\004\005  
\060\003\001\001\377\060\173\006\003\125\035\037\004\164\060\162  
\060\070\240\066\240\064\206\062\150\164\164\160\072\057\057\143  
\162\154\056\143\157\155\157\144\157\143\141\056\143\157\155\057  
\101\101\101\103\145\162\164\151\146\151\143\141\164\145\123\145  
\162\166\151\143\145\163\056\143\162\154\060\066\240\064\240\062  
\206\060\150\164\164\160\072\057\057\143\162\154\056\143\157\155  
\157\144\157\056\156\145\164\057\101\101\101\103\145\162\164\151  
\146\151\143\141\164\145\123\145\162\166\151\143\145\163\056\143  
\162\154\060\015\006\011\052\206\110\206\367\015\001\001\005\005  
\000\003\202\001\001\000\010\126\374\002\360\233\350\377\244\372  
\326\173\306\104\200\316\117\304\305\366\000\130\314\246\266\274  
\024\111\150\004\166\350\346\356\135\354\002\017\140\326\215\120  
\030\117\046\116\001\343\346\260\245\356\277\274\164\124\101\277  
\375\374\022\270\307\117\132\364\211\140\005\177\140\267\005\112  
\363\366\361\302\277\304\271\164\206\266\055\175\153\314\322\363  
\106\335\057\306\340\152\303\303\064\003\054\175\226\335\132\302  
\016\247\012\231\301\005\213\253\014\057\363\134\072\317\154\067  
\125\011\207\336\123\100\154\130\357\374\266\253\145\156\004\366  
\033\334\074\340\132\025\306\236\331\361\131\110\060\041\145\003  
\154\354\351\041\163\354\233\003\241\340\067\255\240\025\030\217  
\372\272\002\316\247\054\251\020\023\054\324\345\010\046\253\042  
\227\140\370\220\136\164\324\242\232\123\275\362\251\150\340\242  
\156\302\327\154\261\243\017\236\277\353\150\347\126\362\256\362  
\343\053\070\072\011\201\265\153\205\327\276\055\355\077\032\267  
\262\143\342\365\142\054\202\324\152\000\101\120\361\071\203\237  
\225\351\066\226\230\156

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "Comodo AAA Services root"

# Issuer: CN=AAA Certificate Services,O=Comodo CA Limited,L=Salford,ST=Greater Manchester,C=GB

# Serial Number: 1 (0x1)

# Subject: CN=AAA Certificate Services,O=Comodo CA Limited,L=Salford,ST=Greater Manchester,C=GB

# Not Valid Before: Thu Jan 01 00:00:00 2004

# Not Valid After : Sun Dec 31 23:59:59 2028

```

# Fingerprint
(SHA-256):
D7:A7:A0:FB:5D:7E:27:31:D7:71:E9:48:4E:BC:DE:F7:1D:5F:0C:3E:0A:29:48:78:2B:C8:3E:E0:EA:69:9E:F4
# Fingerprint (SHA1): D1:EB:23:A4:6D:17:D6:8F:D9:25:64:C2:F1:F1:60:17:64:D8:E3:49
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Comodo AAA Services root"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\321\353\043\244\155\027\326\217\331\045\144\302\361\361\140\027
\144\330\343\111
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\111\171\004\260\353\207\031\254\107\260\274\021\121\233\164\320
END
CKA_ISSUER MULTILINE_OCTAL
\060\173\061\013\060\011\006\003\125\004\006\023\002\107\102\061
\033\060\031\006\003\125\004\010\014\022\107\162\145\141\164\145
\162\040\115\141\156\143\150\145\163\164\145\162\061\020\060\016
\006\003\125\004\007\014\007\123\141\154\146\157\162\144\061\032
\060\030\006\003\125\004\012\014\021\103\157\155\157\144\157\040
\103\101\040\114\151\155\151\164\145\144\061\041\060\037\006\003
\125\004\003\014\030\101\101\101\040\103\145\162\164\151\146\151
\143\141\164\145\040\123\145\162\166\151\143\145\163
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\001\001
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "QuoVadis Root CA 2"
#
# Issuer: CN=QuoVadis Root CA 2,O=QuoVadis Limited,C=BM
# Serial Number: 1289 (0x509)
# Subject: CN=QuoVadis Root CA 2,O=QuoVadis Limited,C=BM
# Not Valid Before: Fri Nov 24 18:27:00 2006
# Not Valid After : Mon Nov 24 18:23:33 2031
# Fingerprint (SHA-256):
85:A0:DD:7D:D7:20:AD:B7:FF:05:F8:3D:54:2B:20:9D:C7:FF:45:28:F7:D6:77:B1:83:89:FE:A5:E5:C4:9E:86
# Fingerprint (SHA1): CA:3A:FB:CF:12:40:36:4B:44:B2:16:20:88:80:48:39:19:93:7C:F7
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE

```

```
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL
CK_FALSE
CKA_LABEL UTF8 "QuoVadis Root CA 2"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\105\061\013\060\011\006\003\125\004\006\023\002\102\115\061
\031\060\027\006\003\125\004\012\023\020\121\165\157\126\141\144
\151\163\040\114\151\155\151\164\145\144\061\033\060\031\006\003
\125\004\003\023\022\121\165\157\126\141\144\151\163\040\122\157
\157\164\040\103\101\040\062
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\105\061\013\060\011\006\003\125\004\006\023\002\102\115\061
\031\060\027\006\003\125\004\012\023\020\121\165\157\126\141\144
\151\163\040\114\151\155\151\164\145\144\061\033\060\031\006\003
\125\004\003\023\022\121\165\157\126\141\144\151\163\040\122\157
\157\164\040\103\101\040\062
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\002\005\011
END
CKA_VALUE MULTILINE_OCTAL
\060\202\005\267\060\202\003\237\240\003\002\001\002\002\002\005
\011\060\015\006\011\052\206\110\206\367\015\001\001\005\005\000
\060\105\061\013\060\011\006\003\125\004\006\023\002\102\115\061
\031\060\027\006\003\125\004\012\023\020\121\165\157\126\141\144
\151\163\040\114\151\155\151\164\145\144\061\033\060\031\006\003
\125\004\003\023\022\121\165\157\126\141\144\151\163\040\122\157
\157\164\040\103\101\040\062\060\036\027\015\060\066\061\061\062
\064\061\070\062\067\060\060\132\027\015\063\061\061\061\062\064
\061\070\062\063\063\063\132\060\105\061\013\060\011\006\003\125
\004\006\023\002\102\115\061\031\060\027\006\003\125\004\012\023
\020\121\165\157\126\141\144\151\163\040\114\151\155\151\164\145
\144\061\033\060\031\006\003\125\004\003\023\022\121\165\157\126
\141\144\151\163\040\122\157\157\164\040\103\101\040\062\060\202
\002\042\060\015\006\011\052\206\110\206\367\015\001\001\001\005
\000\003\202\002\017\000\060\202\002\012\002\202\002\001\000\232
\030\312\113\224\015\000\055\257\003\051\212\360\017\201\310\256
\114\031\205\035\010\237\253\051\104\205\363\057\201\255\062\036
\220\106\277\243\206\046\032\036\376\176\034\030\072\134\234\140
\027\052\072\164\203\063\060\175\141\124\021\313\355\253\340\346
\322\242\176\365\153\157\030\267\012\013\055\375\351\076\357\012
\306\263\020\351\334\302\106\027\370\135\375\244\332\377\236\111
\132\234\346\063\346\044\226\367\077\272\133\053\034\172\065\302
\326\147\376\253\146\120\213\155\050\140\053\357\327\140\303\307
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\220\103\267\154\023\361\336\335\366\304\370\211\077\321\165\365  
\222\303\221\325\212\210\320\220\354\334\155\336\211\302\145\161  
\226\213\015\003\375\234\277\133\026\254\222\333\352\376\171\174  
\255\353\257\367\026\313\333\315\045\053\345\037\373\232\237\342  
\121\314\072\123\014\110\346\016\275\311\264\166\006\122\346\021  
\023\205\162\143\003\004\340\004\066\053\040\031\002\350\164\247  
\037\266\311\126\146\360\165\045\334\147\301\016\141\140\210\263  
\076\321\250\374\243\332\035\260\321\261\043\124\337\104\166\155  
\355\101\330\301\262\042\266\123\034\337\065\035\334\241\167\052  
\061\344\055\365\345\345\333\310\340\377\345\200\327\013\143\240  
\377\063\241\017\272\054\025\025\352\227\263\322\242\265\276\362  
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\226\236\043\175\202\244\114\201\342\241\321\272\147\137\225\007  
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\325\375\014\121\316\120\152\010\061\371\221\332\014\217\144\134  
\003\303\072\213\040\077\156\215\147\075\072\326\376\175\133\210  
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\003\001\000\001\243\201\260\060\201\255\060\017\006\003\125\035  
\023\001\001\377\004\005\060\003\001\001\377\060\013\006\003\125  
\035\017\004\004\003\002\001\006\060\035\006\003\125\035\016\004  
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\003\304\031\106\321\224\153\060\156\006\003\125\035\043\004\147  
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\003\125\004\012\023\020\121\165\157\126\141\144\151\163\040\114  
\151\155\151\164\145\144\061\033\060\031\006\003\125\004\003\023  
\022\121\165\157\126\141\144\151\163\040\122\157\157\164\040\103  
\101\040\062\202\002\005\011\060\015\006\011\052\206\110\206\367  
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\006\133\250\256\161\135\057\005\057\147\346\023\105\203\304\066  
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\003\030\047\125\211\170\175\166\352\226\064\200\027\040\334\347  
\203\370\215\374\007\270\332\137\115\056\147\262\204\375\331\104  
\374\167\120\201\346\174\264\311\015\013\162\123\370\166\007\007  
\101\107\226\014\373\340\202\046\223\125\214\376\042\037\140\145  
\174\137\347\046\263\367\062\220\230\120\324\067\161\125\366\222  
\041\170\367\225\171\372\370\055\046\207\146\126\060\167\246\067  
\170\063\122\020\130\256\077\141\216\362\152\261\357\030\176\112  
\131\143\312\215\242\126\325\247\057\274\126\037\317\071\301\342  
\373\012\250\025\054\175\115\172\143\306\154\227\104\074\322\157  
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\070\365\073\350\100\341\264\156\126\032\040\314\157\130\215\355
\056\105\217\326\351\223\077\347\261\054\337\072\326\042\214\334
\204\273\042\157\320\370\344\306\071\351\004\210\074\303\272\353
\125\172\155\200\231\044\365\154\001\373\370\227\260\224\133\353
\375\322\157\361\167\150\015\065\144\043\254\270\125\241\003\321
\115\102\031\334\370\165\131\126\243\371\250\111\171\370\257\016
\271\021\240\174\267\152\355\064\320\266\046\142\070\032\207\014
\370\350\375\056\323\220\177\007\221\052\035\326\176\134\205\203
\231\260\070\010\077\351\136\371\065\007\344\311\142\156\127\177
\247\120\225\367\272\310\233\346\216\242\001\305\326\146\277\171
\141\363\074\034\341\271\202\134\135\240\303\351\330\110\275\031
\242\021\024\031\156\262\206\033\150\076\110\067\032\210\267\135
\226\136\234\307\357\047\142\010\342\221\031\134\322\361\041\335
\272\027\102\202\227\161\201\123\061\251\237\366\175\142\277\162
\341\243\223\035\314\212\046\132\011\070\320\316\327\015\200\026
\264\170\245\072\207\114\215\212\245\325\106\227\362\054\020\271
\274\124\042\300\001\120\151\103\236\364\262\357\155\370\354\332
\361\343\261\357\337\221\217\124\052\013\045\301\046\031\304\122
\020\005\145\325\202\020\352\302\061\315\056
```

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "QuoVadis Root CA 2"

# Issuer: CN=QuoVadis Root

CA 2,O=QuoVadis Limited,C=BM

# Serial Number: 1289 (0x509)

# Subject: CN=QuoVadis Root CA 2,O=QuoVadis Limited,C=BM

# Not Valid Before: Fri Nov 24 18:27:00 2006

# Not Valid After : Mon Nov 24 18:23:33 2031

# Fingerprint (SHA-256):

85:A0:DD:7D:D7:20:AD:B7:FF:05:F8:3D:54:2B:20:9D:C7:FF:45:28:F7:D6:77:B1:83:89:FE:A5:E5:C4:9E:86

# Fingerprint (SHA1): CA:3A:FB:CF:12:40:36:4B:44:B2:16:20:88:80:48:39:19:93:7C:F7

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "QuoVadis Root CA 2"

CKA\_CERT\_SHA1\_HASH MULTILINE\_OCTAL

```
\312\072\373\317\022\100\066\113\104\262\026\040\210\200\110\071
\031\223\174\367
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END

CKA\_CERT\_MD5\_HASH MULTILINE\_OCTAL

```
\136\071\173\335\370\272\354\202\351\254\142\272\014\124\000\053
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END



```

CKA_ISSUER MULTILINE_OCTAL
\060\105\061\013\060\011\006\003\125\004\006\023\002\102\115\061
\031\060\027\006\003\125\004\012\023\020\121\165\157\126\141\144
\151\163\040\114\151\155\151\164\145\144\061\033\060\031\006\003
\125\004\003\023\022\121\165\157\126\141\144\151\163\040\122\157
\157\164\040\103\101\040\062
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\002\005\011
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "QuoVadis Root CA 3"
#
# Issuer: CN=QuoVadis Root CA 3,O=QuoVadis Limited,C=BM
# Serial Number: 1478 (0x5c6)
# Subject: CN=QuoVadis Root CA 3,O=QuoVadis Limited,C=BM
# Not Valid Before: Fri Nov 24 19:11:23 2006
# Not Valid After : Mon Nov 24 19:06:44 2031
# Fingerprint (SHA-256):
18:F1:FC:7F:20:5D:F8:AD:DD:EB:7F:E0:07:DD:57:E3:AF:37:5A:9C:4D:8D:73:54:6B:F4:F1:FE:D1:E1:8D:35
# Fingerprint (SHA1): 1F:49:14:F7:D8:74:95:1D:DD:AE:02:C0:BE:FD:3A:2D:82:75:51:85
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL
UTF8 "QuoVadis Root CA 3"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\105\061\013\060\011\006\003\125\004\006\023\002\102\115\061
\031\060\027\006\003\125\004\012\023\020\121\165\157\126\141\144
\151\163\040\114\151\155\151\164\145\144\061\033\060\031\006\003
\125\004\003\023\022\121\165\157\126\141\144\151\163\040\122\157
\157\164\040\103\101\040\063
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\105\061\013\060\011\006\003\125\004\006\023\002\102\115\061
\031\060\027\006\003\125\004\012\023\020\121\165\157\126\141\144
\151\163\040\114\151\155\151\164\145\144\061\033\060\031\006\003
\125\004\003\023\022\121\165\157\126\141\144\151\163\040\122\157
\157\164\040\103\101\040\063

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END

CKA\_SERIAL\_NUMBER MULTILINE\_OCTAL

\002\002\005\306

END

CKA\_VALUE MULTILINE\_OCTAL

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\060\105\061\013\060\011\006\003\125\004\006\023\002\102\115\061  
\031\060\027\006\003\125\004\012\023\020\121\165\157\126\141\144  
\151\163\040\114\151\155\151\164\145\144\061\033\060\031\006\003  
\125\004\003\023\022\121\165\157\126\141\144\151\163\040\122\157  
\157\164\040\103\101\040\063\060\036\027\015\060\066\061\061\062  
\064\061\071\061\061\062\063\132\027\015\063\061\061\061\062\064  
\061\071\060\066\064\064\132\060\105\061\013\060\011\006\003\125  
\004\006\023\002\102\115\061\031\060\027\006\003\125\004\012\023  
\020\121\165\157\126\141\144\151\163\040\114\151\155\151\164\145  
\144\061\033\060\031\006\003\125\004\003\023\022\121\165\157\126  
\141\144\151\163\040\122\157\157\164\040\103\101\040\063\060\202  
\002\042\060\015\006\011\052\206\110\206\367\015\001\001\001\005  
\000\003\202\002\017\000\060\202\002\012\002\202\002\001\000\314  
\127\102\026\124\234\346\230\323\323\115\356\376\355\307\237\103  
\071\112\145\263\350\026\210\064\333\015\131\221\164\317\222\270  
\004\100\255\002\113\061\253\274\215\221\150\330\040\016\032\001  
\342\032\173\116\027\135\342\212\267\077\231\032\315\353\141\253  
\302\145\246\037\267\267\275\267\217\374\375\160\217\013\240\147  
\276\001\242\131\317\161\346\017\051\166\377\261\126\171\105\053  
\037\236\172\124\350\243\051\065\150\244\001\117\017\244\056\067  
\357\033\277\343\217\020\250\162\253\130\127\347\124\206\310\311  
\363\133\332\054\332\135\216\156\074\243\076\332\373\202\345\335  
\362\134\262\005\063\157\212\066\316\320\023\116\377\277\112\014  
\064\114\246\303\041\275\120\004\125\353\261\273\235\373\105\036  
\144\025\336\125\001\214\002\166\265\313\241\077\102\151\274\057  
\275\150\103\026\126\211\052\067\141\221\375\246\256\116\300\313  
\024\145\224\067\113\222\006\357\004\320\310\234\210\333\013\173  
\201\257\261\075\052\304\145\072\170\266\356\334\200\261\322\323  
\231\234\072\356\153\132\153\263\215\267\325\316\234\302\276\245  
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\051\247\230\243\045\103\057\357\361\137\046\341\210\115\370\136  
\156\327\331\024\156\031\063\151\247\073\204\211\223\304\123\125  
\023\241\121\170\100\370\270\311\242\356\173\272\122\102\203\236  
\024\355\005\122\132\131\126\247\227\374\235\077\012\051\330\334  
\117\221\016\023\274\336\225\244\337\213\231\276\254\233\063\210  
\357\265\201\257\033\306\042\123\310\366\307\356\227\024\260\305  
\174\170\122\310\360\316\156\167\140\204\246\351\052\166\040\355  
\130\001\027\060\223\351\032\213\340\163\143\331\152\222\224\111  
\116\264\255\112\205\304\243\042\060\374\011\355\150\042\163\246  
\210\014\125\041\130\305\341\072\237\052\335\312\341\220\340\331  
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\014\354\221\046\207\212\263\242\341\160\217\054\012\345\315\155  
\150\121\353\332\077\005\177\213\062\346\023\134\153\376\137\100  
\342\042\310\264\264\144\117\326\272\175\110\076\250\151\014\327  
\273\206\161\311\163\270\077\073\235\045\113\332\377\100\353\002  
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\125\035\023\001\001\377\004\005\060\003\001\001\377\060\201\341  
\006\003\125\035\040\004\201\331\060\201\326\060\201\323\006\011  
\053\006\001\004\001\276\130\000\003\060\201\305\060\201\223\006  
\010\053\006\001\005\005\007\002\002\060\201\206\032\201\203\101  
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\151\146\151\143\141\164\145\040\120\157\154\151\143\171\040\057  
\040\103\145\162\164\151\146\151\143\141\164\151\157\156\040\120  
\162\141\143\164\151\143\145\040\123\164\141\164\145\155\145\156  
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\003\125\035\043\004\147\060\145\200\024\362\300\023\340\202\103  
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\141\144\151\163\040\114\151\155\151\164\145\144\061\033\060\031  
\006\003\125\004\003\023\022\121\165\157\126\141\144\151\163\040  
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\356\347\051\332\303\133\266\260\203\331\320\320\342\041\373\363  
\140\247\073\135\140\123\047\242\233\366\010\042\052\347\277\240  
\162\345\234\044\152\061\261\220\172\047\333\204\021\211\047\246  
\167\132\070\327\277\254\206\374\356\135\203\274\006\306\321\167  
\153\017\155\044\057\113\172\154\247\007\226\312\343\204\237\255  
\210\213\035\253\026\215\133\146\027\331\026\364\213\200\322\335  
\370\262\166\303\374\070\023\252\014\336\102\151\053\156\363\074  
\353\200\047\333\365\246\104\015\237\132\125\131\013\325\015\122  
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\231\114\252\363\162\021\223\344\352\366\233\332\250\135\247\115  
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\223\301\344\311\151\032\075\300\153\116\042\155\356\253\130\115
\306\320\101\301\053\352\117\022\207\136\353\105\330\154\365\230
\002\323\240\330\125\212\006\231\031\242\240\167\321\060\236\254
\314\165\356\203\365\260\142\071\317\154\127\342\114\322\221\013
\016\165\050\033\232\277\375\032\103\361\312\167\373\073\217\141
\270\151\050\026\102\004\136\160\052\034\041\330\217\341\275\043
\133\055\164\100\222\331\143\031\015\163\335\151\274\142\107\274
\340\164\053\262\353\175\276\101\033\265\300\106\305\241\042\313
\137\116\301\050\222\336\030\272\325\052\050\273\021\213\027\223
\230\231\140\224\134\043\317\132\047\227\136\013\005\006\223\067
\036\073\151\066\353\251\236\141\035\217\062\332\216\014\326\164
\076\173\011\044\332\001\167\107\304\073\315\064\214\231\365\312
\341\045\141\063\262\131\033\342\156\327\067\127\266\015\251\022
\332
```

END

CKA\_NSS\_Mozilla\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "QuoVadis Root CA 3"

# Issuer: CN=QuoVadis Root CA 3,O=QuoVadis Limited,C=BM

# Serial Number: 1478 (0x5c6)

# Subject:

CN=QuoVadis Root CA 3,O=QuoVadis Limited,C=BM

# Not Valid Before: Fri Nov 24 19:11:23 2006

# Not Valid After : Mon Nov 24 19:06:44 2031

# Fingerprint (SHA-256):

18:F1:FC:7F:20:5D:F8:AD:DD:EB:7F:E0:07:DD:57:E3:AF:37:5A:9C:4D:8D:73:54:6B:F4:F1:FE:D1:E1:8D:35

# Fingerprint (SHA1): 1F:49:14:F7:D8:74:95:1D:DD:AE:02:C0:BE:FD:3A:2D:82:75:51:85

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "QuoVadis Root CA 3"

CKA\_CERT\_SHA1\_HASH MULTILINE\_OCTAL

```
\037\111\024\367\330\164\225\035\335\256\002\300\276\375\072\055
\202\165\121\205
```

END

CKA\_CERT\_MD5\_HASH MULTILINE\_OCTAL

```
\061\205\074\142\224\227\143\271\252\375\211\116\257\157\340\317
```

END

CKA\_ISSUER MULTILINE\_OCTAL

```
\060\105\061\013\060\011\006\003\125\004\006\023\002\102\115\061
\031\060\027\006\003\125\004\012\023\020\121\165\157\126\141\144
\151\163\040\114\151\155\151\164\145\144\061\033\060\031\006\003
```

```
\125\004\003\023\022\121\165\157\126\141\144\151\163\040\122\157
\157\164\040\103\101\040\063
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\002\005\306
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "Security Communication Root CA"
#
# Issuer: OU=Security Communication RootCA1,O=SECOM Trust.net,C=JP
# Serial Number: 0 (0x0)
# Subject: OU=Security Communication RootCA1,O=SECOM Trust.net,C=JP
# Not Valid Before: Tue Sep 30 04:20:49 2003
# Not Valid After : Sat Sep 30 04:20:49 2023
# Fingerprint (SHA-256):
E7:5E:72:ED:9F:56:0E:EC:6E:B4:80:00:73:A4:3F:C3:AD:19:19:5A:39:22:82:01:78:95:97:4A:99:02:6B:6C
# Fingerprint (SHA1): 36:B1:2B:49:F9:81:9E:D7:4C:9E:BC:38:0F:C6:56:8F:5D:AC:B2:F7
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Security Communication
Root CA"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\120\061\013\060\011\006\003\125\004\006\023\002\112\120\061
\030\060\026\006\003\125\004\012\023\017\123\105\103\117\115\040
\124\162\165\163\164\056\156\145\164\061\047\060\045\006\003\125
\004\013\023\036\123\145\143\165\162\151\164\171\040\103\157\155
\155\165\156\151\143\141\164\151\157\156\040\122\157\157\164\103
\101\061
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\120\061\013\060\011\006\003\125\004\006\023\002\112\120\061
\030\060\026\006\003\125\004\012\023\017\123\105\103\117\115\040
\124\162\165\163\164\056\156\145\164\061\047\060\045\006\003\125
\004\013\023\036\123\145\143\165\162\151\164\171\040\103\157\155
\155\165\156\151\143\141\164\151\157\156\040\122\157\157\164\103
\101\061
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
```

\002\001\000

END

CKA\_VALUE MULTILINE\_OCTAL

\060\202\003\132\060\202\002\102\240\003\002\001\002\002\001\000  
\060\015\006\011\052\206\110\206\367\015\001\001\005\005\000\060  
\120\061\013\060\011\006\003\125\004\006\023\002\112\120\061\030  
\060\026\006\003\125\004\012\023\017\123\105\103\117\115\040\124  
\162\165\163\164\056\156\145\164\061\047\060\045\006\003\125\004  
\013\023\036\123\145\143\165\162\151\164\171\040\103\157\155\155  
\165\156\151\143\141\164\151\157\156\040\122\157\157\164\103\101  
\061\060\036\027\015\060\063\060\071\063\060\060\064\062\060\064  
\071\132\027\015\062\063\060\071\063\060\060\064\062\060\064\071  
\132\060\120\061\013\060\011\006\003\125\004\006\023\002\112\120  
\061\030\060\026\006\003\125\004\012\023\017\123\105\103\117\115  
\040\124\162\165\163\164\056\156\145\164\061\047\060\045\006\003  
\125\004\013\023\036\123\145\143\165\162\151\164\171\040\103\157  
\155\155\165\156\151\143\141\164\151\157\156\040\122\157\157\164  
\103\101\061\060\202\001\042\060\015\006\011\052\206\110\206\367  
\015\001\001\001\005\000\003\202\001\017\000\060\202\001\012\002  
\202\001\001\000\263\263\376\177\323\155\261\357\026\174\127\245  
\014\155\166\212\057\113\277\144\373\114\356\212\360\363\051\174  
\365\377\356\052\340\351\351\272\133\144\042\232\232\157\054\072  
\046\151\121\005\231\046\334\325\034\152\161\306\232\175\036\235  
\335\174\154\306\214\147\147\112\076\370\161\260\031\047\251\011  
\014\246\225\277\113\214\014\372\125\230\073\330\350\042\241\113  
\161\070\171\254\227\222\151\263\211\176\352\041\150\006\230\024  
\226\207\322\141\066\274\155\047\126\236\127\356\300\300\126\375  
\062\317\244\331\216\302\043\327\215\250\363\330\045\254\227\344  
\160\070\364\266\072\264\235\073\227\046\103\243\241\274\111\131  
\162\114\043\060\207\001\130\366\116\276\034\150\126\146\257\315  
\101\135\310\263\115\052\125\106\253\037\332\036\342\100\075\333  
\315\175\271\222\200\234\067\335\014\226\144\235\334\042\367\144  
\213\337\141\336\025\224\122\025\240\175\122\311\113\250\041\311  
\306\261\355\313\303\225\140\321\017\360\253\160\370\337\313\115  
\176\354\326\372\253\331\275\177\124\362\245\351\171\372\331\326  
\166\044\050\163\002\003\001\000\001\243\077\060\075\060\035\006  
\003\125\035\016\004\026\004\024\240\163\111\231\150\334\205\133  
\145\343\233\050\057\127\237\275\063\274\007\110\060\013\006\003  
\125\035\017\004\004\003\002\001\006\060\017\006\003\125\035\023  
\001\001\377\004\005\060\003\001\001\377\060\015\006\011\052\206  
\110\206\367\015\001\001\005\005\000\003\202\001\001\000\150\100  
\251\250\273\344\117\135\171\263\005\265\027\263\140\023\353\306  
\222\135\340\321\323\152\376\373\276\233\155\277\307\005\155\131  
\040\304\034\360\267\332\204\130\002\143\372\110\026\357\117\245  
\013\367\112\230\362\077\236\033\255\107\153\143\316\010\107\353  
\122\077\170\234\257\115\256\370\325\117\317\232\230\052\020\101  
\071\122\304\335\331\233\016\357\223\001\256\262\056\312\150\102  
\044\102\154\260\263\072\076\315\351\332\110\304\025\313\351\371

```
\007\017\222\120\111\212\335\061\227\137\311\351\067\252\073\131
\145\227\224\062\311\263\237\076\072\142\130\305\111\255\142\016
\161\245\062\252\057\306\211\166\103\100\023\023\147\075\242\124
\045\020\313\361\072\362\331\372\333\111\126\273\246\376\247\101
\065\303\340\210\141\311\210\307\337\066\020\042\230\131\352\260
\112\373\126\026\163\156\254\115\367\042\241\117\255\035\172\055
\105\047\345\060\301\136\362\332\023\313\045\102\121\225\107\003
\214\154\041\314\164\102\355\123\377\063\213\217\017\127\001\026
\057\317\246\356\311\160\042\024\275\375\276\154\013\003
```

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRUST\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRUST\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "Security Communication Root CA"

# Issuer: OU=Security Communication RootCA1,O=SECOM Trust.net,C=JP

# Serial Number: 0 (0x0)

# Subject: OU=Security Communication RootCA1,O=SECOM Trust.net,C=JP

# Not Valid Before: Tue Sep 30 04:20:49 2003

# Not Valid After : Sat Sep 30 04:20:49 2023

# Fingerprint (SHA-256):

E7:5E:72:ED:9F:56:0E:EC:6E:B4:80:00:73:A4:3F:C3:AD:19:19:5A:39:22:82:01:78:95:97:4A:99:02:6B:6C

# Fingerprint (SHA1): 36:B1:2B:49:F9:81:9E:D7:4C:9E:BC:38:0F:C6:56:8F:5D:AC:B2:F7

CKA\_CLASS

CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "Security Communication Root CA"

CKA\_CERT\_SHA1\_HASH MULTILINE\_OCTAL

```
\066\261\053\111\371\201\236\327\114\236\274\070\017\306\126\217
\135\254\262\367
```

END

CKA\_CERT\_MD5\_HASH MULTILINE\_OCTAL

```
\361\274\143\152\124\340\265\047\365\315\347\032\343\115\156\112
```

END

CKA\_ISSUER MULTILINE\_OCTAL

```
\060\120\061\013\060\011\006\003\125\004\006\023\002\112\120\061
\030\060\026\006\003\125\004\012\023\017\123\105\103\117\115\040
\124\162\165\163\164\056\156\145\164\061\047\060\045\006\003\125
\004\013\023\036\123\145\143\165\162\151\164\171\040\103\157\155
\155\165\156\151\143\141\164\151\157\156\040\122\157\157\164\103
\101\061
```

END

CKA\_SERIAL\_NUMBER MULTILINE\_OCTAL

```
\002\001\000
```

END

```

CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED
CK_BBOOL CK_FALSE

#
# Certificate "Camerfirma Chambers of Commerce Root"
#
# Issuer: CN=Chambers of Commerce Root,OU=http://www.chambersign.org,O=AC Camerfirma SA CIF
A82743287,C=EU
# Serial Number: 0 (0x0)
# Subject: CN=Chambers of Commerce Root,OU=http://www.chambersign.org,O=AC Camerfirma SA CIF
A82743287,C=EU
# Not Valid Before: Tue Sep 30 16:13:43 2003
# Not Valid After : Wed Sep 30 16:13:44 2037
# Fingerprint (SHA-256):
0C:25:8A:12:A5:67:4A:EF:25:F2:8B:A7:DC:FA:EC:EE:A3:48:E5:41:E6:F5:CC:4E:E6:3B:71:B3:61:60:6A:C3
# Fingerprint (SHA1): 6E:3A:55:A4:19:0C:19:5C:93:84:3C:C0:DB:72:2E:31:30:61:F0:B1
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Camerfirma Chambers of Commerce Root"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\177\061\013\060\011\006\003\125\004\006\023\002\105\125\061
\047\060\045\006\003\125\004\012\023\036\101\103\040\103\141\155
\145\162\146\151\162\155\141\040\123\101\040\103\111\106\040\101
\070\062\067\064\063\062\070\067\061\043\060\041\006\003\125\004
\013\023\032\150\164\164\160\072\057\057\167\167\167\056\143\150
\141\155\142\145\162\163\151\147\156\056\157\162\147\061\042\060
\040\006\003\125\004\003\023\031\103\150\141\155\142\145\162\163
\040\157\146\040\103\157\155\155\145\162\143\145\040\122\157\157
\164
END
CKA_ID
UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\177\061\013\060\011\006\003\125\004\006\023\002\105\125\061
\047\060\045\006\003\125\004\012\023\036\101\103\040\103\141\155
\145\162\146\151\162\155\141\040\123\101\040\103\111\106\040\101
\070\062\067\064\063\062\070\067\061\043\060\041\006\003\125\004
\013\023\032\150\164\164\160\072\057\057\167\167\167\056\143\150
\141\155\142\145\162\163\151\147\156\056\157\162\147\061\042\060
\040\006\003\125\004\003\023\031\103\150\141\155\142\145\162\163
\040\157\146\040\103\157\155\155\145\162\143\145\040\122\157\157
\164

```



END

CKA\_SERIAL\_NUMBER

MULTILINE\_OCTAL

\002\001\000

END

CKA\_VALUE MULTILINE\_OCTAL

\060\202\004\275\060\202\003\245\240\003\002\001\002\002\001\000  
\060\015\006\011\052\206\110\206\367\015\001\001\005\005\000\060  
\177\061\013\060\011\006\003\125\004\006\023\002\105\125\061\047  
\060\045\006\003\125\004\012\023\036\101\103\040\103\141\155\145  
\162\146\151\162\155\141\040\123\101\040\103\111\106\040\101\070  
\062\067\064\063\062\070\067\061\043\060\041\006\003\125\004\013  
\023\032\150\164\164\160\072\057\057\167\167\167\056\143\150\141  
\155\142\145\162\163\151\147\156\056\157\162\147\061\042\060\040  
\006\003\125\004\003\023\031\103\150\141\155\142\145\162\163\040  
\157\146\040\103\157\155\155\145\162\143\145\040\122\157\157\164  
\060\036\027\015\060\063\060\071\063\060\061\066\061\063\064\063  
\132\027\015\063\067\060\071\063\060\061\066\061\063\064\064\132  
\060\177\061\013\060\011\006\003\125\004\006\023\002\105\125\061  
\047\060\045\006\003\125\004\012\023\036\101\103\040\103\141\155  
\145\162\146\151\162\155\141\040\123\101\040\103\111\106\040\101  
\070\062\067\064\063\062\070\067\061\043\060\041\006\003\125\004  
\013\023\032\150\164\164\160\072\057\057\167\167\167\056\143\150  
\141\155\142\145\162\163\151\147\156\056\157\162\147\061\042\060  
\040\006\003\125\004\003\023\031\103\150\141\155\142\145\162\163  
\040\157\146\040\103\157\155\155\145\162\143\145\040\122\157\157  
\164\060\202\001\040\060\015\006\011\052\206\110\206\367\015\001  
\001\001\005\000\003\202\001\015\000\060\202\001\010\002\202\001  
\001\000\267\066\125\345\245\135\030\060\340\332\211\124\221\374  
\310\307\122\370\057\120\331\357\261\165\163\145\107\175\033\133  
\272\165\305\374\241\210\044\372\057\355\312\010\112\071\124\304  
\121\172\265\332\140\352\070\074\201\262\313\361\273\331\221\043  
\077\110\001\160\165\251\005\052\255\037\161\363\311\124\075\035  
\006\152\100\076\263\014\205\356\134\033\171\302\142\304\270\066  
\216\065\135\001\014\043\004\107\065\252\233\140\116\240\146\075  
\313\046\012\234\100\241\364\135\230\277\161\253\245\000\150\052  
\355\203\172\017\242\024\265\324\042\263\200\260\074\014\132\121  
\151\055\130\030\217\355\231\236\361\256\342\225\346\366\107\250  
\326\014\017\260\130\130\333\303\146\067\236\233\221\124\063\067  
\322\224\034\152\110\311\311\362\245\332\245\014\043\367\043\016  
\234\062\125\136\161\234\204\005\121\232\055\375\346\116\052\064  
\132\336\312\100\067\147\014\124\041\125\167\332\012\014\314\227  
\256\200\334\224\066\112\364\076\316\066\023\036\123\344\254\116  
\072\005\354\333\256\162\234\070\213\320\071\073\211\012\076\167  
\376\165\002\001\003\243\202\001\104\060\202\001\100\060\022\006  
\003\125\035\023\001\001\377\004\010\060\006\001\001\377\002\001  
\014\060\074\006\003\125\035\037\004\065\060\063\060\061\240\057  
\240\055\206\053\150\164\164\160\072\057\057\143\162\154\056\143

\150\141\155\142\145\162\163\151\147\156\056\157\162\147\057\143  
\150\141\155\142\145\162\163\162\157\157\164\056\143\162\154\060  
\035\006\003\125\035\016\004\026\004\024\343\224\365\261\115\351  
\333\241\051\133\127\213\115\166\006\166\341\321\242\212\060\016  
\006\003\125\035\017\001\001\377\004\004\003\002\001\006\060\021  
\006\011\140\206\110\001\206\370\102\001\001\004\004\003\002\000  
\007\060\047\006\003\125\035\021\004\040\060\036\201\034\143\150  
\141\155\142\145\162\163\162\157\157\164\100\143\150\141\155\142  
\145\162\163\151\147\156\056\157\162\147\060\047\006\003\125\035  
\022\004\040\060\036\201\034\143\150\141\155\142\145\162\163\162  
\157\157\164\100\143\150\141\155\142\145\162\163\151\147\156\056  
\157\162\147\060\130\006\003\125\035\040\004\121\060\117\060\115  
\006\013\053\006\001\004\001\201\207\056\012\003\001\060\076\060  
\074\006\010\053\006\001\005\005\007\002\001\026\060\150\164\164  
\160\072\057\057\143\160\163\056\143\150\141\155\142\145\162\163  
\151\147\156\056\157\162\147\057\143\160\163\057\143\150\141\155  
\142\145\162\163\162\157\157\164\056\150\164\155\154\060\015\006  
\011\052\206\110\206\367\015\001\001\005\005\000\003\202\001\001  
\000\014\101\227\302\032\206\300\042\174\237\373\220\363\032\321  
\003\261\357\023\371\041\137\004\234\332\311\245\215\047\154\226  
\207\221\276\101\220\001\162\223\347\036\175\137\366\211\306\135  
\247\100\011\075\254\111\105\105\334\056\215\060\150\262\011\272  
\373\303\057\314\272\013\337\077\167\173\106\175\072\022\044\216  
\226\217\074\005\012\157\322\224\050\035\155\014\300\056\210\042  
\325\330\317\035\023\307\360\110\327\327\005\247\317\307\107\236  
\073\074\064\310\200\117\324\024\273\374\015\120\367\372\263\354  
\102\137\251\335\155\310\364\165\317\173\301\162\046\261\001\034  
\134\054\375\172\116\264\001\305\005\127\271\347\074\252\005\331  
\210\351\007\106\101\316\357\101\201\256\130\337\203\242\256\312  
\327\167\037\347\000\074\235\157\216\344\062\011\035\115\170\064  
\170\064\074\224\233\046\355\117\161\306\031\172\275\040\042\110  
\132\376\113\175\003\267\347\130\276\306\062\116\164\036\150\335  
\250\150\133\263\076\356\142\175\331\200\350\012\165\172\267\356  
\264\145\232\041\220\340\252\320\230\274\070\265\163\074\213\370  
\334

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# For Email Distrust After: Mon Mar 01 00:00:00 2021

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER MULTILINE\_OCTAL

\062\061\060\063\060\061\060\060\060\060\060\060\132

END

# Trust for "Camerfirma Chambers of Commerce Root"

# Issuer: CN=Chambers of Commerce Root,OU=http://www.chambersign.org,O=AC Camerfirma SA CIF  
A82743287,C=EU

# Serial Number: 0 (0x0)

```
# Subject: CN=Chambers of Commerce Root,OU=http://www.chambersign.org,O=AC Camerfirma SA CIF
A82743287,C=EU
# Not Valid Before: Tue Sep 30 16:13:43 2003
# Not Valid After : Wed Sep 30 16:13:44 2037
# Fingerprint (SHA-256):
0C:25:8A:12:A5:67:4A:EF:25:F2:8B:A7:DC:FA:EC:EE:A3:48:E5:41:E6:F5:CC:4E:E6:3B:71:B3:61:60:6A:C3
# Fingerprint (SHA1): 6E:3A:55:A4:19:0C:19:5C:93:84:3C:C0:DB:72:2E:31:30:61:F0:B1
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL
CK_FALSE
CKA_LABEL UTF8 "Camerfirma Chambers of Commerce Root"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\156\072\125\244\031\014\031\134\223\204\074\300\333\162\056\061
\060\141\360\261
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\260\001\356\024\331\257\051\030\224\166\216\361\151\063\052\204
END
CKA_ISSUER MULTILINE_OCTAL
\060\177\061\013\060\011\006\003\125\004\006\023\002\105\125\061
\047\060\045\006\003\125\004\012\023\036\101\103\040\103\141\155
\145\162\146\151\162\155\141\040\123\101\040\103\111\106\040\101
\070\062\067\064\063\062\070\067\061\043\060\041\006\003\125\004
\013\023\032\150\164\164\160\072\057\057\167\167\167\056\143\150
\141\155\142\145\162\163\151\147\156\056\157\162\147\061\042\060
\040\006\003\125\004\003\023\031\103\150\141\155\142\145\162\163
\040\157\146\040\103\157\155\155\145\162\143\145\040\122\157\157
\164
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\001\000
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING
CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "XRamp Global CA Root"
#
# Issuer: CN=XRamp Global Certification Authority,O=XRamp Security Services
Inc,OU=www.xrampsecurity.com,C=US
# Serial Number:50:94:6c:ec:18:ea:d5:9c:4d:d5:97:ef:75:8f:a0:ad
# Subject: CN=XRamp Global Certification Authority,O=XRamp Security Services
Inc,OU=www.xrampsecurity.com,C=US
```

```
# Not Valid Before: Mon Nov 01 17:14:04 2004
# Not Valid After : Mon Jan 01 05:37:19 2035
# Fingerprint (SHA-256):
CE:CD:DC:90:50:99:D8:DA:DF:C5:B1:D2:09:B7:37:CB:E2:C1:8C:FB:2C:10:C0:FF:0B:CF:0D:32:86:FC:1A:A2
# Fingerprint (SHA1): B8:01:86:D1:EB:9C:86:A5:41:04:CF:30:54:F3:4C:52:B7:E5:58:C6
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "XRamp Global CA Root"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\201\202\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\036\060\034\006\003\125\004\013\023\025\167\167\167\056\170
\162\141\155\160\163\145\143\165\162\151\164\171\056\143\157\155
\061\044\060\042\006\003\125\004\012\023\033\130\122\141\155\160
\040\123\145\143\165\162\151\164\171\040\123\145\162\166\151\143
\145\163\040\111\156\143\061\055\060\053\006\003\125\004\003\023
\044\130\122\141\155\160\040\107\154\157\142\141\154\040\103\145
\162\164\151\146\151\143\141\164\151\157\156\040\101\165\164\150
\157\162\151\164\171
END
CKA_ID
UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\201\202\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\036\060\034\006\003\125\004\013\023\025\167\167\167\056\170
\162\141\155\160\163\145\143\165\162\151\164\171\056\143\157\155
\061\044\060\042\006\003\125\004\012\023\033\130\122\141\155\160
\040\123\145\143\165\162\151\164\171\040\123\145\162\166\151\143
\145\163\040\111\156\143\061\055\060\053\006\003\125\004\003\023
\044\130\122\141\155\160\040\107\154\157\142\141\154\040\103\145
\162\164\151\146\151\143\141\164\151\157\156\040\101\165\164\150
\157\162\151\164\171
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\020\120\224\154\354\030\352\325\234\115\325\227\357\165\217
\240\255
END
CKA_VALUE MULTILINE_OCTAL
\060\202\004\060\060\202\003\030\240\003\002\001\002\002\020\120
\224\154\354\030\352\325\234\115\325\227\357\165\217\240\255\060
\015\006\011\052\206\110\206\367\015\001\001\005\005\000\060\201
\202\061\013\060\011\006\003\125\004\006\023\002\125\123\061\036
\060\034\006\003\125\004\013\023\025\167\167\167\056\170\162\141
\155\160\163\145\143\165\162\151\164\171\056\143\157\155\061\044
\060\042\006\003\125\004\012\023\033\130\122\141\155\160\040\123
```

\145\143\165\162\151\164\171\040\123\145\162\166\151\143\145\163  
\040\111\156\143\061\055\060\053\006\003\125\004\003\023\044\130  
\122\141\155\160\040\107\154\157\142\141\154\040\103\145\162\164  
\151\146\151\143\141\164\151\157\156\040\101\165\164\150\157\162  
\151\164\171\060\036\027\015\060\064\061\061\060\061\061\067\061  
\064\060\064\132\027\015\063\065\060\061\060\061\060\065\063\067  
\061\071\132\060\201\202\061\013\060\011\006\003\125\004\006\023  
\002\125\123\061\036\060\034\006\003\125\004\013\023\025\167\167  
\167\056\170\162\141\155\160\163\145\143\165\162\151\164\171\056  
\143\157\155\061\044\060\042\006\003\125\004\012\023\033\130\122  
\141\155\160\040\123\145\143\165\162\151\164\171\040\123\145\162  
\166\151\143\145\163\040\111\156\143\061\055\060\053\006\003\125  
\004\003\023\044\130\122\141\155\160\040\107\154\157\142\141\154  
\040\103\145\162\164\151\146\151\143\141\164\151\157\156\040\101  
\165\164\150\157\162\151\164\171\060\202\001\042\060\015\006\011  
\052\206\110\206\367\015\001\001\001\005\000\003\202\001\017\000  
\060\202\001\012\002\202\001\001\000\230\044\036\275\025\264\272  
\337\307\214\245\047\266\070\013\151\363\266\116\250\054\056\041  
\035\134\104\337\041\135\176\043\164\376\136\176\264\112\267\246  
\255\037\256\340\006\026\342\233\133\331\147\164\153\135\200\217  
\051\235\206\033\331\234\015\230\155\166\020\050\130\344\145\260  
\177\112\230\171\237\340\303\061\176\200\053\265\214\300\100\073  
\021\206\320\313\242\206\066\140\244\325\060\202\155\331\156\320  
\017\022\004\063\227\137\117\141\132\360\344\371\221\253\347\035  
\073\274\350\317\364\153\055\064\174\342\110\141\034\216\363\141  
\104\314\157\240\112\251\224\260\115\332\347\251\064\172\162\070  
\250\101\314\074\224\021\175\353\310\246\214\267\206\313\312\063  
\073\331\075\067\213\373\172\076\206\054\347\163\327\012\127\254  
\144\233\031\353\364\017\004\010\212\254\003\027\031\144\364\132  
\045\042\215\064\054\262\366\150\035\022\155\323\212\036\024\332  
\304\217\246\342\043\205\325\172\015\275\152\340\351\354\354\027  
\273\102\033\147\252\045\355\105\203\041\374\301\311\174\325\142  
\076\372\362\305\055\323\375\324\145\002\003\001\000\001\243\201  
\237\060\201\234\060\023\006\011\053\006\001\004\001\202\067\024  
\002\004\006\036\004\000\103\000\101\060\013\006\003\125\035\017  
\004\004\003\002\001\206\060\017\006\003\125\035\023\001\001\377  
\004\005\060\003\001\001\377\060\035\006\003\125\035\016\004\026  
\004\024\306\117\242\075\006\143\204\011\234\316\142\344\004\254  
\215\134\265\351\266\033\060\066\006\003\125\035\037\004\057\060  
\055\060\053\240\051\240\047\206\045\150\164\164\160\072\057\057  
\143\162\154\056\170\162\141\155\160\163\145\143\165\162\151\164  
\171\056\143\157\155\057\130\107\103\101\056\143\162\154\060\020  
\006\011\053\006\001\004\001\202\067\025\001\004\003\002\001\001  
\060\015\006\011\052\206\110\206\367\015\001\001\005\005\000\003  
\202\001\001\000\221\025\071\003\001\033\147\373\112\034\371\012  
\140\133\241\332\115\227\142\371\044\123\047\327\202\144\116\220  
\056\303\111\033\053\232\334\374\250\170\147\065\361\035\360\021  
\275\267\110\343\020\366\015\337\077\322\311\266\252\125\244\110

```
\272\002\333\336\131\056\025\133\073\235\026\175\107\327\067\352
\137\115\166\022\066\273\037\327\241\201\004\106\040\243\054\155
\251\236\001\176\077\051\316\000\223\337\375\311\222\163\211\211
\144\236\347\053\344\034\221\054\322\271\316\175\316\157\061\231
\323\346\276\322\036\220\360\011\024\171\134\043\253\115\322\332
\041\037\115\231\171\235\341\317\047\237\020\233\034\210\015\260
\212\144\101\061\270\016\154\220\044\244\233\134\161\217\272\273
\176\034\033\333\152\200\017\041\274\351\333\246\267\100\364\262
\213\251\261\344\357\232\032\320\075\151\231\356\250\050\243\341
\074\263\360\262\021\234\317\174\100\346\335\347\103\175\242\330
\072\265\251\215\362\064\231\304\324\020\341\006\375\011\204\020
\073\356\304\114\364\354\047\174\102\302\164\174\202\212\011\311
\264\003\045\274
```

END

CKA\_NSS\_Mozilla\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "XRamp Global CA Root"

# Issuer: CN=XRamp Global Certification Authority,O=XRamp Security Services  
Inc,OU=www.xrampsecurity.com,C=US

# Serial Number:50:94:6c:ec:18:ea:d5:9c:4d:d5:97:ef:75:8f:a0:ad

# Subject: CN=XRamp

Global Certification Authority,O=XRamp Security Services Inc,OU=www.xrampsecurity.com,C=US

# Not Valid Before: Mon Nov 01 17:14:04 2004

# Not Valid After : Mon Jan 01 05:37:19 2035

# Fingerprint (SHA-256):

CE:CD:DC:90:50:99:D8:DA:DF:C5:B1:D2:09:B7:37:CB:E2:C1:8C:FB:2C:10:C0:FF:0B:CF:0D:32:86:FC:1A:A2

# Fingerprint (SHA1): B8:01:86:D1:EB:9C:86:A5:41:04:CF:30:54:F3:4C:52:B7:E5:58:C6

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "XRamp Global CA Root"

CKA\_CERT\_SHA1\_HASH MULTILINE\_OCTAL

```
\270\001\206\321\353\234\206\245\101\004\317\060\124\363\114\122
\267\345\130\306
```

END

CKA\_CERT\_MD5\_HASH MULTILINE\_OCTAL

```
\241\013\104\263\312\020\330\000\156\235\017\330\017\222\012\321
```

END

CKA\_ISSUER MULTILINE\_OCTAL

```
\060\201\202\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\036\060\034\006\003\125\004\013\023\025\167\167\167\056\170
\162\141\155\160\163\145\143\165\162\151\164\171\056\143\157\155
\061\044\060\042\006\003\125\004\012\023\033\130\122\141\155\160
\040\123\145\143\165\162\151\164\171\040\123\145\162\166\151\143
```

```
\145\163\040\111\156\143\061\055\060\053\006\003\125\004\003\023
\044\130\122\141\155\160\040\107\154\157\142\141\154\040\103\145
\162\164\151\146\151\143\141\164\151\157\156\040\101\165\164\150
\157\162\151\164\171
```

END

CKA\_SERIAL\_NUMBER

MULTILINE\_OCTAL

```
\002\020\120\224\154\354\030\352\325\234\115\325\227\357\165\217
\240\255
```

END

CKA\_TRUST\_SERVER\_AUTH CK\_TRUST CKT\_NSS\_TRUSTED\_DELEGATOR

CKA\_TRUST\_EMAIL\_PROTECTION CK\_TRUST CKT\_NSS\_TRUSTED\_DELEGATOR

CKA\_TRUST\_CODE\_SIGNING CK\_TRUST CKT\_NSS\_MUST\_VERIFY\_TRUST

CKA\_TRUST\_STEP\_UP\_APPROVED CK\_BBOOL CK\_FALSE

#

# Certificate "Go Daddy Class 2 CA"

#

# Issuer: OU=Go Daddy Class 2 Certification Authority,O="The Go Daddy Group, Inc.",C=US

# Serial Number: 0 (0x0)

# Subject: OU=Go Daddy Class 2 Certification Authority,O="The Go Daddy Group, Inc.",C=US

# Not Valid Before: Tue Jun 29 17:06:20 2004

# Not Valid After : Thu Jun

29 17:06:20 2034

# Fingerprint (SHA-256):

C3:84:6B:F2:4B:9E:93:CA:64:27:4C:0E:C6:7C:1E:CC:5E:02:4F:FC:AC:D2:D7:40:19:35:0E:81:FE:54:6A:E4

# Fingerprint (SHA1): 27:96:BA:E6:3F:18:01:E2:77:26:1B:A0:D7:77:70:02:8F:20:EE:E4

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_CERTIFICATE

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "Go Daddy Class 2 CA"

CKA\_CERTIFICATE\_TYPE CK\_CERTIFICATE\_TYPE CKC\_X\_509

CKA\_SUBJECT MULTILINE\_OCTAL

```
\060\143\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\041\060\037\006\003\125\004\012\023\030\124\150\145\040\107\157
\040\104\141\144\144\171\040\107\162\157\165\160\054\040\111\156
\143\056\061\061\060\057\006\003\125\004\013\023\050\107\157\040
\104\141\144\144\171\040\103\154\141\163\163\040\062\040\103\145
\162\164\151\146\151\143\141\164\151\157\156\040\101\165\164\150
\157\162\151\164\171
```

END

CKA\_ID UTF8 "0"

CKA\_ISSUER MULTILINE\_OCTAL

```
\060\143\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\041\060\037\006\003\125\004\012\023\030\124\150\145\040\107\157
\040\104\141\144\144\171\040\107\162\157\165\160\054\040\111\156
\143\056\061\061\060\057\006\003\125\004\013\023\050\107\157\040
```

\104\141\144\144\171\040\103\154\141\163\163\040\062\040\103\145  
\162\164\151\146\151\143\141\164\151\157\156\040\101\165\164\150  
\157\162\151\164\171

END

CKA\_SERIAL\_NUMBER

MULTILINE\_OCTAL

\002\001\000

END

CKA\_VALUE MULTILINE\_OCTAL

\060\202\004\000\060\202\002\350\240\003\002\001\002\002\001\000  
\060\015\006\011\052\206\110\206\367\015\001\001\005\005\000\060  
\143\061\013\060\011\006\003\125\004\006\023\002\125\123\061\041  
\060\037\006\003\125\004\012\023\030\124\150\145\040\107\157\040  
\104\141\144\144\171\040\107\162\157\165\160\054\040\111\156\143  
\056\061\061\060\057\006\003\125\004\013\023\050\107\157\040\104  
\141\144\144\171\040\103\154\141\163\163\040\062\040\103\145\162  
\164\151\146\151\143\141\164\151\157\156\040\101\165\164\150\157  
\162\151\164\171\060\036\027\015\060\064\060\066\062\071\061\067  
\060\066\062\060\132\027\015\063\064\060\066\062\071\061\067\060  
\066\062\060\132\060\143\061\013\060\011\006\003\125\004\006\023  
\002\125\123\061\041\060\037\006\003\125\004\012\023\030\124\150  
\145\040\107\157\040\104\141\144\144\171\040\107\162\157\165\160  
\054\040\111\156\143\056\061\061\060\057\006\003\125\004\013\023  
\050\107\157\040\104\141\144\144\171\040\103\154\141\163\163\040  
\062\040\103\145\162\164\151\146\151\143\141\164\151\157\156\040  
\101\165\164\150\157\162\151\164\171\060\202\001\040\060\015\006  
\011\052\206\110\206\367\015\001\001\001\005\000\003\202\001\015  
\000\060\202\001\010\002\202\001\001\000\336\235\327\352\127\030  
\111\241\133\353\327\137\110\206\352\276\335\377\344\357\147\034  
\364\145\150\263\127\161\240\136\167\273\355\233\111\351\160\200  
\075\126\030\143\010\157\332\362\314\320\077\177\002\124\042\124  
\020\330\262\201\324\300\165\075\113\177\307\167\303\076\170\253  
\032\003\265\040\153\057\152\053\261\305\210\176\304\273\036\260  
\301\330\105\047\157\252\067\130\367\207\046\327\330\055\366\251  
\027\267\037\162\066\116\246\027\077\145\230\222\333\052\156\135  
\242\376\210\340\013\336\177\345\215\025\341\353\313\072\325\342  
\022\242\023\055\330\216\257\137\022\075\240\010\005\010\266\134  
\245\145\070\004\105\231\036\243\140\140\164\305\101\245\162\142  
\033\142\305\037\157\137\032\102\276\002\121\145\250\256\043\030  
\152\374\170\003\251\115\177\200\303\372\253\132\374\241\100\244  
\312\031\026\376\262\310\357\136\163\015\356\167\275\232\366\171  
\230\274\261\007\147\242\025\015\335\240\130\306\104\173\012\076  
\142\050\137\272\101\007\123\130\317\021\176\070\164\305\370\377  
\265\151\220\217\204\164\352\227\033\257\002\001\003\243\201\300  
\060\201\275\060\035\006\003\125\035\016\004\026\004\024\322\304  
\260\322\221\324\114\021\161\263\141\313\075\241\376\335\250\152  
\324\343\060\201\215\006\003\125\035\043\004\201\205\060\201\202  
\200\024\322\304\260\322\221\324\114\021\161\263\141\313\075\241



\376\335\250\152\324\343\241\147\244\145\060\143\061\013\060\011  
\006\003\125\004\006\023\002\125\123\061\041\060\037\006\003\125  
\004\012\023\030\124\150\145\040\107\157\040\104\141\144\144\171  
\040\107\162\157\165\160\054\040\111\156\143\056\061\061\060\057  
\006\003\125\004\013\023\050\107\157\040\104\141\144\144\171\040  
\103\154\141\163\163\040\062\040\103\145\162\164\151\146\151\143  
\141\164\151\157\156\040\101\165\164\150\157\162\151\164\171\202  
\001\000\060\014\006\003\125\035\023\004\005\060\003\001\001\377  
\060\015\006\011\052\206\110\206\367\015\001\001\005\005\000\003  
\202\001\001\000\062\113\363\262\312\076\221\374\022\306\241\007  
\214\216\167\240\063\006\024\134\220\036\030\367\010\246\075\012  
\031\371\207\200\021\156\151\344\226\027\060\377\064\221\143\162  
\070\356\314\034\001\243\035\224\050\244\061\366\172\304\124\327  
\366\345\061\130\003\242\314\316\142\333\224\105\163\265\277\105  
\311\044\265\325\202\002\255\043\171\151\215\270\266\115\316\317  
\114\312\063\043\350\034\210\252\235\213\101\156\026\311\040\345  
\211\236\315\073\332\160\367\176\231\046\040\024\124\045\253\156  
\163\205\346\233\041\235\012\154\202\016\250\370\302\014\372\020  
\036\154\226\357\207\015\304\017\141\213\255\356\203\053\225\370  
\216\222\204\162\071\353\040\352\203\355\203\315\227\156\010\274  
\353\116\046\266\163\053\344\323\366\114\376\046\161\342\141\021  
\164\112\377\127\032\207\017\165\110\056\317\121\151\027\240\002  
\022\141\225\325\321\100\262\020\114\356\304\254\020\103\246\245  
\236\012\325\225\142\232\015\317\210\202\305\062\014\344\053\237  
\105\346\015\237\050\234\261\271\052\132\127\255\067\017\257\035  
\177\333\275\237

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "Go Daddy Class 2 CA"

# Issuer: OU=Go Daddy Class 2 Certification Authority,O="The Go Daddy Group, Inc.",C=US

# Serial Number: 0 (0x0)

# Subject: OU=Go Daddy Class 2 Certification Authority,O="The Go Daddy Group, Inc.",C=US

# Not Valid Before: Tue

Jun 29 17:06:20 2004

# Not Valid After : Thu Jun 29 17:06:20 2034

# Fingerprint (SHA-256):

C3:84:6B:F2:4B:9E:93:CA:64:27:4C:0E:C6:7C:1E:CC:5E:02:4F:FC:AC:D2:D7:40:19:35:0E:81:FE:54:6A:E4

# Fingerprint (SHA1): 27:96:BA:E6:3F:18:01:E2:77:26:1B:A0:D7:77:70:02:8F:20:EE:E4

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "Go Daddy Class 2 CA"

CKA\_CERT\_SHA1\_HASH MULTILINE\_OCTAL

\047\226\272\346\077\030\001\342\167\046\033\240\327\167\160\002

\217\040\356\344

END

CKA\_CERT\_MD5\_HASH MULTILINE\_OCTAL

\221\336\006\045\253\332\375\062\027\014\273\045\027\052\204\147

END

CKA\_ISSUER MULTILINE\_OCTAL

\060\143\061\013\060\011\006\003\125\004\006\023\002\125\123\061

\041\060\037\006\003\125\004\012\023\030\124\150\145\040\107\157

\040\104\141\144\144\171\040\107\162\157\165\160\054\040\111\156

\143\056\061\061\060\057\006\003\125\004\013\023\050\107\157\040

\104\141\144\144\171\040\103\154\141\163\163\040\062\040\103\145

\162\164\151\146\151\143\141\164\151\157\156\040\101\165\164\150

\157\162\151\164\171

END

CKA\_SERIAL\_NUMBER

MULTILINE\_OCTAL

\002\001\000

END

CKA\_TRUST\_SERVER\_AUTH CK\_TRUST CKT\_NSS\_TRUSTED\_DELEGATOR

CKA\_TRUST\_EMAIL\_PROTECTION CK\_TRUST CKT\_NSS\_TRUSTED\_DELEGATOR

CKA\_TRUST\_CODE\_SIGNING CK\_TRUST CKT\_NSS\_MUST\_VERIFY\_TRUST

CKA\_TRUST\_STEP\_UP\_APPROVED CK\_BBOOL CK\_FALSE

#

# Certificate "Starfield Class 2 CA"

#

# Issuer: OU=Starfield Class 2 Certification Authority,O="Starfield Technologies, Inc.",C=US

# Serial Number: 0 (0x0)

# Subject: OU=Starfield Class 2 Certification Authority,O="Starfield Technologies, Inc.",C=US

# Not Valid Before: Tue Jun 29 17:39:16 2004

# Not Valid After : Thu Jun 29 17:39:16 2034

# Fingerprint (SHA-256):

14:65:FA:20:53:97:B8:76:FA:A6:F0:A9:95:8E:55:90:E4:0F:CC:7F:AA:4F:B7:C2:C8:67:75:21:FB:5F:B6:58

# Fingerprint (SHA1): AD:7E:1C:28:B0:64:EF:8F:60:03:40:20:14:C3:D0:E3:37:0E:B5:8A

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_CERTIFICATE

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE

CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "Starfield Class 2 CA"

CKA\_CERTIFICATE\_TYPE CK\_CERTIFICATE\_TYPE CKC\_X\_509

CKA\_SUBJECT MULTILINE\_OCTAL

\060\150\061\013\060\011\006\003\125\004\006\023\002\125\123\061

\045\060\043\006\003\125\004\012\023\034\123\164\141\162\146\151

\145\154\144\040\124\145\143\150\156\157\154\157\147\151\145\163

\054\040\111\156\143\056\061\062\060\060\006\003\125\004\013\023

\051\123\164\141\162\146\151\145\154\144\040\103\154\141\163\163

```
\040\062\040\103\145\162\164\151\146\151\143\141\164\151\157\156
\040\101\165\164\150\157\162\151\164\171
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\150\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\045\060\043\006\003\125\004\012\023\034\123\164\141\162\146\151
\145\154\144\040\124\145\143\150\156\157\154\157\147\151\145\163
\054\040\111\156\143\056\061\062\060\060\006\003\125\004\013\023
\051\123\164\141\162\146\151\145\154\144\040\103\154\141\163\163
\040\062\040\103\145\162\164\151\146\151\143\141\164\151\157\156
\040\101\165\164\150\157\162\151\164\171
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\001\000
END
CKA_VALUE MULTILINE_OCTAL
\060\202\004\017\060\202\002\367\240\003\002\001\002\002\001\000
\060\015\006\011\052\206\110\206\367\015\001\001\005\005\000\060
\150\061\013\060\011\006\003\125\004\006\023\002\125\123\061\045
\060\043\006\003\125\004\012\023\034\123\164\141\162\146\151\145
\154\144\040\124\145\143\150\156\157\154\157\147\151\145\163\054
\040\111\156\143\056\061\062\060\060\006\003\125\004\013\023\051
\123\164\141\162\146\151\145\154\144\040\103\154\141\163\163\040
\062\040\103\145\162\164\151\146\151\143\141\164\151\157\156\040
\101\165\164\150\157\162\151\164\171\060\036\027\015\060\064\060
\066\062\071\061\067\063\071\061\066\132\027\015\063\064\060\066
\062\071\061\067\063\071\061\066\132\060\150\061\013\060\011\006
\003\125\004\006\023\002\125\123\061\045\060\043\006\003\125\004
\012\023\034\123\164\141\162\146\151\145\154\144\040\124\145\143
\150\156\157\154\157\147\151\145\163\054\040\111\156\143\056\061
\062\060\060\006\003\125\004\013\023\051\123\164\141\162\146\151
\145\154\144\040\103\154\141\163\163\040\062\040\103\145\162\164
\151\146\151\143\141\164\151\157\156\040\101\165\164\150\157\162
\151\164\171\060\202\001\040\060\015\006\011\052\206\110\206\367
\015\001\001\001\005\000\003\202\001\015\000\060\202\001\010\002
\202\001\001\000\267\062\310\376\351\161\246\004\205\255\014\021
\144\337\316\115\357\310\003\030\207\077\241\253\373\074\246\237
\360\303\241\332\324\330\156\053\123\220\373\044\244\076\204\360
\236\350\137\354\345\047\104\365\050\246\077\173\336\340\052\360
\310\257\123\057\236\312\005\001\223\036\217\146\034\071\247\115
\372\132\266\163\004\045\146\353\167\177\347\131\306\112\231\045
\024\124\353\046\307\363\177\031\325\060\160\217\257\260\106\052
\377\255\353\051\355\327\237\252\004\207\243\324\371\211\245\064
\137\333\103\221\202\066\331\146\074\261\270\271\202\375\234\072
\076\020\310\073\357\006\145\146\172\233\031\030\075\377\161\121
\074\060\056\137\276\075\167\163\262\135\006\154\303\043\126\232
```

\053\205\046\222\034\247\002\263\344\077\015\257\010\171\202\270  
\066\075\352\234\323\065\263\274\151\312\365\314\235\350\375\144  
\215\027\200\063\156\136\112\135\231\311\036\207\264\235\032\300  
\325\156\023\065\043\136\337\233\137\075\357\326\367\166\302\352  
\076\273\170\015\034\102\147\153\004\330\370\326\332\157\213\362  
\104\240\001\253\002\001\003\243\201\305\060\201\302\060\035\006  
\003\125\035\016\004\026\004\024\277\137\267\321\316\335\037\206  
\364\133\125\254\334\327\020\302\016\251\210\347\060\201\222\006  
\003\125\035\043\004\201\212\060\201\207\200\024\277\137\267\321  
\316\335\037\206\364\133\125\254\334\327\020\302\016\251\210\347  
\241\154\244\152\060\150\061\013\060\011\006\003\125\004\006\023  
\002\125\123\061\045\060\043\006\003\125\004\012\023\034\123\164  
\141\162\146\151\145\154\144\040\124\145\143\150\156\157\154\157  
\147\151\145\163\054\040\111\156\143\056\061\062\060\060\006\003  
\125\004\013\023\051\123\164\141\162\146\151\145\154\144\040\103  
\154\141\163\163\040\062\040\103\145\162\164\151\146\151\143\141  
\164\151\157\156\040\101\165\164\150\157\162\151\164\171\202\001  
\000\060\014\006\003\125\035\023\004\005\060\003\001\001\377\060  
\015\006\011\052\206\110\206\367\015\001\001\005\005\000\003\202  
\001\001\000\005\235\077\210\235\321\311\032\125\241\254\151\363  
\363\131\332\233\001\207\032\117\127\251\241\171\011\052\333\367  
\057\262\036\314\307\136\152\330\203\207\241\227\357\111\065\076  
\167\006\101\130\142\277\216\130\270\012\147\077\354\263\335\041  
\146\037\311\124\372\162\314\075\114\100\330\201\257\167\236\203  
\172\273\242\307\365\064\027\216\331\021\100\364\374\054\052\115  
\025\177\247\142\135\056\045\323\000\013\040\032\035\150\371\027  
\270\364\275\213\355\050\131\335\115\026\213\027\203\310\262\145  
\307\055\172\245\252\274\123\206\155\335\127\244\312\370\040\101  
\013\150\360\364\373\164\276\126\135\172\171\365\371\035\205\343  
\055\225\276\365\161\220\103\314\215\037\232\000\012\207\051\351  
\125\042\130\000\043\352\343\022\103\051\133\107\010\335\214\101  
\152\145\006\250\345\041\252\101\264\225\041\225\271\175\321\064  
\253\023\326\255\274\334\342\075\071\315\275\076\165\160\241\030  
\131\003\311\042\264\217\234\325\136\052\327\245\266\324\012\155  
\370\267\100\021\106\232\037\171\016\142\277\017\227\354\340\057  
\037\027\224

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "Starfield Class 2 CA"

# Issuer: OU=Starfield Class 2 Certification Authority,O="Starfield Technologies, Inc.",C=US

# Serial Number: 0 (0x0)

# Subject: OU=Starfield Class 2 Certification Authority,O="Starfield Technologies, Inc.",C=US

# Not Valid Before: Tue Jun 29 17:39:16 2004

# Not Valid After : Thu Jun 29 17:39:16 2034

```

# Fingerprint (SHA-256):
14:65:FA:20:53:97:B8:76:FA:A6:F0:A9:95:8E:55:90:E4:0F:CC:7F:AA:4F:B7:C2:C8:67:75:21:FB:5F:B6:58
#
Fingerprint (SHA1): AD:7E:1C:28:B0:64:EF:8F:60:03:40:20:14:C3:D0:E3:37:0E:B5:8A
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Starfield Class 2 CA"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\255\176\034\050\260\144\357\217\140\003\100\040\024\303\320\343
\067\016\265\212
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\062\112\113\273\310\143\151\233\276\164\232\306\335\035\106\044
END
CKA_ISSUER MULTILINE_OCTAL
\060\150\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\045\060\043\006\003\125\004\012\023\034\123\164\141\162\146\151
\145\154\144\040\124\145\143\150\156\157\154\157\147\151\145\163
\054\040\111\156\143\056\061\062\060\060\006\003\125\004\013\023
\051\123\164\141\162\146\151\145\154\144\040\103\154\141\163\163
\040\062\040\103\145\162\164\151\146\151\143\141\164\151\157\156
\040\101\165\164\150\157\162\151\164\171
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\001\000
END
CKA_TRUST_SERVER_AUTH
CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "DigiCert Assured ID Root CA"
#
# Issuer: CN=DigiCert Assured ID Root CA,OU=www.digicert.com,O=DigiCert Inc,C=US
# Serial Number:0c:e7:e0:e5:17:d8:46:fe:8f:e5:60:fc:1b:f0:30:39
# Subject: CN=DigiCert Assured ID Root CA,OU=www.digicert.com,O=DigiCert Inc,C=US
# Not Valid Before: Fri Nov 10 00:00:00 2006
# Not Valid After : Mon Nov 10 00:00:00 2031
# Fingerprint (SHA-256):
3E:90:99:B5:01:5E:8F:48:6C:00:BC:EA:9D:11:1E:E7:21:FA:BA:35:5A:89:BC:F1:DF:69:56:1E:3D:C6:32:5C
# Fingerprint (SHA1): 05:63:B8:63:0D:62:D7:5A:BB:C8:AB:1E:4B:DF:B5:A8:99:B2:4D:43
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE

```

```
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "DigiCert Assured ID Root CA"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT
MULTILINE_OCTAL
\060\145\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\025\060\023\006\003\125\004\012\023\014\104\151\147\151\103\145
\162\164\040\111\156\143\061\031\060\027\006\003\125\004\013\023
\020\167\167\167\056\144\151\147\151\143\145\162\164\056\143\157
\155\061\044\060\042\006\003\125\004\003\023\033\104\151\147\151
\103\145\162\164\040\101\163\163\165\162\145\144\040\111\104\040
\122\157\157\164\040\103\101
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\145\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\025\060\023\006\003\125\004\012\023\014\104\151\147\151\103\145
\162\164\040\111\156\143\061\031\060\027\006\003\125\004\013\023
\020\167\167\167\056\144\151\147\151\143\145\162\164\056\143\157
\155\061\044\060\042\006\003\125\004\003\023\033\104\151\147\151
\103\145\162\164\040\101\163\163\165\162\145\144\040\111\104\040
\122\157\157\164\040\103\101
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\020\014\347\340\345\027\330\106\376\217\345\140\374\033\360
\060\071
END
CKA_VALUE
MULTILINE_OCTAL
\060\202\003\267\060\202\002\237\240\003\002\001\002\002\020\014
\347\340\345\027\330\106\376\217\345\140\374\033\360\060\071\060
\015\006\011\052\206\110\206\367\015\001\001\005\005\000\060\145
\061\013\060\011\006\003\125\004\006\023\002\125\123\061\025\060
\023\006\003\125\004\012\023\014\104\151\147\151\103\145\162\164
\040\111\156\143\061\031\060\027\006\003\125\004\013\023\020\167
\167\167\056\144\151\147\151\143\145\162\164\056\143\157\155\061
\044\060\042\006\003\125\004\003\023\033\104\151\147\151\103\145
\162\164\040\101\163\163\165\162\145\144\040\111\104\040\122\157
\157\164\040\103\101\060\036\027\015\060\066\061\061\061\060\060
\060\060\060\060\060\132\027\015\063\061\061\061\061\060\060\060
\060\060\060\060\132\060\145\061\013\060\011\006\003\125\004\006
\023\002\125\123\061\025\060\023\006\003\125\004\012\023\014\104
\151\147\151\103\145\162\164\040\111\156\143\061\031\060\027\006
\003\125\004\013\023\020\167\167\167\056\144\151\147\151\143\145
\162\164\056\143\157\155\061\044\060\042\006\003\125\004\003\023
\033\104\151\147\151\103\145\162\164\040\101\163\163\165\162\145
\144\040\111\104\040\122\157\157\164\040\103\101\060\202\001\042
\060\015\006\011\052\206\110\206\367\015\001\001\001\005\000\003
```

\202\001\017\000\060\202\001\012\002\202\001\001\000\255\016\025  
\316\344\103\200\134\261\207\363\267\140\371\161\022\245\256\334  
\046\224\210\252\364\316\365\040\071\050\130\140\014\370\200\332  
\251\025\225\062\141\074\265\261\050\204\212\212\334\237\012\014  
\203\027\172\217\220\254\212\347\171\123\134\061\204\052\366\017  
\230\062\066\166\314\336\335\074\250\242\357\152\373\041\362\122  
\141\337\237\040\327\037\342\261\331\376\030\144\322\022\133\137  
\371\130\030\065\274\107\315\241\066\371\153\177\324\260\070\076  
\301\033\303\214\063\331\330\057\030\376\050\017\263\247\203\326  
\303\156\104\300\141\065\226\026\376\131\234\213\166\155\327\361  
\242\113\015\053\377\013\162\332\236\140\320\216\220\065\306\170  
\125\207\040\241\317\345\155\012\310\111\174\061\230\063\154\042  
\351\207\320\062\132\242\272\023\202\021\355\071\027\235\231\072  
\162\241\346\372\244\331\325\027\061\165\256\205\175\042\256\077  
\001\106\206\366\050\171\310\261\332\344\127\027\304\176\034\016  
\260\264\222\246\126\263\275\262\227\355\252\247\360\267\305\250  
\077\225\026\320\377\241\226\353\010\137\030\167\117\002\003\001  
\000\001\243\143\060\141\060\016\006\003\125\035\017\001\001\377  
\004\004\003\002\001\206\060\017\006\003\125\035\023\001\001\377  
\004\005\060\003\001\001\377\060\035\006\003\125\035\016\004\026  
\004\024\105\353\242\257\364\222\313\202\061\055\121\213\247\247  
\041\235\363\155\310\017\060\037\006\003\125\035\043\004\030\060  
\026\200\024\105\353\242\257\364\222\313\202\061\055\121\213\247  
\247\041\235\363\155\310\017\060\015\006\011\052\206\110\206\367  
\015\001\001\005\005\000\003\202\001\001\000\242\016\274\337\342  
\355\360\343\162\163\172\144\224\277\367\162\146\330\062\344\102  
\165\142\256\207\353\362\325\331\336\126\263\237\314\316\024\050  
\271\015\227\140\134\022\114\130\344\323\075\203\111\105\130\227  
\065\151\032\250\107\352\126\306\171\253\022\330\147\201\204\337  
\177\011\074\224\346\270\046\054\040\275\075\263\050\211\367\137  
\377\042\342\227\204\037\351\145\357\207\340\337\301\147\111\263  
\135\353\262\011\052\353\046\355\170\276\175\077\053\363\267\046  
\065\155\137\211\001\266\111\133\237\001\005\233\253\075\045\301  
\314\266\177\302\361\157\206\306\372\144\150\353\201\055\224\353  
\102\267\372\214\036\335\142\361\276\120\147\267\154\275\363\361  
\037\153\014\066\007\026\177\067\174\251\133\155\172\361\022\106  
\140\203\327\047\004\276\113\316\227\276\303\147\052\150\021\337  
\200\347\014\063\146\277\023\015\024\156\363\177\037\143\020\036  
\372\215\033\045\155\154\217\245\267\141\001\261\322\243\046\241  
\020\161\235\255\342\303\371\303\231\121\267\053\007\010\316\056  
\346\120\262\247\372\012\105\057\242\360\362

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRUST\_AFTER

CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRUST\_AFTER CK\_BBOOL CK\_FALSE

```

# Trust for "DigiCert Assured ID Root CA"
# Issuer: CN=DigiCert Assured ID Root CA,OU=www.digicert.com,O=DigiCert Inc,C=US
# Serial Number:0c:e7:e0:e5:17:d8:46:fe:8f:e5:60:fc:1b:f0:30:39
# Subject: CN=DigiCert Assured ID Root CA,OU=www.digicert.com,O=DigiCert Inc,C=US
# Not Valid Before: Fri Nov 10 00:00:00 2006
# Not Valid After : Mon Nov 10 00:00:00 2031
# Fingerprint (SHA-256):
3E:90:99:B5:01:5E:8F:48:6C:00:BC:EA:9D:11:1E:E7:21:FA:BA:35:5A:89:BC:F1:DF:69:56:1E:3D:C6:32:5C
# Fingerprint (SHA1): 05:63:B8:63:0D:62:D7:5A:BB:C8:AB:1E:4B:DF:B5:A8:99:B2:4D:43
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "DigiCert Assured ID Root CA"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\005\143\270\143\015\142\327\132\273\310\253\036\113\337\265\250
\231\262\115\103
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\207\316\013\173\052\016\111\000\341\130\161\233\067\250\223\162
END
CKA_ISSUER
MULTILINE_OCTAL
\060\145\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\025\060\023\006\003\125\004\012\023\014\104\151\147\151\103\145
\162\164\040\111\156\143\061\031\060\027\006\003\125\004\013\023
\020\167\167\167\056\144\151\147\151\143\145\162\164\056\143\157
\155\061\044\060\042\006\003\125\004\003\023\033\104\151\147\151
\103\145\162\164\040\101\163\163\165\162\145\144\040\111\104\040
\122\157\157\164\040\103\101
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\020\014\347\340\345\027\330\106\376\217\345\140\374\033\360
\060\071
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "DigiCert Global Root CA"
#
# Issuer: CN=DigiCert Global Root CA,OU=www.digicert.com,O=DigiCert Inc,C=US
# Serial Number:08:3b:e0:56:90:42:46:b1:a1:75:6a:c9:59:91:c7:4a
#
# Subject: CN=DigiCert Global Root CA,OU=www.digicert.com,O=DigiCert Inc,C=US
# Not Valid Before: Fri Nov 10 00:00:00 2006

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# Not Valid After : Mon Nov 10 00:00:00 2031
# Fingerprint (SHA-256):
43:48:A0:E9:44:4C:78:CB:26:5E:05:8D:5E:89:44:B4:D8:4F:96:62:BD:26:DB:25:7F:89:34:A4:43:C7:01:61
# Fingerprint (SHA1): A8:98:5D:3A:65:E5:E5:C4:B2:D7:D6:6D:40:C6:DD:2F:B1:9C:54:36
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "DigiCert Global Root CA"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\141\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\025\060\023\006\003\125\004\012\023\014\104\151\147\151\103\145
\162\164\040\111\156\143\061\031\060\027\006\003\125\004\013\023
\020\167\167\167\056\144\151\147\151\143\145\162\164\056\143\157
\155\061\040\060\036\006\003\125\004\003\023\027\104\151\147\151
\103\145\162\164\040\107\154\157\142\141\154\040\122\157\157\164
\040\103\101
END
CKA_ID
UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\141\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\025\060\023\006\003\125\004\012\023\014\104\151\147\151\103\145
\162\164\040\111\156\143\061\031\060\027\006\003\125\004\013\023
\020\167\167\167\056\144\151\147\151\143\145\162\164\056\143\157
\155\061\040\060\036\006\003\125\004\003\023\027\104\151\147\151
\103\145\162\164\040\107\154\157\142\141\154\040\122\157\157\164
\040\103\101
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\020\010\073\340\126\220\102\106\261\241\165\152\311\131\221
\307\112
END
CKA_VALUE MULTILINE_OCTAL
\060\202\003\257\060\202\002\227\240\003\002\001\002\002\020\010
\073\340\126\220\102\106\261\241\165\152\311\131\221\307\112\060
\015\006\011\052\206\110\206\367\015\001\001\005\005\000\060\141
\061\013\060\011\006\003\125\004\006\023\002\125\123\061\025\060
\023\006\003\125\004\012\023\014\104\151\147\151\103\145\162\164
\040\111\156\143\061\031\060\027\006\003\125\004\013\023\020\167
\167\167\056\144\151\147\151\143\145\162\164\056\143\157\155\061
\040\060\036\006\003\125\004\003\023\027\104\151\147\151\103\145
\162\164\040\107\154\157\142\141\154\040\122\157\157\164\040\103
\101\060\036\027\015\060\066\061\061\061\060\060\060\060\060\060
\060\132\027\015\063\061\061\061\061\060\060\060\060\060\060\060
\132\060\141\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\025\060\023\006\003\125\004\012\023\014\104\151\147\151\103
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\145\162\164\040\111\156\143\061\031\060\027\006\003\125\004\013  
\023\020\167\167\167\056\144\151\147\151\143\145\162\164\056\143  
\157\155\061\040\060\036\006\003\125\004\003\023\027\104\151\147  
\151\103\145\162\164\040\107\154\157\142\141\154\040\122\157\157  
\164\040\103\101\060\202\001\042\060\015\006\011\052\206\110\206  
\367\015\001\001\001\005\000\003\202\001\017\000\060\202\001\012  
\002\202\001\001\000\342\073\341\021\162\336\250\244\323\243\127  
\252\120\242\217\013\167\220\311\242\245\356\022\316\226\133\001  
\011\040\314\001\223\247\116\060\267\123\367\103\304\151\000\127  
\235\342\215\042\335\207\006\100\000\201\011\316\316\033\203\277  
\337\315\073\161\106\342\326\146\307\005\263\166\047\026\217\173  
\236\036\225\175\356\267\110\243\010\332\326\257\172\014\071\006  
\145\177\112\135\037\274\027\370\253\276\356\050\327\164\177\172  
\170\231\131\205\150\156\134\043\062\113\277\116\300\350\132\155  
\343\160\277\167\020\277\374\001\366\205\331\250\104\020\130\062  
\251\165\030\325\321\242\276\107\342\047\152\364\232\063\370\111  
\010\140\213\324\137\264\072\204\277\241\252\112\114\175\076\317  
\117\137\154\166\136\240\113\067\221\236\334\042\346\155\316\024  
\032\216\152\313\376\315\263\024\144\027\307\133\051\236\062\277  
\362\356\372\323\013\102\324\253\267\101\062\332\014\324\357\370  
\201\325\273\215\130\077\265\033\350\111\050\242\160\332\061\004  
\335\367\262\026\362\114\012\116\007\250\355\112\075\136\265\177  
\243\220\303\257\047\002\003\001\000\001\243\143\060\141\060\016  
\006\003\125\035\017\001\001\377\004\004\003\002\001\206\060\017  
\006\003\125\035\023\001\001\377\004\005\060\003\001\001\377\060  
\035\006\003\125\035\016\004\026\004\024\003\336\120\065\126\321  
\114\273\146\360\243\342\033\033\303\227\262\075\321\125\060\037  
\006\003\125\035\043\004\030\060\026\200\024\003\336\120\065\126  
\321\114\273\146\360\243\342\033\033\303\227\262\075\321\125\060  
\015\006\011\052\206\110\206\367\015\001\001\005\005\000\003\202  
\001\001\000\313\234\067\252\110\023\022\012\372\335\104\234\117  
\122\260\364\337\256\004\365\171\171\010\243\044\030\374\113\053  
\204\300\055\271\325\307\376\364\301\037\130\313\270\155\234\172  
\164\347\230\051\253\021\265\343\160\240\241\315\114\210\231\223  
\214\221\160\342\253\017\034\276\223\251\377\143\325\344\007\140  
\323\243\277\235\133\011\361\325\216\343\123\364\216\143\372\077  
\247\333\264\146\337\142\146\326\321\156\101\215\362\055\265\352  
\167\112\237\235\130\342\053\131\300\100\043\355\055\050\202\105  
\076\171\124\222\046\230\340\200\110\250\067\357\360\326\171\140  
\026\336\254\350\016\315\156\254\104\027\070\057\111\332\341\105  
\076\052\271\066\123\317\072\120\006\367\056\350\304\127\111\154  
\141\041\030\325\004\255\170\074\054\072\200\153\247\353\257\025  
\024\351\330\211\301\271\070\154\342\221\154\212\377\144\271\167  
\045\127\060\300\033\044\243\341\334\351\337\107\174\265\264\044  
\010\005\060\354\055\275\013\277\105\277\120\271\251\363\353\230  
\001\022\255\310\210\306\230\064\137\215\012\074\306\351\325\225  
\225\155\336

END

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CKA_NSS_MOZILLA_CA_POLICY
CK_BBOOL CK_TRUE
CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE
CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

# Trust for "DigiCert Global Root CA"
# Issuer: CN=DigiCert Global Root CA,OU=www.digicert.com,O=DigiCert Inc,C=US
# Serial Number:08:3b:e0:56:90:42:46:b1:a1:75:6a:c9:59:91:c7:4a
# Subject: CN=DigiCert Global Root CA,OU=www.digicert.com,O=DigiCert Inc,C=US
# Not Valid Before: Fri Nov 10 00:00:00 2006
# Not Valid After : Mon Nov 10 00:00:00 2031
# Fingerprint (SHA-256):
43:48:A0:E9:44:4C:78:CB:26:5E:05:8D:5E:89:44:B4:D8:4F:96:62:BD:26:DB:25:7F:89:34:A4:43:C7:01:61
#
Fingerprint (SHA1): A8:98:5D:3A:65:E5:E5:C4:B2:D7:D6:6D:40:C6:DD:2F:B1:9C:54:36
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "DigiCert Global Root CA"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\250\230\135\072\145\345\345\304\262\327\326\155\100\306\335\057
\261\234\124\066
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\171\344\251\204\015\175\072\226\327\300\117\342\103\114\211\056
END
CKA_ISSUER MULTILINE_OCTAL
\060\141\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\025\060\023\006\003\125\004\012\023\014\104\151\147\151\103\145
\162\164\040\111\156\143\061\031\060\027\006\003\125\004\013\023
\020\167\167\167\056\144\151\147\151\143\145\162\164\056\143\157
\155\061\040\060\036\006\003\125\004\003\023\027\104\151\147\151
\103\145\162\164\040\107\154\157\142\141\154\040\122\157\157\164
\040\103\101
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\020\010\073\340\126\220\102\106\261\241\165\152\311\131\221
\307\112
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "DigiCert High Assurance EV Root CA"

```

```

#
# Issuer: CN=DigiCert High Assurance EV Root CA,OU=www.digicert.com,O=DigiCert Inc,C=US
# Serial Number:02:ac:5c:26:6a:0b:40:9b:8f:0b:79:f2:ae:46:25:77
# Subject: CN=DigiCert High Assurance EV Root CA,OU=www.digicert.com,O=DigiCert Inc,C=US
# Not Valid Before: Fri Nov 10 00:00:00 2006
# Not Valid After : Mon Nov 10 00:00:00 2031
# Fingerprint (SHA-256):
74:31:E5:F4:C3:C1:CE:46:90:77:4F:0B:61:E0:54:40:88:3B:A9:A0:1E:D0:0B:A6:AB:D7:80:6E:D3:B1:18:CF
# Fingerprint (SHA1): 5F:B7:EE:06:33:E2:59:DB:AD:0C:4C:9A:E6:D3:8F:1A:61:C7:DC:25
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE
CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "DigiCert High Assurance EV Root CA"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\154\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\025\060\023\006\003\125\004\012\023\014\104\151\147\151\103\145
\162\164\040\111\156\143\061\031\060\027\006\003\125\004\013\023
\020\167\167\167\056\144\151\147\151\143\145\162\164\056\143\157
\155\061\053\060\051\006\003\125\004\003\023\042\104\151\147\151
\103\145\162\164\040\110\151\147\150\040\101\163\163\165\162\141
\156\143\145\040\105\126\040\122\157\157\164\040\103\101
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\154\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\025\060\023\006\003\125\004\012\023\014\104\151\147\151\103\145
\162\164\040\111\156\143\061\031\060\027\006\003\125\004\013\023
\020\167\167\167\056\144\151\147\151\143\145\162\164\056\143\157
\155\061\053\060\051\006\003\125\004\003\023\042\104\151\147\151
\103\145\162\164\040\110\151\147\150\040\101\163\163\165\162\141
\156\143\145\040\105\126\040\122\157\157\164\040\103\101
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\020\002\254\134\046\152\013\100\233\217\013\171\362\256\106
\045\167
END
CKA_VALUE MULTILINE_OCTAL
\060\202\003\305\060\202\002\255\240\003\002\001\002\002\020\002
\254\134\046\152\013\100\233\217\013\171\362\256\106\045\167\060
\015\006\011\052\206\110\206\367\015\001\001\005\005\000\060\154
\061\013\060\011\006\003\125\004\006\023\002\125\123\061\025\060
\023\006\003\125\004\012\023\014\104\151\147\151\103\145\162\164
\040\111\156\143\061\031\060\027\006\003\125\004\013\023\020\167
\167\167\056\144\151\147\151\143\145\162\164\056\143\157\155\061

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\053\060\051\006\003\125\004\003\023\042\104\151\147\151\103\145  
\162\164\040\110\151\147\150\040\101\163\163\165\162\141\156\143  
\145\040\105\126\040\122\157\157\164\040\103\101\060\036\027\015  
\060\066\061\061\061\060\060\060\060\060\060\060\132\027\015\063  
\061\061\061\061\060\060\060\060\060\060\060\132\060\154\061\013  
\060\011\006\003\125\004\006\023\002\125\123\061\025\060\023\006  
\003\125\004\012\023\014\104\151\147\151\103\145\162\164\040\111  
\156\143\061\031\060\027\006\003\125\004\013\023\020\167\167\167  
\056\144\151\147\151\143\145\162\164\056\143\157\155\061\053\060  
\051\006\003\125\004\003\023\042\104\151\147\151\103\145\162\164  
\040\110\151\147\150\040\101\163\163\165\162\141\156\143\145\040  
\105\126\040\122\157\157\164\040\103\101\060\202\001\042\060\015  
\006\011\052\206\110\206\367\015\001\001\001\005\000\003\202\001  
\017\000\060\202\001\012\002\202\001\001\000\306\314\345\163\346  
\373\324\273\345\055\055\062\246\337\345\201\077\311\315\045\111  
\266\161\052\303\325\224\064\147\242\012\034\260\137\151\246\100  
\261\304\267\262\217\320\230\244\251\101\131\072\323\334\224\326  
\074\333\164\070\244\112\314\115\045\202\367\112\245\123\022\070  
\356\363\111\155\161\221\176\143\266\253\246\137\303\244\204\370  
\117\142\121\276\370\305\354\333\070\222\343\006\345\010\221\014  
\304\050\101\125\373\313\132\211\025\176\161\350\065\277\115\162  
\011\075\276\072\070\120\133\167\061\033\215\263\307\044\105\232  
\247\254\155\000\024\132\004\267\272\023\353\121\012\230\101\101  
\042\116\145\141\207\201\101\120\246\171\134\211\336\031\112\127  
\325\056\346\135\034\123\054\176\230\315\032\006\026\244\150\163  
\320\064\004\023\134\241\161\323\132\174\125\333\136\144\341\067  
\207\060\126\004\345\021\264\051\200\022\361\171\071\210\242\002  
\021\174\047\146\267\210\267\170\362\312\012\250\070\253\012\144  
\302\277\146\135\225\204\301\241\045\036\207\135\032\120\013\040  
\022\314\101\273\156\013\121\070\270\113\313\002\003\001\000\001  
\243\143\060\141\060\016\006\003\125\035\017\001\001\377\004\004  
\003\002\001\206\060\017\006\003\125\035\023\001\001\377\004\005  
\060\003\001\001\377\060\035\006\003\125\035\016\004\026\004\024  
\261\076\303\151\003\370\277\107\001\324\230\046\032\010\002\357  
\143\144\053\303\060\037\006\003\125\035\043\004\030\060\026\200  
\024\261\076\303\151\003\370\277\107\001\324\230\046\032\010\002  
\357\143\144\053\303\060\015\006\011\052\206\110\206\367\015\001  
\001\005\005\000\003\202\001\001\000\034\032\006\227\334\327\234  
\237\074\210\146\006\010\127\041\333\041\107\370\052\147\252\277  
\030\062\166\100\020\127\301\212\363\172\331\021\145\216\065\372  
\236\374\105\265\236\331\114\061\113\270\221\350\103\054\216\263  
\170\316\333\343\123\171\161\326\345\041\224\001\332\125\207\232  
\044\144\366\212\146\314\336\234\067\315\250\064\261\151\233\043  
\310\236\170\042\053\160\103\343\125\107\061\141\031\357\130\305  
\205\057\116\060\366\240\061\026\043\310\347\342\145\026\063\313  
\277\032\033\240\075\370\312\136\213\061\213\140\010\211\055\014  
\006\134\122\267\304\371\012\230\321\025\137\237\022\276\174\066  
\143\070\275\104\244\177\344\046\053\012\304\227\151\015\351\214

```
\342\300\020\127\270\310\166\022\221\125\362\110\151\330\274\052
\002\133\017\104\324\040\061\333\364\272\160\046\135\220\140\236
\274\113\027\011\057\264\313\036\103\150\311\007\047\301\322\134
\367\352\041\271\150\022\234\074\234\277\236\374\200\134\233\143
\315\354\107\252\045\047\147\240\067\363\000\202\175\124\327\251
\370\351\056\023\243\167\350\037\112
```

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "DigiCert High Assurance EV Root CA"

# Issuer: CN=DigiCert High Assurance EV Root CA,OU=www.digicert.com,O=DigiCert Inc,C=US

# Serial Number:02:ac:5c:26:6a:0b:40:9b:8f:0b:79:f2:ae:46:25:77

# Subject: CN=DigiCert High Assurance EV Root CA,OU=www.digicert.com,O=DigiCert Inc,C=US

# Not Valid Before: Fri Nov 10 00:00:00 2006

# Not Valid After : Mon Nov 10 00:00:00 2031

# Fingerprint (SHA-256):

74:31:E5:F4:C3:C1:CE:46:90:77:4F:0B:61:E0:54:40:88:3B:A9:A0:1E:D0:0B:A6:AB:D7:80:6E:D3:B1:18:CF

# Fingerprint (SHA1): 5F:B7:EE:06:33:E2:59:DB:AD:0C:4C:9A:E6:D3:8F:1A:61:C7:DC:25

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE

CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "DigiCert High Assurance EV Root CA"

CKA\_CERT\_SHA1\_HASH MULTILINE\_OCTAL

```
\137\267\356\006\063\342\131\333\255\014\114\232\346\323\217\032
\141\307\334\045
```

END

CKA\_CERT\_MD5\_HASH MULTILINE\_OCTAL

```
\324\164\336\127\134\071\262\323\234\205\203\305\300\145\111\212
```

END

CKA\_ISSUER MULTILINE\_OCTAL

```
\060\154\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\025\060\023\006\003\125\004\012\023\014\104\151\147\151\103\145
\162\164\040\111\156\143\061\031\060\027\006\003\125\004\013\023
\020\167\167\167\056\144\151\147\151\143\145\162\164\056\143\157
\155\061\053\060\051\006\003\125\004\003\023\042\104\151\147\151
\103\145\162\164\040\110\151\147\150\040\101\163\163\165\162\141
\156\143\145\040\105\126\040\122\157\157\164\040\103\101
```

END

CKA\_SERIAL\_NUMBER MULTILINE\_OCTAL

```
\002\020\002\254\134\046\152\013\100\233\217\013\171\362\256\106
\045\167
```

END

CKA\_TRUST\_SERVER\_AUTH CK\_TRUST CKT\_NSS\_TRUSTED\_DELEGATOR

```

CKA_TRUST_EMAIL_PROTECTION
CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "SwissSign Gold CA - G2"
#
# Issuer: CN=SwissSign Gold CA - G2,O=SwissSign AG,C=CH
# Serial Number:00:bb:40:1c:43:f5:5e:4f:b0
# Subject: CN=SwissSign Gold CA - G2,O=SwissSign AG,C=CH
# Not Valid Before: Wed Oct 25 08:30:35 2006
# Not Valid After : Sat Oct 25 08:30:35 2036
# Fingerprint (SHA-256):
62:DD:0B:E9:B9:F5:0A:16:3E:A0:F8:E7:5C:05:3B:1E:CA:57:EA:55:C8:68:8F:64:7C:68:81:F2:C8:35:7B:95
# Fingerprint (SHA1): D8:C5:38:8A:B7:30:1B:1B:6E:D4:7A:E6:45:25:3A:6F:9F:1A:27:61
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "SwissSign Gold CA - G2"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\105\061\013\060\011\006\003\125\004\006\023\002\103\110\061
\025\060\023\006\003\125\004\012\023\014\123\167\151\163\163\123
\151\147\156\040\101\107\061\037\060\035\006\003\125\004\003\023
\026\123\167\151\163\163\123\151\147\156\040\107\157\154\144\040
\103\101\040\055\040\107\062
END
CKA_ID
UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\105\061\013\060\011\006\003\125\004\006\023\002\103\110\061
\025\060\023\006\003\125\004\012\023\014\123\167\151\163\163\123
\151\147\156\040\101\107\061\037\060\035\006\003\125\004\003\023
\026\123\167\151\163\163\123\151\147\156\040\107\157\154\144\040
\103\101\040\055\040\107\062
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\011\000\273\100\034\103\365\136\117\260
END
CKA_VALUE MULTILINE_OCTAL
\060\202\005\272\060\202\003\242\240\003\002\001\002\002\011\000
\273\100\034\103\365\136\117\260\060\015\006\011\052\206\110\206
\367\015\001\001\005\005\000\060\105\061\013\060\011\006\003\125
\004\006\023\002\103\110\061\025\060\023\006\003\125\004\012\023
\014\123\167\151\163\163\123\151\147\156\040\101\107\061\037\060
\035\006\003\125\004\003\023\026\123\167\151\163\163\123\151\147

```

\156\040\107\157\154\144\040\103\101\040\055\040\107\062\060\036  
\027\015\060\066\061\060\062\065\060\070\063\060\063\065\132\027  
\015\063\066\061\060\062\065\060\070\063\060\063\065\132\060\105  
\061\013\060\011\006\003\125\004\006\023\002\103\110\061\025\060  
\023\006\003\125\004\012\023\014\123\167\151\163\163\123\151\147  
\156\040\101\107\061\037\060\035\006\003\125\004\003\023\026\123  
\167\151\163\163\123\151\147\156\040\107\157\154\144\040\103\101  
\040\055\040\107\062\060\202\002\042\060\015\006\011\052\206\110  
\206\367\015\001\001\001\005\000\003\202\002\017\000\060\202\002  
\012\002\202\002\001\000\257\344\356\176\213\044\016\022\156\251  
\120\055\026\104\073\222\222\134\312\270\135\204\222\102\023\052  
\274\145\127\202\100\076\127\044\315\120\213\045\052\267\157\374  
\357\242\320\300\037\002\044\112\023\226\217\043\023\346\050\130  
\000\243\107\307\006\247\204\043\053\273\275\226\053\177\125\314  
\213\301\127\037\016\142\145\017\335\075\126\212\163\332\256\176  
\155\272\201\034\176\102\214\040\065\331\103\115\204\372\204\333  
\122\054\363\016\047\167\013\153\277\021\057\162\170\237\056\330  
\076\346\030\067\132\052\162\371\332\142\220\222\225\312\037\234  
\351\263\074\053\313\363\001\023\277\132\317\301\265\012\140\275  
\335\265\231\144\123\270\240\226\263\157\342\046\167\221\214\340  
\142\020\002\237\064\017\244\325\222\063\121\336\276\215\272\204  
\172\140\074\152\333\237\053\354\336\336\001\077\156\115\345\120  
\206\313\264\257\355\104\100\305\312\132\214\332\322\053\174\250  
\356\276\246\345\012\252\016\245\337\005\122\267\125\307\042\135  
\062\152\227\227\143\023\333\311\333\171\066\173\205\072\112\305  
\122\211\371\044\347\235\167\251\202\377\125\034\245\161\151\053  
\321\002\044\362\263\046\324\153\332\004\125\345\301\012\307\155  
\060\067\220\052\344\236\024\063\136\026\027\125\305\133\265\313  
\064\211\222\361\235\046\217\241\007\324\306\262\170\120\333\014  
\014\013\174\013\214\101\327\271\351\335\214\210\367\243\115\262  
\062\314\330\027\332\315\267\316\146\235\324\375\136\377\275\227  
\076\051\165\347\176\247\142\130\257\045\064\245\101\307\075\274  
\015\120\312\003\003\017\010\132\037\225\163\170\142\277\257\162  
\024\151\016\245\345\003\016\170\216\046\050\102\360\007\013\142  
\040\020\147\071\106\372\251\003\314\004\070\172\146\357\040\203  
\265\214\112\126\216\221\000\374\216\134\202\336\210\240\303\342  
\150\156\175\215\357\074\335\145\364\135\254\121\357\044\200\256  
\252\126\227\157\371\255\175\332\141\077\230\167\074\245\221\266  
\034\214\046\332\145\242\011\155\301\342\124\343\271\312\114\114  
\200\217\167\173\140\232\036\337\266\362\110\036\016\272\116\124  
\155\230\340\341\242\032\242\167\120\317\304\143\222\354\107\031  
\235\353\346\153\316\301\002\003\001\000\001\243\201\254\060\201  
\251\060\016\006\003\125\035\017\001\001\377\004\004\003\002\001  
\006\060\017\006\003\125\035\023\001\001\377\004\005\060\003\001  
\001\377\060\035\006\003\125\035\016\004\026\004\024\133\045\173  
\226\244\145\121\176\270\071\363\300\170\146\136\350\072\347\360  
\356\060\037\006\003\125\035\043\004\030\060\026\200\024\133\045  
\173\226\244\145\121\176\270\071\363\300\170\146\136\350\072\347



\360\356\060\106\006\003\125\035\040\004\077\060\075\060\073\006  
\011\140\205\164\001\131\001\002\001\001\060\056\060\054\006\010  
\053\006\001\005\005\007\002\001\026\040\150\164\164\160\072\057  
\057\162\145\160\157\163\151\164\157\162\171\056\163\167\151\163  
\163\163\151\147\156\056\143\157\155\057\060\015\006\011\052\206  
\110\206\367\015\001\001\005\005\000\003\202\002\001\000\047\272  
\343\224\174\361\256\300\336\027\346\345\330\325\365\124\260\203  
\364\273\315\136\005\173\117\237\165\146\257\074\350\126\176\374  
\162\170\070\003\331\053\142\033\000\271\370\351\140\315\314\316  
\121\212\307\120\061\156\341\112\176\030\057\151\131\266\075\144  
\201\053\343\203\204\346\042\207\216\175\340\356\002\231\141\270  
\036\364\270\053\210\022\026\204\302\061\223\070\226\061\246\271  
\073\123\077\303\044\223\126\133\151\222\354\305\301\273\070\000  
\343\354\027\251\270\334\307\174\001\203\237\062\107\272\122\042  
\064\035\062\172\011\126\247\174\045\066\251\075\113\332\300\202  
\157\012\273\022\310\207\113\047\021\371\036\055\307\223\077\236  
\333\137\046\153\122\331\056\212\361\024\306\104\215\025\251\267  
\277\275\336\246\032\356\256\055\373\110\167\027\376\273\354\257  
\030\365\052\121\360\071\204\227\225\154\156\033\303\053\304\164  
\140\171\045\260\012\047\337\337\136\322\071\317\105\175\102\113  
\337\263\054\036\305\306\135\312\125\072\240\234\151\232\217\332  
\357\262\260\074\237\207\154\022\053\145\160\025\122\061\032\044  
\317\157\061\043\120\037\214\117\217\043\303\164\101\143\034\125  
\250\024\335\076\340\121\120\317\361\033\060\126\016\222\260\202  
\205\330\203\313\042\144\274\055\270\045\325\124\242\270\006\352  
\255\222\244\044\240\301\206\265\112\023\152\107\317\056\013\126  
\225\124\313\316\232\333\152\264\246\262\333\101\010\206\047\167  
\367\152\240\102\154\013\070\316\327\165\120\062\222\302\337\053  
\060\042\110\320\325\101\070\045\135\244\351\135\237\306\224\165  
\320\105\375\060\227\103\217\220\253\012\307\206\163\140\112\151  
\055\336\245\170\327\006\332\152\236\113\076\167\072\040\023\042  
\001\320\277\150\236\143\140\153\065\115\013\155\272\241\075\300  
\223\340\177\043\263\125\255\162\045\116\106\371\322\026\357\260  
\144\301\001\236\351\312\240\152\230\016\317\330\140\362\057\111  
\270\344\102\341\070\065\026\364\310\156\117\367\201\126\350\272  
\243\276\043\257\256\375\157\003\340\002\073\060\166\372\033\155  
\101\317\001\261\351\270\311\146\364\333\046\363\072\244\164\362  
\111\044\133\311\260\320\127\301\372\076\172\341\227\311

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "SwissSign Gold CA - G2"

# Issuer: CN=SwissSign Gold CA - G2,O=SwissSign AG,C=CH

# Serial Number:00:bb:40:1c:43:f5:5e:4f:b0

# Subject: CN=SwissSign Gold CA - G2,O=SwissSign AG,C=CH

```

# Not Valid Before: Wed Oct 25 08:30:35 2006
# Not Valid
  After : Sat Oct 25 08:30:35 2036
# Fingerprint (SHA-256):
62:DD:0B:E9:B9:F5:0A:16:3E:A0:F8:E7:5C:05:3B:1E:CA:57:EA:55:C8:68:8F:64:7C:68:81:F2:C8:35:7B:95
# Fingerprint (SHA1): D8:C5:38:8A:B7:30:1B:1B:6E:D4:7A:E6:45:25:3A:6F:9F:1A:27:61
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "SwissSign Gold CA - G2"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\330\305\070\212\267\060\033\033\156\324\172\346\105\045\072\157
\237\032\047\141
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\044\167\331\250\221\321\073\372\210\055\302\377\370\315\063\223
END
CKA_ISSUER MULTILINE_OCTAL
\060\105\061\013\060\011\006\003\125\004\006\023\002\103\110\061
\025\060\023\006\003\125\004\012\023\014\123\167\151\163\163\123
\151\147\156\040\101\107\061\037\060\035\006\003\125\004\003\023
\026\123\167\151\163\163\123\151\147\156\040\107\157\154\144\040
\103\101\040\055\040\107\062
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\011\000\273\100\034\103\365\136\117\260
END
CKA_TRUST_SERVER_AUTH
  CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "SwissSign Silver CA - G2"
#
# Issuer: CN=SwissSign Silver CA - G2,O=SwissSign AG,C=CH
# Serial Number:4f:1b:d4:2f:54:bb:2f:4b
# Subject: CN=SwissSign Silver CA - G2,O=SwissSign AG,C=CH
# Not Valid Before: Wed Oct 25 08:32:46 2006
# Not Valid After : Sat Oct 25 08:32:46 2036
# Fingerprint (SHA-256):
BE:6C:4D:A2:BB:B9:BA:59:B6:F3:93:97:68:37:42:46:C3:C0:05:99:3F:A9:8F:02:0D:1D:ED:BE:D4:8A:81:D5
# Fingerprint (SHA1): 9B:AA:E5:9F:56:EE:21:CB:43:5A:BE:25:93:DF:A7:F0:40:D1:1D:CB
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE

```

```
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "SwissSign Silver CA - G2"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\107\061\013\060\011\006\003\125\004\006\023\002\103\110\061
\025\060\023\006\003\125\004\012\023\014\123\167\151\163\163\123
\151\147\156\040\101\107\061\041\060\037\006\003\125\004\003\023
\030\123\167\151\163\163\123\151\147\156\040\123\151\154\166\145
\162\040\103\101\040\055\040\107\062
END
CKA_ID
UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\107\061\013\060\011\006\003\125\004\006\023\002\103\110\061
\025\060\023\006\003\125\004\012\023\014\123\167\151\163\163\123
\151\147\156\040\101\107\061\041\060\037\006\003\125\004\003\023
\030\123\167\151\163\163\123\151\147\156\040\123\151\154\166\145
\162\040\103\101\040\055\040\107\062
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\010\117\033\324\057\124\273\057\113
END
CKA_VALUE MULTILINE_OCTAL
\060\202\005\275\060\202\003\245\240\003\002\001\002\002\010\117
\033\324\057\124\273\057\113\060\015\006\011\052\206\110\206\367
\015\001\001\005\005\000\060\107\061\013\060\011\006\003\125\004
\006\023\002\103\110\061\025\060\023\006\003\125\004\012\023\014
\123\167\151\163\163\123\151\147\156\040\101\107\061\041\060\037
\006\003\125\004\003\023\030\123\167\151\163\163\123\151\147\156
\040\123\151\154\166\145\162\040\103\101\040\055\040\107\062\060
\036\027\015\060\066\061\060\062\065\060\070\063\062\064\066\132
\027\015\063\066\061\060\062\065\060\070\063\062\064\066\132\060
\107\061\013\060\011\006\003\125\004\006\023\002\103\110\061\025
\060\023\006\003\125\004\012\023\014\123\167\151\163\163\123\151
\147\156\040\101\107\061\041\060\037\006\003\125\004\003\023\030
\123\167\151\163\163\123\151\147\156\040\123\151\154\166\145\162
\040\103\101\040\055\040\107\062\060\202\002\042\060\015\006\011
\052\206\110\206\367\015\001\001\001\005\000\003\202\002\017\000
\060\202\002\012\002\202\002\001\000\304\361\207\177\323\170\061
\367\070\311\370\303\231\103\274\307\367\274\067\347\116\161\272
\113\217\245\163\035\134\156\230\256\003\127\256\070\067\103\057
\027\075\037\310\316\150\020\301\170\256\031\003\053\020\372\054
\171\203\366\350\271\150\271\125\362\004\104\247\071\371\374\004
\213\036\361\242\115\047\371\141\173\272\267\345\242\023\266\353
\141\076\320\154\321\346\373\372\136\355\035\264\236\240\065\133
\241\222\313\360\111\222\376\205\012\005\076\346\331\013\342\117
\273\334\225\067\374\221\351\062\065\042\321\037\072\116\047\205
\235\260\025\224\062\332\141\015\107\115\140\102\256\222\107\350
```

\203\132\120\130\351\212\213\271\135\241\334\335\231\112\037\066  
\147\273\110\344\203\266\067\353\110\072\257\017\147\217\027\007  
\350\004\312\357\152\061\207\324\300\266\371\224\161\173\147\144  
\270\266\221\112\102\173\145\056\060\152\014\365\220\356\225\346  
\362\315\202\354\331\241\112\354\366\262\113\345\105\205\346\155  
\170\223\004\056\234\202\155\066\251\304\061\144\037\206\203\013  
\052\364\065\012\170\311\125\317\101\260\107\351\060\237\231\276  
\141\250\006\204\271\050\172\137\070\331\033\251\070\260\203\177  
\163\301\303\073\110\052\202\017\041\233\270\314\250\065\303\204  
\033\203\263\076\276\244\225\151\001\072\211\000\170\004\331\311  
\364\231\031\253\126\176\133\213\206\071\025\221\244\020\054\011  
\062\200\140\263\223\300\052\266\030\013\235\176\215\111\362\020  
\112\177\371\325\106\057\031\222\243\231\247\046\254\273\214\074  
\346\016\274\107\007\334\163\121\361\160\144\057\010\371\264\107  
\035\060\154\104\352\051\067\205\222\150\146\274\203\070\376\173  
\071\056\323\120\360\037\373\136\140\266\251\246\372\047\101\361  
\233\030\162\362\365\204\164\112\311\147\304\124\256\110\144\337  
\214\321\156\260\035\341\007\217\010\036\231\234\161\351\114\330  
\245\367\107\022\037\164\321\121\236\206\363\302\242\043\100\013  
\163\333\113\246\347\163\006\214\301\240\351\301\131\254\106\372  
\346\057\370\317\161\234\106\155\271\304\025\215\070\171\003\105  
\110\357\304\135\327\010\356\207\071\042\206\262\015\017\130\103  
\367\161\251\110\056\375\352\326\037\002\003\001\000\001\243\201  
\254\060\201\251\060\016\006\003\125\035\017\001\001\377\004\004  
\003\002\001\006\060\017\006\003\125\035\023\001\001\377\004\005  
\060\003\001\001\377\060\035\006\003\125\035\016\004\026\004\024  
\027\240\315\301\344\101\266\072\133\073\313\105\235\275\034\302  
\230\372\206\130\060\037\006\003\125\035\043\004\030\060\026\200  
\024\027\240\315\301\344\101\266\072\133\073\313\105\235\275\034  
\302\230\372\206\130\060\106\006\003\125\035\040\004\077\060\075  
\060\073\006\011\140\205\164\001\131\001\003\001\001\060\056\060  
\054\006\010\053\006\001\005\005\007\002\001\026\040\150\164\164  
\160\072\057\057\162\145\160\157\163\151\164\157\162\171\056\163  
\167\151\163\163\163\151\147\156\056\143\157\155\057\060\015\006  
\011\052\206\110\206\367\015\001\001\005\005\000\003\202\002\001  
\000\163\306\201\340\047\322\055\017\340\225\060\342\232\101\177  
\120\054\137\137\142\141\251\206\152\151\030\014\164\111\326\135  
\204\352\101\122\030\157\130\255\120\126\040\152\306\275\050\151  
\130\221\334\221\021\065\251\072\035\274\032\245\140\236\330\037  
\177\105\221\151\331\176\273\170\162\301\006\017\052\316\217\205  
\160\141\254\240\315\013\270\071\051\126\204\062\116\206\273\075  
\304\052\331\327\037\162\356\376\121\241\042\101\261\161\002\143  
\032\202\260\142\253\136\127\022\037\337\313\335\165\240\300\135  
\171\220\214\033\340\120\346\336\061\376\230\173\160\137\245\220  
\330\255\370\002\266\157\323\140\335\100\113\042\305\075\255\072  
\172\237\032\032\107\221\171\063\272\202\334\062\151\003\226\156  
\037\113\360\161\376\343\147\162\240\261\277\134\213\344\372\231  
\042\307\204\271\033\215\043\227\077\355\045\340\317\145\273\365

```
\141\004\357\335\036\262\132\101\042\132\241\237\135\054\350\133
\311\155\251\014\014\170\252\140\306\126\217\001\132\014\150\274
\151\031\171\304\037\176\227\005\277\305\351\044\121\136\324\325
\113\123\355\331\043\132\066\003\145\243\301\003\255\101\060\363
\106\033\205\220\257\145\265\325\261\344\026\133\170\165\035\227
\172\155\131\251\052\217\173\336\303\207\211\020\231\111\163\170
\310\075\275\121\065\164\052\325\361\176\151\033\052\273\073\275
\045\270\232\132\075\162\141\220\146\207\356\014\326\115\324\021
\164\013\152\376\013\003\374\243\125\127\211\376\112\313\256\133
\027\005\310\362\215\043\061\123\070\322\055\152\077\202\271\215
\010\152\367\136\101\164\156\303\021\176\007\254\051\140\221\077
\070\312\127\020\015\275\060\057\307\245\346\101\240\332\256\005
\207\232\240\244\145\154\114\011\014\211\272\270\323\271\300\223
\212\060\372\215\345\232\153\025\001\116\147\252\332\142\126\076
\204\010\146\322\304\066\175\247\076\020\374\210\340\324\200\345
\000\275\252\363\116\006\243\172\152\371\142\162\343\011\117\353
\233\016\001\043\361\237\273\174\334\334\154\021\227\045\262\362
\264\143\024\322\006\052\147\214\203\365\316\352\007\330\232\152
\036\354\344\012\273\052\114\353\011\140\071\316\312\142\330\056
\156
```

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "SwissSign Silver CA - G2"

# Issuer: CN=SwissSign Silver CA - G2,O=SwissSign AG,C=CH

# Serial Number:4f:1b:d4:2f:54:bb:2f:4b

#

Subject: CN=SwissSign Silver CA - G2,O=SwissSign AG,C=CH

# Not Valid Before: Wed Oct 25 08:32:46 2006

# Not Valid After : Sat Oct 25 08:32:46 2036

# Fingerprint (SHA-256):

BE:6C:4D:A2:BB:B9:BA:59:B6:F3:93:97:68:37:42:46:C3:C0:05:99:3F:A9:8F:02:0D:1D:ED:BE:D4:8A:81:D5

# Fingerprint (SHA1): 9B:AA:E5:9F:56:EE:21:CB:43:5A:BE:25:93:DF:A7:F0:40:D1:1D:CB

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "SwissSign Silver CA - G2"

CKA\_CERT\_SHA1\_HASH MULTILINE\_OCTAL

```
\233\252\345\237\126\356\041\313\103\132\276\045\223\337\247\360
```

```
\100\321\035\313
```

END

CKA\_CERT\_MD5\_HASH MULTILINE\_OCTAL

```
\340\006\241\311\175\317\311\374\015\300\126\165\226\330\142\023
```

END

```

CKA_ISSUER MULTILINE_OCTAL
\060\107\061\013\060\011\006\003\125\004\006\023\002\103\110\061
\025\060\023\006\003\125\004\012\023\014\123\167\151\163\163\123
\151\147\156\040\101\107\061\041\060\037\006\003\125\004\003\023
\030\123\167\151\163\163\123\151\147\156\040\123\151\154\166\145
\162\040\103\101\040\055\040\107\062
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\010\117\033\324\057\124\273\057\113
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "SecureTrust CA"
#
# Issuer: CN=SecureTrust CA,O=SecureTrust Corporation,C=US
# Serial Number:0c:f0:8e:5c:08:16:a5:ad:42:7f:f0:eb:27:18:59:d0
# Subject: CN=SecureTrust CA,O=SecureTrust Corporation,C=US
# Not Valid Before: Tue Nov 07 19:31:18 2006
# Not Valid After : Mon Dec 31 19:40:55 2029
# Fingerprint (SHA-256):
F1:C1:B5:0A:E5:A2:0D:D8:03:0E:C9:F6:BC:24:82:3D:D3:67:B5:25:57:59:B4:E7:1B:61:FC:E9:F7:37:5D:73
# Fingerprint (SHA1): 87:82:C6:C3:04:35:3B:CF:D2:96:92:D2:59:3E:7D:44:D9:34:FF:11
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL
CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "SecureTrust CA"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\110\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\040\060\036\006\003\125\004\012\023\027\123\145\143\165\162\145
\124\162\165\163\164\040\103\157\162\160\157\162\141\164\151\157
\156\061\027\060\025\006\003\125\004\003\023\016\123\145\143\165
\162\145\124\162\165\163\164\040\103\101
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\110\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\040\060\036\006\003\125\004\012\023\027\123\145\143\165\162\145
\124\162\165\163\164\040\103\157\162\160\157\162\141\164\151\157
\156\061\027\060\025\006\003\125\004\003\023\016\123\145\143\165
\162\145\124\162\165\163\164\040\103\101

```

END

CKA\_SERIAL\_NUMBER MULTILINE\_OCTAL

\002\020\014\360\216\134\010\026\245\255\102\177\360\353\047\030  
\131\320

END

CKA\_VALUE MULTILINE\_OCTAL

\060\202\003\270\060\202\002\240\240\003\002\001\002\002\020\014  
\360\216\134\010\026\245\255\102\177\360\353\047\030\131\320\060  
\015\006\011\052\206\110\206\367\015\001\001\005\005\000\060\110  
\061\013\060\011\006\003\125\004\006\023\002\125\123\061\040\060  
\036\006\003\125\004\012\023\027\123\145\143\165\162\145\124\162  
\165\163\164\040\103\157\162\160\157\162\141\164\151\157\156\061  
\027\060\025\006\003\125\004\003\023\016\123\145\143\165\162\145  
\124\162\165\163\164\040\103\101\060\036\027\015\060\066\061\061  
\060\067\061\071\063\061\061\070\132\027\015\062\071\061\062\063  
\061\061\071\064\060\065\065\132\060\110\061\013\060\011\006\003  
\125\004\006\023\002\125\123\061\040\060\036\006\003\125\004\012  
\023\027\123\145\143\165\162\145\124\162\165\163\164\040\103\157  
\162\160\157\162\141\164\151\157\156\061\027\060\025\006\003\125  
\004\003\023\016\123\145\143\165\162\145\124\162\165\163\164\040  
\103\101\060\202\001\042\060\015\006\011\052\206\110\206\367\015  
\001\001\001\005\000\003\202\001\017\000\060\202\001\012\002\202  
\001\001\000\253\244\201\345\225\315\365\366\024\216\302\117\312  
\324\342\170\225\130\234\101\341\015\231\100\044\027\071\221\063  
\146\351\276\341\203\257\142\134\211\321\374\044\133\141\263\340  
\021\021\101\034\035\156\360\270\273\370\336\247\201\272\246\110  
\306\237\035\275\276\216\251\101\076\270\224\355\051\032\324\216  
\322\003\035\003\357\155\015\147\034\127\327\006\255\312\310\365  
\376\016\257\146\045\110\004\226\013\135\243\272\026\303\010\117  
\321\106\370\024\134\362\310\136\001\231\155\375\210\314\206\250  
\301\157\061\102\154\122\076\150\313\363\031\064\337\273\207\030  
\126\200\046\304\320\334\300\157\337\336\240\302\221\026\240\144  
\021\113\104\274\036\366\347\372\143\336\146\254\166\244\161\243  
\354\066\224\150\172\167\244\261\347\016\057\201\172\342\265\162  
\206\357\242\153\213\360\017\333\323\131\077\272\162\274\104\044  
\234\343\163\263\367\257\127\057\102\046\235\251\164\272\000\122  
\362\113\315\123\174\107\013\066\205\016\146\251\010\227\026\064  
\127\301\146\367\200\343\355\160\124\307\223\340\056\050\025\131  
\207\272\273\002\003\001\000\001\243\201\235\060\201\232\060\023  
\006\011\053\006\001\004\001\202\067\024\002\004\006\036\004\000  
\103\000\101\060\013\006\003\125\035\017\004\004\003\002\001\206  
\060\017\006\003\125\035\023\001\001\377\004\005\060\003\001\001  
\377\060\035\006\003\125\035\016\004\026\004\024\102\062\266\026  
\372\004\375\376\135\113\172\303\375\367\114\100\035\132\103\257  
\060\064\006\003\125\035\037\004\055\060\053\060\051\240\047\240  
\045\206\043\150\164\164\160\072\057\057\143\162\154\056\163\145  
\143\165\162\145\164\162\165\163\164\056\143\157\155\057\123\124  
\103\101\056\143\162\154\060\020\006\011\053\006\001\004\001\202

```
\067\025\001\004\003\002\001\000\060\015\006\011\052\206\110\206
\367\015\001\001\005\005\000\003\202\001\001\000\060\355\117\112
\341\130\072\122\162\133\265\246\243\145\030\246\273\121\073\167
\351\235\352\323\237\134\340\105\145\173\015\312\133\342\160\120
\262\224\005\024\256\111\307\215\101\007\022\163\224\176\014\043
\041\375\274\020\177\140\020\132\162\365\230\016\254\354\271\177
\335\172\157\135\323\034\364\377\210\005\151\102\251\005\161\310
\267\254\046\350\056\264\214\152\377\161\334\270\261\337\231\274
\174\041\124\053\344\130\242\273\127\051\256\236\251\243\031\046
\017\231\056\010\260\357\375\151\317\231\032\011\215\343\247\237
\053\311\066\064\173\044\263\170\114\225\027\244\006\046\036\266
\144\122\066\137\140\147\331\234\305\005\164\013\347\147\043\322
\010\374\210\351\256\213\177\341\060\364\067\176\375\306\062\332
\055\236\104\060\060\154\356\007\336\322\064\374\322\377\100\366
\113\364\146\106\006\124\246\362\062\012\143\046\060\153\233\321
\334\213\107\272\341\271\325\142\320\242\240\364\147\005\170\051
\143\032\157\004\326\370\306\114\243\232\261\067\264\215\345\050
\113\035\236\054\302\270\150\274\355\002\356\061
```

END

CKA\_NSS\_Mozilla\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "SecureTrust CA"

#

Issuer: CN=SecureTrust CA,O=SecureTrust Corporation,C=US

# Serial Number:0c:f0:8e:5c:08:16:a5:ad:42:7f:f0:eb:27:18:59:d0

# Subject: CN=SecureTrust CA,O=SecureTrust Corporation,C=US

# Not Valid Before: Tue Nov 07 19:31:18 2006

# Not Valid After : Mon Dec 31 19:40:55 2029

# Fingerprint (SHA-256):

F1:C1:B5:0A:E5:A2:0D:D8:03:0E:C9:F6:BC:24:82:3D:D3:67:B5:25:57:59:B4:E7:1B:61:FC:E9:F7:37:5D:73

# Fingerprint (SHA1): 87:82:C6:C3:04:35:3B:CF:D2:96:92:D2:59:3E:7D:44:D9:34:FF:11

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "SecureTrust CA"

CKA\_CERT\_SHA1\_HASH MULTILINE\_OCTAL

```
\207\202\306\303\004\065\073\317\322\226\222\322\131\076\175\104
\331\064\377\021
```

END

CKA\_CERT\_MD5\_HASH MULTILINE\_OCTAL

```
\334\062\303\247\155\045\127\307\150\011\235\352\055\251\242\321
```

END

CKA\_ISSUER MULTILINE\_OCTAL

```
\060\110\061\013\060\011\006\003\125\004\006\023\002\125\123\061
```



```
\040\060\036\006\003\125\004\012\023\027\123\145\143\165\162\145
\124\162\165\163\164\040\103\157\162\160\157\162\141\164\151\157
\156\061\027\060\025\006\003\125\004\003\023\016\123\145\143\165
\162\145\124\162\165\163\164\040\103\101
```

END

CKA\_SERIAL\_NUMBER

MULTILINE\_OCTAL

```
\002\020\014\360\216\134\010\026\245\255\102\177\360\353\047\030
\131\320
```

END

CKA\_TRUST\_SERVER\_AUTH CK\_TRUST CKT\_NSS\_TRUSTED\_DELEGATOR

CKA\_TRUST\_EMAIL\_PROTECTION CK\_TRUST CKT\_NSS\_MUST\_VERIFY\_TRUST

CKA\_TRUST\_CODE\_SIGNING CK\_TRUST CKT\_NSS\_MUST\_VERIFY\_TRUST

CKA\_TRUST\_STEP\_UP\_APPROVED CK\_BBOOL CK\_FALSE

#

# Certificate "Secure Global CA"

#

# Issuer: CN=Secure Global CA,O=SecureTrust Corporation,C=US

# Serial Number:07:56:22:a4:e8:d4:8a:89:4d:f4:13:c8:f0:f8:ea:a5

# Subject: CN=Secure Global CA,O=SecureTrust Corporation,C=US

# Not Valid Before: Tue Nov 07 19:42:28 2006

# Not Valid After : Mon Dec 31 19:52:06 2029

# Fingerprint (SHA-256):

42:00:F5:04:3A:C8:59:0E:BB:52:7D:20:9E:D1:50:30:29:FB:CB:D4:1C:A1:B5:06:EC:27:F1:5A:DE:7D:AC:69

# Fingerprint (SHA1): 3A:44:73:5A:E5:81:90:1F:24:86:61:46:1E:3B:9C:C4:5F:F5:3A:1B

CKA\_CLASS

CK\_OBJECT\_CLASS CKO\_CERTIFICATE

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "Secure Global CA"

CKA\_CERTIFICATE\_TYPE CK\_CERTIFICATE\_TYPE CKC\_X\_509

CKA\_SUBJECT MULTILINE\_OCTAL

```
\060\112\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\040\060\036\006\003\125\004\012\023\027\123\145\143\165\162\145
\124\162\165\163\164\040\103\157\162\160\157\162\141\164\151\157
\156\061\031\060\027\006\003\125\004\003\023\020\123\145\143\165
\162\145\040\107\154\157\142\141\154\040\103\101
```

END

CKA\_ID UTF8 "0"

CKA\_ISSUER MULTILINE\_OCTAL

```
\060\112\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\040\060\036\006\003\125\004\012\023\027\123\145\143\165\162\145
\124\162\165\163\164\040\103\157\162\160\157\162\141\164\151\157
\156\061\031\060\027\006\003\125\004\003\023\020\123\145\143\165
\162\145\040\107\154\157\142\141\154\040\103\101
```

END

CKA\_SERIAL\_NUMBER MULTILINE\_OCTAL  
\002\020\007\126\042\244\350\324\212\211\115\364\023\310\360\370  
\352\245  
END  
CKA\_VALUE  
MULTILINE\_OCTAL  
\060\202\003\274\060\202\002\244\240\003\002\001\002\002\020\007  
\126\042\244\350\324\212\211\115\364\023\310\360\370\352\245\060  
\015\006\011\052\206\110\206\367\015\001\001\005\005\000\060\112  
\061\013\060\011\006\003\125\004\006\023\002\125\123\061\040\060  
\036\006\003\125\004\012\023\027\123\145\143\165\162\145\124\162  
\165\163\164\040\103\157\162\160\157\162\141\164\151\157\156\061  
\031\060\027\006\003\125\004\003\023\020\123\145\143\165\162\145  
\040\107\154\157\142\141\154\040\103\101\060\036\027\015\060\066  
\061\061\060\067\061\071\064\062\062\070\132\027\015\062\071\061  
\062\063\061\061\071\065\062\060\066\132\060\112\061\013\060\011  
\006\003\125\004\006\023\002\125\123\061\040\060\036\006\003\125  
\004\012\023\027\123\145\143\165\162\145\124\162\165\163\164\040  
\103\157\162\160\157\162\141\164\151\157\156\061\031\060\027\006  
\003\125\004\003\023\020\123\145\143\165\162\145\040\107\154\157  
\142\141\154\040\103\101\060\202\001\042\060\015\006\011\052\206  
\110\206\367\015\001\001\001\005\000\003\202\001\017\000\060\202  
\001\012\002\202\001\001\000\257\065\056\330\254\154\125\151\006  
\161\345\023\150\044\263\117\330\314\041\107\370\361\140\070\211  
\211\003\351\275\352\136\106\123\011\334\134\365\132\350\367\105  
\052\002\353\061\141\327\051\063\114\316\307\174\012\067\176\017  
\272\062\230\341\035\227\257\217\307\334\311\070\226\363\333\032  
\374\121\355\150\306\320\156\244\174\044\321\256\102\310\226\120  
\143\056\340\376\165\376\230\247\137\111\056\225\343\071\063\144  
\216\036\244\137\220\322\147\074\262\331\376\101\271\125\247\011  
\216\162\005\036\213\335\104\205\202\102\320\111\300\035\140\360  
\321\027\054\225\353\366\245\301\222\243\305\302\247\010\140\015  
\140\004\020\226\171\236\026\064\346\251\266\372\045\105\071\310  
\036\145\371\223\365\252\361\122\334\231\230\075\245\206\032\014  
\065\063\372\113\245\004\006\025\034\061\200\357\252\030\153\302  
\173\327\332\316\371\063\040\325\365\275\152\063\055\201\004\373  
\260\134\324\234\243\342\134\035\343\251\102\165\136\173\324\167  
\357\071\124\272\311\012\030\033\022\231\111\057\210\113\375\120  
\142\321\163\347\217\172\103\002\003\001\000\001\243\201\235\060  
\201\232\060\023\006\011\053\006\001\004\001\202\067\024\002\004  
\006\036\004\000\103\000\101\060\013\006\003\125\035\017\004\004  
\003\002\001\206\060\017\006\003\125\035\023\001\001\377\004\005  
\060\003\001\001\377\060\035\006\003\125\035\016\004\026\004\024  
\257\104\004\302\101\176\110\203\333\116\071\002\354\354\204\172  
\346\316\311\244\060\064\006\003\125\035\037\004\055\060\053\060  
\051\240\047\240\045\206\043\150\164\164\160\072\057\057\143\162  
\154\056\163\145\143\165\162\145\164\162\165\163\164\056\143\157  
\155\057\123\107\103\101\056\143\162\154\060\020\006\011\053\006

```
\001\004\001\202\067\025\001\004\003\002\001\000\060\015\006\011
\052\206\110\206\367\015\001\001\005\005\000\003\202\001\001\000
\143\032\010\100\175\244\136\123\015\167\330\172\256\037\015\013
\121\026\003\357\030\174\310\343\257\152\130\223\024\140\221\262
\204\334\210\116\276\071\212\072\363\346\202\211\135\001\067\263
\253\044\244\025\016\222\065\132\112\104\136\116\127\372\165\316
\037\110\316\146\364\074\100\046\222\230\154\033\356\044\106\014
\027\263\122\245\333\245\221\221\317\067\323\157\347\047\010\072
\116\031\037\072\247\130\134\027\317\171\077\213\344\247\323\046
\043\235\046\017\130\151\374\107\176\262\320\215\213\223\277\051
\117\103\151\164\166\147\113\317\007\214\346\002\367\265\341\264
\103\265\113\055\024\237\371\334\046\015\277\246\107\164\006\330
\210\321\072\051\060\204\316\322\071\200\142\033\250\307\127\111
\274\152\125\121\147\025\112\276\065\007\344\325\165\230\067\171
\060\024\333\051\235\154\305\151\314\107\125\242\060\367\314\134
\177\302\303\230\034\153\116\026\200\353\172\170\145\105\242\000
\032\257\014\015\125\144\064\110\270\222\271\361\264\120\051\362
\117\043\037\332\154\254\037\104\341\335\043\170\121\133\307\026
END
```

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "Secure Global CA"

# Issuer: CN=Secure Global CA,O=SecureTrust Corporation,C=US

# Serial Number:07:56:22:a4:e8:d4:8a:89:4d:f4:13:c8:f0:f8:ea:a5

# Subject: CN=Secure Global CA,O=SecureTrust Corporation,C=US

# Not Valid Before: Tue Nov 07 19:42:28 2006

# Not Valid After : Mon Dec 31 19:52:06 2029

# Fingerprint (SHA-256):

42:00:F5:04:3A:C8:59:0E:BB:52:7D:20:9E:D1:50:30:29:FB:CB:D4:1C:A1:B5:06:EC:27:F1:5A:DE:7D:AC:69

# Fingerprint (SHA1): 3A:44:73:5A:E5:81:90:1F:24:86:61:46:1E:3B:9C:C4:5F:F5:3A:1B

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "Secure Global CA"

CKA\_CERT\_SHA1\_HASH MULTILINE\_OCTAL

```
\072\104\163\132\345\201\220\037\044\206\141\106\036\073\234\304
\137\365\072\033
```

END

CKA\_CERT\_MD5\_HASH MULTILINE\_OCTAL

```
\317\364\047\015\324\355\334\145\026\111\155\075\332\277\156\336
```

END

CKA\_ISSUER

MULTILINE\_OCTAL

```
\060\112\061\013\060\011\006\003\125\004\006\023\002\125\123\061
```

```
\040\060\036\006\003\125\004\012\023\027\123\145\143\165\162\145
\124\162\165\163\164\040\103\157\162\160\157\162\141\164\151\157
\156\061\031\060\027\006\003\125\004\003\023\020\123\145\143\165
\162\145\040\107\154\157\142\141\154\040\103\101
```

END

CKA\_SERIAL\_NUMBER MULTILINE\_OCTAL

```
\002\020\007\126\042\244\350\324\212\211\115\364\023\310\360\370
\352\245
```

END

CKA\_TRUST\_SERVER\_AUTH CK\_TRUST CKT\_NSS\_TRUSTED\_DELEGATOR

CKA\_TRUST\_EMAIL\_PROTECTION CK\_TRUST CKT\_NSS\_TRUSTED\_DELEGATOR

CKA\_TRUST\_CODE\_SIGNING CK\_TRUST CKT\_NSS\_MUST\_VERIFY\_TRUST

CKA\_TRUST\_STEP\_UP\_APPROVED CK\_BBOOL CK\_FALSE

#

# Certificate "COMODO Certification Authority"

#

# Issuer: CN=COMODO Certification Authority,O=COMODO CA Limited,L=Salford,ST=Greater Manchester,C=GB

# Serial Number:4e:81:2d:8a:82:65:e0:0b:02:ee:3e:35:02:46:e5:3d

# Subject: CN=COMODO Certification Authority,O=COMODO CA Limited,L=Salford,ST=Greater Manchester,C=GB

# Not Valid Before: Fri Dec 01 00:00:00 2006

# Not Valid After : Mon Dec 31 23:59:59 2029

# Fingerprint (SHA-256):

0C:2C:D6:3D:F7:80:6F:A3:99:ED:E8:09:11:6B:57:5B:F8:79:89:F0:65:18:F9:80:8C:86:05:03:17:8B:AF:66

# Fingerprint (SHA1): 66:31:BF:9E:F7:4F:9E:B6:C9:D5:A6:0C:BA:6A:BE:D1:F7:BD:EF:7B

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_CERTIFICATE

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "COMODO Certification Authority"

CKA\_CERTIFICATE\_TYPE CK\_CERTIFICATE\_TYPE CKC\_X\_509

CKA\_SUBJECT MULTILINE\_OCTAL

```
\060\201\201\061\013\060\011\006\003\125\004\006\023\002\107\102
\061\033\060\031\006\003\125\004\010\023\022\107\162\145\141\164
\145\162\040\115\141\156\143\150\145\163\164\145\162\061\020\060
\016\006\003\125\004\007\023\007\123\141\154\146\157\162\144\061
\032\060\030\006\003\125\004\012\023\021\103\117\115\117\104\117
\040\103\101\040\114\151\155\151\164\145\144\061\047\060\045\006
\003\125\004\003\023\036\103\117\115\117\104\117\040\103\145\162
\164\151\146\151\143\141\164\151\157\156\040\101\165\164\150\157
\162\151\164\171
```

END

CKA\_ID

UTF8 "0"

CKA\_ISSUER MULTILINE\_OCTAL

```
\060\201\201\061\013\060\011\006\003\125\004\006\023\002\107\102
```

\061\033\060\031\006\003\125\004\010\023\022\107\162\145\141\164  
\145\162\040\115\141\156\143\150\145\163\164\145\162\061\020\060  
\016\006\003\125\004\007\023\007\123\141\154\146\157\162\144\061  
\032\060\030\006\003\125\004\012\023\021\103\117\115\117\104\117  
\040\103\101\040\114\151\155\151\164\145\144\061\047\060\045\006  
\003\125\004\003\023\036\103\117\115\117\104\117\040\103\145\162  
\164\151\146\151\143\141\164\151\157\156\040\101\165\164\150\157  
\162\151\164\171

END

CKA\_SERIAL\_NUMBER MULTILINE\_OCTAL

\002\020\116\201\055\212\202\145\340\013\002\356\076\065\002\106  
\345\075

END

CKA\_VALUE MULTILINE\_OCTAL

\060\202\004\035\060\202\003\005\240\003\002\001\002\002\020\116  
\201\055\212\202\145\340\013\002\356\076\065\002\106\345\075\060  
\015\006\011\052\206\110\206\367\015\001\001\005\005\000\060\201  
\201\061\013\060\011\006\003\125\004\006\023\002\107\102\061\033  
\060\031\006\003\125\004\010\023\022\107\162\145\141\164\145\162  
\040\115\141\156\143\150\145\163\164\145\162\061\020\060\016\006  
\003\125\004\007\023\007\123\141\154\146\157\162\144\061\032\060  
\030\006\003\125\004\012\023\021\103\117\115\117\104\117\040\103  
\101\040\114\151\155\151\164\145\144\061\047\060\045\006\003\125  
\004\003\023\036\103\117\115\117\104\117\040\103\145\162\164\151  
\146\151\143\141\164\151\157\156\040\101\165\164\150\157\162\151  
\164\171\060\036\027\015\060\066\061\062\060\061\060\060\060\060  
\060\060\132\027\015\062\071\061\062\063\061\062\063\065\071\065  
\071\132\060\201\201\061\013\060\011\006\003\125\004\006\023\002  
\107\102\061\033\060\031\006\003\125\004\010\023\022\107\162\145  
\141\164\145\162\040\115\141\156\143\150\145\163\164\145\162\061  
\020\060\016\006\003\125\004\007\023\007\123\141\154\146\157\162  
\144\061\032\060\030\006\003\125\004\012\023\021\103\117\115\117  
\104\117\040\103\101\040\114\151\155\151\164\145\144\061\047\060  
\045\006\003\125\004\003\023\036\103\117\115\117\104\117\040\103  
\145\162\164\151\146\151\143\141\164\151\157\156\040\101\165\164  
\150\157\162\151\164\171\060\202\001\042\060\015\006\011\052\206  
\110\206\367\015\001\001\001\005\000\003\202\001\017\000\060\202  
\001\012\002\202\001\001\000\320\100\213\213\162\343\221\033\367  
\121\301\033\124\004\230\323\251\277\301\346\212\135\073\207\373  
\273\210\316\015\343\057\077\006\226\360\242\051\120\231\256\333  
\073\241\127\260\164\121\161\315\355\102\221\115\101\376\251\310  
\330\152\206\167\104\273\131\146\227\120\136\264\324\054\160\104  
\317\332\067\225\102\151\074\060\304\161\263\122\360\041\115\241  
\330\272\071\174\034\236\243\044\235\362\203\026\230\252\026\174  
\103\233\025\133\267\256\064\221\376\324\142\046\030\106\232\077  
\353\301\371\361\220\127\353\254\172\015\213\333\162\060\152\146  
\325\340\106\243\160\334\150\331\377\004\110\211\167\336\265\351  
\373\147\155\101\351\274\071\275\062\331\142\002\361\261\250\075

\156\067\234\342\057\342\323\242\046\213\306\270\125\103\210\341  
\043\076\245\322\044\071\152\107\253\000\324\241\263\251\045\376  
\015\077\247\035\272\323\121\301\013\244\332\254\070\357\125\120  
\044\005\145\106\223\064\117\055\215\255\306\324\041\031\322\216  
\312\005\141\161\007\163\107\345\212\031\022\275\004\115\316\116  
\234\245\110\254\273\046\367\002\003\001\000\001\243\201\216\060  
\201\213\060\035\006\003\125\035\016\004\026\004\024\013\130\345  
\213\306\114\025\067\244\100\251\060\251\041\276\107\066\132\126  
\377\060\016\006\003\125\035\017\001\001\377\004\004\003\002\001  
\006\060\017\006\003\125\035\023\001\001\377\004\005\060\003\001  
\001\377\060\111\006\003\125\035\037\004\102\060\100\060\076\240  
\074\240\072\206\070\150\164\164\160\072\057\057\143\162\154\056  
\143\157\155\157\144\157\143\141\056\143\157\155\057\103\117\115  
\117\104\117\103\145\162\164\151\146\151\143\141\164\151\157\156  
\101\165\164\150\157\162\151\164\171\056\143\162\154\060\015\006  
\011\052\206\110\206\367\015\001\001\005\005\000\003\202\001\001  
\000\076\230\236\233\366\033\351\327\071\267\170\256\035\162\030  
\111\323\207\344\103\202\353\077\311\252\365\250\265\357\125\174  
\041\122\145\371\325\015\341\154\364\076\214\223\163\221\056\002  
\304\116\007\161\157\300\217\070\141\010\250\036\201\012\300\057  
\040\057\101\213\221\334\110\105\274\361\306\336\272\166\153\063  
\310\000\055\061\106\114\355\347\235\317\210\224\377\063\300\126  
\350\044\206\046\270\330\070\070\337\052\153\335\022\314\307\077  
\107\027\114\242\302\006\226\011\326\333\376\077\074\106\101\337  
\130\342\126\017\074\073\301\034\223\065\331\070\122\254\356\310  
\354\056\060\116\224\065\264\044\037\113\170\151\332\362\002\070  
\314\225\122\223\360\160\045\131\234\040\147\304\356\371\213\127  
\141\364\222\166\175\077\204\215\125\267\350\345\254\325\361\365  
\031\126\246\132\373\220\034\257\223\353\345\034\324\147\227\135  
\004\016\276\013\203\246\027\203\271\060\022\240\305\063\025\005  
\271\015\373\307\005\166\343\330\112\215\374\064\027\243\306\041  
\050\276\060\105\061\036\307\170\276\130\141\070\254\073\342\001  
\145

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRUST\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRUST\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "COMODO Certification Authority"

# Issuer: CN=COMODO Certification Authority,O=COMODO CA Limited,L=Salford,ST=Greater Manchester,C=GB

# Serial Number:4e:81:2d:8a:82:65:e0:0b:02:ee:3e:35:02:46:e5:3d

# Subject: CN=COMODO Certification Authority,O=COMODO CA Limited,L=Salford,ST=Greater Manchester,C=GB

# Not Valid Before: Fri Dec 01 00:00:00 2006

# Not Valid After : Mon Dec 31 23:59:59 2029

# Fingerprint (SHA-256):

```

0C:2C:D6:3D:F7:80:6F:A3:99:ED:E8:09:11:6B:57:5B:F8:79:89:F0:65:18:F9:80:8C:86:05:03:17:8B:AF:66
# Fingerprint (SHA1): 66:31:BF:9E:F7:4F:9E:B6:C9:D5:A6:0C:BA:6A:BE:D1:F7:BD:EF:7B
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE
  CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "COMODO Certification Authority"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\146\061\277\236\367\117\236\266\311\325\246\014\272\152\276\321
\367\275\357\173
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\134\110\334\367\102\162\354\126\224\155\034\314\161\065\200\165
END
CKA_ISSUER MULTILINE_OCTAL
\060\201\201\061\013\060\011\006\003\125\004\006\023\002\107\102
\061\033\060\031\006\003\125\004\010\023\022\107\162\145\141\164
\145\162\040\115\141\156\143\150\145\163\164\145\162\061\020\060
\016\006\003\125\004\007\023\007\123\141\154\146\157\162\144\061
\032\060\030\006\003\125\004\012\023\021\103\117\115\117\104\117
\040\103\101\040\114\151\155\151\164\145\144\061\047\060\045\006
\003\125\004\003\023\036\103\117\115\117\104\117\040\103\145\162
\164\151\146\151\143\141\164\151\157\156\040\101\165\164\150\157
\162\151\164\171
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\020\116\201\055\212\202\145\340\013\002\356\076\065\002\106
\345\075
END
CKA_TRUST_SERVER_AUTH CK_TRUST
  CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "COMODO ECC Certification Authority"
#
# Issuer: CN=COMODO ECC Certification Authority,O=COMODO CA Limited,L=Salford,ST=Greater
Manchester,C=GB
# Serial Number: 1f:47:af:aa:62:00:70:50:54:4c:01:9e:9b:63:99:2a
# Subject: CN=COMODO ECC Certification Authority,O=COMODO CA Limited,L=Salford,ST=Greater
Manchester,C=GB
# Not Valid Before: Thu Mar 06 00:00:00 2008
# Not Valid After : Mon Jan 18 23:59:59 2038
# Fingerprint (SHA-256):
17:93:92:7A:06:14:54:97:89:AD:CE:2F:8F:34:F7:F0:B6:6D:0F:3A:E3:A3:B8:4D:21:EC:15:DB:BA:4F:AD:C7

```

# Fingerprint (SHA1): 9F:74:4E:9F:2B:4D:BA:EC:0F:31:2C:50:B6:56:3B:8E:2D:93:C3:11

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_CERTIFICATE

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "COMODO ECC Certification Authority"

CKA\_CERTIFICATE\_TYPE

CK\_CERTIFICATE\_TYPE CKC\_X\_509

CKA\_SUBJECT MULTILINE\_OCTAL

\060\201\205\061\013\060\011\006\003\125\004\006\023\002\107\102  
\061\033\060\031\006\003\125\004\010\023\022\107\162\145\141\164  
\145\162\040\115\141\156\143\150\145\163\164\145\162\061\020\060  
\016\006\003\125\004\007\023\007\123\141\154\146\157\162\144\061  
\032\060\030\006\003\125\004\012\023\021\103\117\115\117\104\117  
\040\103\101\040\114\151\155\151\164\145\144\061\053\060\051\006  
\003\125\004\003\023\042\103\117\115\117\104\117\040\105\103\103  
\040\103\145\162\164\151\146\151\143\141\164\151\157\156\040\101  
\165\164\150\157\162\151\164\171

END

CKA\_ID UTF8 "0"

CKA\_ISSUER MULTILINE\_OCTAL

\060\201\205\061\013\060\011\006\003\125\004\006\023\002\107\102  
\061\033\060\031\006\003\125\004\010\023\022\107\162\145\141\164  
\145\162\040\115\141\156\143\150\145\163\164\145\162\061\020\060  
\016\006\003\125\004\007\023\007\123\141\154\146\157\162\144\061  
\032\060\030\006\003\125\004\012\023\021\103\117\115\117\104\117  
\040\103\101\040\114\151\155\151\164\145\144\061\053\060\051\006  
\003\125\004\003\023\042\103\117\115\117\104\117\040\105\103\103  
\040\103\145\162\164\151\146\151\143\141\164\151\157\156\040\101  
\165\164\150\157\162\151\164\171

END

CKA\_SERIAL\_NUMBER

MULTILINE\_OCTAL

\002\020\037\107\257\252\142\000\160\120\124\114\001\236\233\143  
\231\052

END

CKA\_VALUE MULTILINE\_OCTAL

\060\202\002\211\060\202\002\017\240\003\002\001\002\002\020\037  
\107\257\252\142\000\160\120\124\114\001\236\233\143\231\052\060  
\012\006\010\052\206\110\316\075\004\003\003\060\201\205\061\013  
\060\011\006\003\125\004\006\023\002\107\102\061\033\060\031\006  
\003\125\004\010\023\022\107\162\145\141\164\145\162\040\115\141  
\156\143\150\145\163\164\145\162\061\020\060\016\006\003\125\004  
\007\023\007\123\141\154\146\157\162\144\061\032\060\030\006\003  
\125\004\012\023\021\103\117\115\117\104\117\040\103\101\040\114  
\151\155\151\164\145\144\061\053\060\051\006\003\125\004\003\023  
\042\103\117\115\117\104\117\040\105\103\103\040\103\145\162\164  
\151\146\151\143\141\164\151\157\156\040\101\165\164\150\157\162



\151\164\171\060\036\027\015\060\070\060\063\060\066\060\060\060  
\060\060\060\132\027\015\063\070\060\061\061\070\062\063\065\071  
\065\071\132\060\201\205\061\013\060\011\006\003\125\004\006\023  
\002\107\102\061\033\060\031\006\003\125\004\010\023\022\107\162  
\145\141\164\145\162\040\115\141\156\143\150\145\163\164\145\162  
\061\020\060\016\006\003\125\004\007\023\007\123\141\154\146\157  
\162\144\061\032\060\030\006\003\125\004\012\023\021\103\117\115  
\117\104\117\040\103\101\040\114\151\155\151\164\145\144\061\053  
\060\051\006\003\125\004\003\023\042\103\117\115\117\104\117\040  
\105\103\103\040\103\145\162\164\151\146\151\143\141\164\151\157  
\156\040\101\165\164\150\157\162\151\164\171\060\166\060\020\006  
\007\052\206\110\316\075\002\001\006\005\053\201\004\000\042\003  
\142\000\004\003\107\173\057\165\311\202\025\205\373\165\344\221  
\026\324\253\142\231\365\076\122\013\006\316\101\000\177\227\341  
\012\044\074\035\001\004\356\075\322\215\011\227\014\340\165\344  
\372\373\167\212\052\365\003\140\113\066\213\026\043\026\255\011  
\161\364\112\364\050\120\264\376\210\034\156\077\154\057\057\011  
\131\133\245\133\013\063\231\342\303\075\211\371\152\054\357\262  
\323\006\351\243\102\060\100\060\035\006\003\125\035\016\004\026  
\004\024\165\161\247\031\110\031\274\235\235\352\101\107\337\224  
\304\110\167\231\323\171\060\016\006\003\125\035\017\001\001\377  
\004\004\003\002\001\006\060\017\006\003\125\035\023\001\001\377  
\004\005\060\003\001\001\377\060\012\006\010\052\206\110\316\075  
\004\003\003\003\150\000\060\145\002\061\000\357\003\133\172\254  
\267\170\012\162\267\210\337\377\265\106\024\011\012\372\240\346  
\175\010\306\032\207\275\030\250\163\275\046\312\140\014\235\316  
\231\237\317\134\017\060\341\276\024\061\352\002\060\024\364\223  
\074\111\247\063\172\220\106\107\263\143\175\023\233\116\267\157  
\030\067\200\123\376\335\040\340\065\232\066\321\307\001\271\346  
\334\335\363\377\035\054\072\026\127\331\222\071\326

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "COMODO ECC Certification Authority"

# Issuer: CN=COMODO ECC Certification Authority,O=COMODO CA Limited,L=Salford,ST=Greater Manchester,C=GB

# Serial Number: 1f:47:af:aa:62:00:70:50:54:4c:01:9e:9b:63:99:2a

# Subject: CN=COMODO ECC Certification Authority,O=COMODO CA Limited,L=Salford,ST=Greater Manchester,C=GB

# Not Valid Before: Thu Mar 06 00:00:00 2008

# Not Valid After : Mon Jan 18 23:59:59 2038

# Fingerprint (SHA-256):

17:93:92:7A:06:14:54:97:89:AD:CE:2F:8F:34:F7:F0:B6:6D:0F:3A:E3:A3:B8:4D:21:EC:15:DB:BA:4F:AD:C7

# Fingerprint (SHA1): 9F:74:4E:9F:2B:4D:BA:EC:0F:31:2C:50:B6:56:3B:8E:2D:93:C3:11

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

```

CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "COMODO ECC Certification Authority"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\237\164\116\237\053\115\272\354\017\061\054\120\266\126\073\216
\055\223\303\021
END
CKA_CERT_MD5_HASH
MULTILINE_OCTAL
\174\142\377\164\235\061\123\136\150\112\325\170\252\036\277\043
END
CKA_ISSUER MULTILINE_OCTAL
\060\201\205\061\013\060\011\006\003\125\004\006\023\002\107\102
\061\033\060\031\006\003\125\004\010\023\022\107\162\145\141\164
\145\162\040\115\141\156\143\150\145\163\164\145\162\061\020\060
\016\006\003\125\004\007\023\007\123\141\154\146\157\162\144\061
\032\060\030\006\003\125\004\012\023\021\103\117\115\117\104\117
\040\103\101\040\114\151\155\151\164\145\144\061\053\060\051\006
\003\125\004\003\023\042\103\117\115\117\104\117\040\105\103\103
\040\103\145\162\164\151\146\151\143\141\164\151\157\156\040\101
\165\164\150\157\162\151\164\171
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\020\037\107\257\252\142\000\160\120\124\114\001\236\233\143
\231\052
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING
CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "OISTE WISeKey Global Root GA CA"
#
# Issuer: CN=OISTE WISeKey Global Root GA CA,OU=OISTE Foundation Endorsed,OU=Copyright (c)
2005,O=WISeKey,C=CH
# Serial Number:41:3d:72:c7:f4:6b:1f:81:43:7d:f1:d2:28:54:df:9a
# Subject: CN=OISTE WISeKey Global Root GA CA,OU=OISTE Foundation Endorsed,OU=Copyright (c)
2005,O=WISeKey,C=CH
# Not Valid Before: Sun Dec 11 16:03:44 2005
# Not Valid After : Fri Dec 11 16:09:51 2037
# Fingerprint (SHA-256):
41:C9:23:86:6A:B4:CA:D6:B7:AD:57:80:81:58:2E:02:07:97:A6:CB:DF:4F:FF:78:CE:83:96:B3:89:37:D7:F5
# Fingerprint (SHA1): 59:22:A1:E1:5A:EA:16:35:21:F8:98:39:6A:46:46:B0:44:1B:0F:A9
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE

```

```
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "OISTE WISeKey Global Root GA CA"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\201\212\061\013\060\011\006\003\125\004\006\023\002\103\110
\061\020\060\016\006\003\125\004\012\023\007\127\111\123\145\113
\145\171\061\033\060\031\006\003\125\004\013\023\022\103\157\160
\171\162\151\147\150\164\040\050\143\051\040\062\060\060\065\061
\042\060\040\006\003\125\004\013\023\031\117\111\123\124\105\040
\106\157\165\156\144\141\164\151\157\156\040\105\156\144\157\162
\163\145\144\061\050\060\046\006\003\125\004\003\023\037\117\111
\123\124\105\040\127\111\123\145\113\145\171\040\107\154\157\142
\141\154\040\122\157\157\164\040\107\101\040\103\101
END
CKA_ID
UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\201\212\061\013\060\011\006\003\125\004\006\023\002\103\110
\061\020\060\016\006\003\125\004\012\023\007\127\111\123\145\113
\145\171\061\033\060\031\006\003\125\004\013\023\022\103\157\160
\171\162\151\147\150\164\040\050\143\051\040\062\060\060\065\061
\042\060\040\006\003\125\004\013\023\031\117\111\123\124\105\040
\106\157\165\156\144\141\164\151\157\156\040\105\156\144\157\162
\163\145\144\061\050\060\046\006\003\125\004\003\023\037\117\111
\123\124\105\040\127\111\123\145\113\145\171\040\107\154\157\142
\141\154\040\122\157\157\164\040\107\101\040\103\101
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\020\101\075\162\307\364\153\037\201\103\175\361\322\050\124
\337\232
END
CKA_VALUE MULTILINE_OCTAL
\060\202\003\361\060\202\002\331\240\003\002\001\002\002\020\101
\075\162\307\364\153\037\201\103\175\361\322\050\124\337\232\060
\015\006\011\052\206\110\206\367\015\001\001\005\005\000\060\201
\212\061\013\060\011\006\003\125\004\006\023\002\103\110\061\020
\060\016\006\003\125\004\012\023\007\127\111\123\145\113\145\171
\061\033\060\031\006\003\125\004\013\023\022\103\157\160\171\162
\151\147\150\164\040\050\143\051\040\062\060\060\065\061\042\060
\040\006\003\125\004\013\023\031\117\111\123\124\105\040\106\157
\165\156\144\141\164\151\157\156\040\105\156\144\157\162\163\145
\144\061\050\060\046\006\003\125\004\003\023\037\117\111\123\124
\105\040\127\111\123\145\113\145\171\040\107\154\157\142\141\154
\040\122\157\157\164\040\107\101\040\103\101\060\036\027\015\060
\065\061\062\061\061\061\066\060\063\064\064\132\027\015\063\067
\061\062\061\061\061\066\060\071\065\061\132\060\201\212\061\013
```

\060\011\006\003\125\004\006\023\002\103\110\061\020\060\016\006  
\003\125\004\012\023\007\127\111\123\145\113\145\171\061\033\060  
\031\006\003\125\004\013\023\022\103\157\160\171\162\151\147\150  
\164\040\050\143\051\040\062\060\060\065\061\042\060\040\006\003  
\125\004\013\023\031\117\111\123\124\105\040\106\157\165\156\144  
\141\164\151\157\156\040\105\156\144\157\162\163\145\144\061\050  
\060\046\006\003\125\004\003\023\037\117\111\123\124\105\040\127  
\111\123\145\113\145\171\040\107\154\157\142\141\154\040\122\157  
\157\164\040\107\101\040\103\101\060\202\001\042\060\015\006\011  
\052\206\110\206\367\015\001\001\001\005\000\003\202\001\017\000  
\060\202\001\012\002\202\001\001\000\313\117\263\000\233\075\066  
\335\371\321\111\152\153\020\111\037\354\330\053\262\306\370\062  
\201\051\103\225\114\232\031\043\041\025\105\336\343\310\034\121  
\125\133\256\223\350\067\377\053\153\351\324\352\276\052\335\250  
\121\053\327\146\303\141\134\140\002\310\365\316\162\173\073\270  
\362\116\145\010\232\315\244\152\031\301\001\273\163\246\327\366  
\303\335\315\274\244\213\265\231\141\270\001\242\243\324\115\324  
\005\075\221\255\370\264\010\161\144\257\160\361\034\153\176\366  
\303\167\235\044\163\173\344\014\214\341\331\066\341\231\213\005  
\231\013\355\105\061\011\312\302\000\333\367\162\240\226\252\225  
\207\320\216\307\266\141\163\015\166\146\214\334\033\264\143\242  
\237\177\223\023\060\361\241\047\333\331\377\054\125\210\221\240  
\340\117\007\260\050\126\214\030\033\227\104\216\211\335\340\027  
\156\347\052\357\217\071\012\061\204\202\330\100\024\111\056\172  
\101\344\247\376\343\144\314\301\131\161\113\054\041\247\133\175  
\340\035\321\056\201\233\303\330\150\367\275\226\033\254\160\261  
\026\024\013\333\140\271\046\001\005\002\003\001\000\001\243\121  
\060\117\060\013\006\003\125\035\017\004\004\003\002\001\206\060  
\017\006\003\125\035\023\001\001\377\004\005\060\003\001\001\377  
\060\035\006\003\125\035\016\004\026\004\024\263\003\176\256\066  
\274\260\171\321\334\224\046\266\021\276\041\262\151\206\224\060  
\020\006\011\053\006\001\004\001\202\067\025\001\004\003\002\001  
\000\060\015\006\011\052\206\110\206\367\015\001\001\005\005\000  
\003\202\001\001\000\113\241\377\013\207\156\263\371\301\103\261  
\110\363\050\300\035\056\311\011\101\372\224\000\034\244\244\253  
\111\117\217\075\036\357\115\157\275\274\244\366\362\046\060\311  
\020\312\035\210\373\164\031\037\205\105\275\260\154\121\371\066  
\176\333\365\114\062\072\101\117\133\107\317\350\013\055\266\304  
\031\235\164\305\107\306\073\152\017\254\024\333\074\364\163\234  
\251\005\337\000\334\164\170\372\370\065\140\131\002\023\030\174  
\274\373\115\260\040\155\103\273\140\060\172\147\063\134\305\231  
\321\370\055\071\122\163\373\214\252\227\045\134\162\331\010\036  
\253\116\074\343\201\061\237\003\246\373\300\376\051\210\125\332  
\204\325\120\003\266\342\204\243\246\066\252\021\072\001\341\030  
\113\326\104\150\263\075\371\123\164\204\263\106\221\106\226\000  
\267\200\054\266\341\343\020\342\333\242\347\050\217\001\226\142  
\026\076\000\343\034\245\066\201\030\242\114\122\166\300\021\243  
\156\346\035\272\343\132\276\066\123\305\076\165\217\206\151\051

```
\130\123\265\234\273\157\237\134\305\030\354\335\057\341\230\311  
\374\276\337\012\015
```

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "OISTE WISeKey Global Root GA CA"

# Issuer: CN=OISTE WISeKey Global Root GA CA,OU=OISTE Foundation Endorsed,OU=Copyright (c)  
2005,O=WISeKey,C=CH

# Serial Number:41:3d:72:c7:f4:6b:1f:81:43:7d:f1:d2:28:54:df:9a

# Subject: CN=OISTE WISeKey Global Root GA CA,OU=OISTE Foundation Endorsed,OU=Copyright (c)  
2005,O=WISeKey,C=CH

# Not Valid Before: Sun Dec 11 16:03:44 2005

# Not Valid After : Fri

Dec 11 16:09:51 2037

# Fingerprint (SHA-256):

41:C9:23:86:6A:B4:CA:D6:B7:AD:57:80:81:58:2E:02:07:97:A6:CB:DF:4F:FF:78:CE:83:96:B3:89:37:D7:F5

# Fingerprint (SHA1): 59:22:A1:E1:5A:EA:16:35:21:F8:98:39:6A:46:46:B0:44:1B:0F:A9

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "OISTE WISeKey Global Root GA CA"

CKA\_CERT\_SHA1\_HASH MULTILINE\_OCTAL

```
\131\042\241\341\132\352\026\065\041\370\230\071\152\106\106\260  
\104\033\017\251
```

END

CKA\_CERT\_MD5\_HASH MULTILINE\_OCTAL

```
\274\154\121\063\247\351\323\146\143\124\025\162\033\041\222\223  
END
```

CKA\_ISSUER MULTILINE\_OCTAL

```
\060\201\212\061\013\060\011\006\003\125\004\006\023\002\103\110  
\061\020\060\016\006\003\125\004\012\023\007\127\111\123\145\113  
\145\171\061\033\060\031\006\003\125\004\013\023\022\103\157\160  
\171\162\151\147\150\164\040\050\143\051\040\062\060\060\065\061  
\042\060\040\006\003\125\004\013\023\031\117\111\123\124\105\040  
\106\157\165\156\144\141\164\151\157\156\040\105\156\144\157\162  
\163\145\144\061\050\060\046\006\003\125\004\003\023\037\117\111  
\123\124\105\040\127\111\123\145\113\145\171\040\107\154\157\142  
\141\154\040\122\157\157\164\040\107\101\040\103\101
```

END

CKA\_SERIAL\_NUMBER

MULTILINE\_OCTAL

```
\002\020\101\075\162\307\364\153\037\201\103\175\361\322\050\124  
\337\232
```

END

CKA\_TRUST\_SERVER\_AUTH CK\_TRUST CKT\_NSS\_MUST\_VERIFY\_TRUST  
CKA\_TRUST\_EMAIL\_PROTECTION CK\_TRUST CKT\_NSS\_TRUSTED\_DELEGATOR  
CKA\_TRUST\_CODE\_SIGNING CK\_TRUST CKT\_NSS\_MUST\_VERIFY\_TRUST  
CKA\_TRUST\_STEP\_UP\_APPROVED CK\_BBOOL CK\_FALSE

#

# Certificate "Certigna"

#

# Issuer: CN=Certigna,O=Dhimyotis,C=FR

# Serial Number:00:fe:dc:e3:01:0f:c9:48:ff

# Subject: CN=Certigna,O=Dhimyotis,C=FR

# Not Valid Before: Fri Jun 29 15:13:05 2007

# Not Valid After : Tue Jun 29 15:13:05 2027

# Fingerprint (SHA-256):

E3:B6:A2:DB:2E:D7:CE:48:84:2F:7A:C5:32:41:C7:B7:1D:54:14:4B:FB:40:C1:1F:3F:1D:0B:42:F5:EE:A1:2D

# Fingerprint (SHA1): B1:2E:13:63:45:86:A4:6F:1A:B2:60:68:37:58:2D:C4:AC:FD:94:97

CKA\_CLASS

CK\_OBJECT\_CLASS CKO\_CERTIFICATE

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "Certigna"

CKA\_CERTIFICATE\_TYPE CK\_CERTIFICATE\_TYPE CKC\_X\_509

CKA\_SUBJECT MULTILINE\_OCTAL

\060\064\061\013\060\011\006\003\125\004\006\023\002\106\122\061

\022\060\020\006\003\125\004\012\014\011\104\150\151\155\171\157

\164\151\163\061\021\060\017\006\003\125\004\003\014\010\103\145

\162\164\151\147\156\141

END

CKA\_ID UTF8 "0"

CKA\_ISSUER MULTILINE\_OCTAL

\060\064\061\013\060\011\006\003\125\004\006\023\002\106\122\061

\022\060\020\006\003\125\004\012\014\011\104\150\151\155\171\157

\164\151\163\061\021\060\017\006\003\125\004\003\014\010\103\145

\162\164\151\147\156\141

END

CKA\_SERIAL\_NUMBER MULTILINE\_OCTAL

\002\011\000\376\334\343\001\017\311\110\377

END

CKA\_VALUE MULTILINE\_OCTAL

\060\202\003\250\060\202\002\220\240\003\002\001\002\002\011\000

\376\334\343\001\017\311\110\377\060\015\006\011\052\206\110\206

\367\015\001\001\005\005\000\060\064\061\013\060\011\006\003\125

\004\006\023\002\106\122\061\022\060\020\006\003\125\004\012\014

\011\104\150\151\155\171\157\164\151\163\061\021\060\017\006\003

\125\004\003\014\010\103\145\162\164\151\147\156\141\060\036\027

\015\060\067\060\066\062\071\061\065\061\063\060\065\132\027\015

\062\067\060\066\062\071\061\065\061\063\060\065\132\060\064\061

\013\060\011\006\003\125\004\006\023\002\106\122\061\022\060\020  
\006\003\125\004\012\014\011\104\150\151\155\171\157\164\151\163  
\061\021\060\017\006\003\125\004\003\014\010\103\145\162\164\151  
\147\156\141\060\202\001\042\060\015\006\011\052\206\110\206\367  
\015\001\001\001\005\000\003\202\001\017\000\060\202\001\012\002  
\202\001\001\000\310\150\361\311\326\326\263\064\165\046\202\036  
\354\264\276\352\134\341\046\355\021\107\141\341\242\174\026\170  
\100\041\344\140\236\132\310\143\341\304\261\226\222\377\030\155  
\151\043\341\053\142\367\335\342\066\057\221\007\271\110\317\016  
\354\171\266\054\347\064\113\160\010\045\243\074\207\033\031\362  
\201\007\017\070\220\031\323\021\376\206\264\362\321\136\036\036  
\226\315\200\154\316\073\061\223\266\362\240\320\251\225\022\175  
\245\232\314\153\310\204\126\212\063\251\347\042\025\123\026\360  
\314\027\354\127\137\351\242\012\230\011\336\343\137\234\157\334  
\110\343\205\013\025\132\246\272\237\254\110\343\011\262\367\364  
\062\336\136\064\276\034\170\135\102\133\316\016\042\217\115\220  
\327\175\062\030\263\013\054\152\277\216\077\024\021\211\040\016  
\167\024\265\075\224\010\207\367\045\036\325\262\140\000\354\157  
\052\050\045\156\052\076\030\143\027\045\077\076\104\040\026\366  
\046\310\045\256\005\112\264\347\143\054\363\214\026\123\176\134  
\373\021\032\010\301\106\142\237\042\270\361\302\215\151\334\372  
\072\130\006\337\002\003\001\000\001\243\201\274\060\201\271\060  
\017\006\003\125\035\023\001\001\377\004\005\060\003\001\001\377  
\060\035\006\003\125\035\016\004\026\004\024\032\355\376\101\071  
\220\264\044\131\276\001\362\122\325\105\366\132\071\334\021\060  
\144\006\003\125\035\043\004\135\060\133\200\024\032\355\376\101  
\071\220\264\044\131\276\001\362\122\325\105\366\132\071\334\021  
\241\070\244\066\060\064\061\013\060\011\006\003\125\004\006\023  
\002\106\122\061\022\060\020\006\003\125\004\012\014\011\104\150  
\151\155\171\157\164\151\163\061\021\060\017\006\003\125\004\003  
\014\010\103\145\162\164\151\147\156\141\202\011\000\376\334\343  
\001\017\311\110\377\060\016\006\003\125\035\017\001\001\377\004  
\004\003\002\001\006\060\021\006\011\140\206\110\001\206\370\102  
\001\001\004\004\003\002\000\007\060\015\006\011\052\206\110\206  
\367\015\001\001\005\005\000\003\202\001\001\000\205\003\036\222  
\161\366\102\257\341\243\141\236\353\363\300\017\362\245\324\332  
\225\346\326\276\150\066\075\176\156\037\114\212\357\321\017\041  
\155\136\245\122\143\316\022\370\357\052\332\157\353\067\376\023  
\002\307\313\073\076\042\153\332\141\056\177\324\162\075\335\060  
\341\036\114\100\031\214\017\327\234\321\203\060\173\230\131\334  
\175\306\271\014\051\114\241\063\242\353\147\072\145\204\323\226  
\342\355\166\105\160\217\265\053\336\371\043\326\111\156\074\024  
\265\306\237\065\036\120\320\301\217\152\160\104\002\142\313\256  
\035\150\101\247\252\127\350\123\252\007\322\006\366\325\024\006  
\013\221\003\165\054\154\162\265\141\225\232\015\213\271\015\347  
\365\337\124\315\336\346\330\326\011\010\227\143\345\301\056\260  
\267\104\046\300\046\300\257\125\060\236\073\325\066\052\031\004  
\364\134\036\377\317\054\267\377\320\375\207\100\021\325\021\043

```
\273\110\300\041\251\244\050\055\375\025\370\260\116\053\364\060
\133\041\374\021\221\064\276\101\357\173\235\227\165\377\227\225
\300\226\130\057\352\273\106\327\273\344\331\056
```

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "Certigna"

# Issuer: CN=Certigna,O=Dhimyotis,C=FR

# Serial Number:00:fe:dc:e3:01:0f:c9:48:ff

# Subject: CN=Certigna,O=Dhimyotis,C=FR

# Not Valid Before: Fri Jun 29 15:13:05 2007

#

Not Valid After : Tue Jun 29 15:13:05 2027

# Fingerprint (SHA-256):

E3:B6:A2:DB:2E:D7:CE:48:84:2F:7A:C5:32:41:C7:B7:1D:54:14:4B:FB:40:C1:1F:3F:1D:0B:42:F5:EE:A1:2D

# Fingerprint (SHA1): B1:2E:13:63:45:86:A4:6F:1A:B2:60:68:37:58:2D:C4:AC:FD:94:97

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "Certigna"

CKA\_CERT\_SHA1\_HASH MULTILINE\_OCTAL

```
\261\056\023\143\105\206\244\157\032\262\140\150\067\130\055\304
\254\375\224\227
```

END

CKA\_CERT\_MD5\_HASH MULTILINE\_OCTAL

```
\253\127\246\133\175\102\202\031\265\330\130\046\050\136\375\377
```

END

CKA\_ISSUER MULTILINE\_OCTAL

```
\060\064\061\013\060\011\006\003\125\004\006\023\002\106\122\061
\022\060\020\006\003\125\004\012\014\011\104\150\151\155\171\157
\164\151\163\061\021\060\017\006\003\125\004\003\014\010\103\145
\162\164\151\147\156\141
```

END

CKA\_SERIAL\_NUMBER MULTILINE\_OCTAL

```
\002\011\000\376\334\343\001\017\311\110\377
```

END

CKA\_TRUST\_SERVER\_AUTH CK\_TRUST CKT\_NSS\_TRUSTED\_DELEGATOR

CKA\_TRUST\_EMAIL\_PROTECTION

CK\_TRUST CKT\_NSS\_TRUSTED\_DELEGATOR

CKA\_TRUST\_CODE\_SIGNING CK\_TRUST CKT\_NSS\_MUST\_VERIFY\_TRUST

CKA\_TRUST\_STEP\_UP\_APPROVED CK\_BBOOL CK\_FALSE

#

# Certificate "ePKI Root Certification Authority"



```

#
# Issuer: OU=ePKI Root Certification Authority,O="Chunghwa Telecom Co., Ltd.",C=TW
# Serial Number:15:c8:bd:65:47:5c:af:b8:97:00:5e:e4:06:d2:bc:9d
# Subject: OU=ePKI Root Certification Authority,O="Chunghwa Telecom Co., Ltd.",C=TW
# Not Valid Before: Mon Dec 20 02:31:27 2004
# Not Valid After : Wed Dec 20 02:31:27 2034
# Fingerprint (SHA-256):
C0:A6:F4:DC:63:A2:4B:FD:CF:54:EF:2A:6A:08:2A:0A:72:DE:35:80:3E:2F:F5:FF:52:7A:E5:D8:72:06:DF:D5
# Fingerprint (SHA1): 67:65:0D:F1:7E:8E:7E:5B:82:40:A4:F4:56:4B:CF:E2:3D:69:C6:F0
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "ePKI Root Certification Authority"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT
MULTILINE_OCTAL
\060\136\061\013\060\011\006\003\125\004\006\023\002\124\127\061
\043\060\041\006\003\125\004\012\014\032\103\150\165\156\147\150
\167\141\040\124\145\154\145\143\157\155\040\103\157\056\054\040
\114\164\144\056\061\052\060\050\006\003\125\004\013\014\041\145
\120\113\111\040\122\157\157\164\040\103\145\162\164\151\146\151
\143\141\164\151\157\156\040\101\165\164\150\157\162\151\164\171
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\136\061\013\060\011\006\003\125\004\006\023\002\124\127\061
\043\060\041\006\003\125\004\012\014\032\103\150\165\156\147\150
\167\141\040\124\145\154\145\143\157\155\040\103\157\056\054\040
\114\164\144\056\061\052\060\050\006\003\125\004\013\014\041\145
\120\113\111\040\122\157\157\164\040\103\145\162\164\151\146\151
\143\141\164\151\157\156\040\101\165\164\150\157\162\151\164\171
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\020\025\310\275\145\107\134\257\270\227\000\136\344\006\322
\274\235
END
CKA_VALUE MULTILINE_OCTAL
\060\202\005\260\060\202\003\230\240\003\002\001\002\002\020\025
\310\275\145\107\134\257\270\227\000\136\344\006\322\274\235\060
\015\006\011\052\206\110\206\367\015\001\001\005\005\000\060\136
\061\013\060\011\006\003\125\004\006\023\002\124\127\061\043\060
\041\006\003\125\004\012\014\032\103\150\165\156\147\150\167\141
\040\124\145\154\145\143\157\155\040\103\157\056\054\040\114\164
\144\056\061\052\060\050\006\003\125\004\013\014\041\145\120\113
\111\040\122\157\157\164\040\103\145\162\164\151\146\151\143\141
\164\151\157\156\040\101\165\164\150\157\162\151\164\171\060\036
\027\015\060\064\061\062\062\060\060\062\063\061\062\067\132\027

```

\015\063\064\061\062\062\060\060\062\063\061\062\067\132\060\136  
\061\013\060\011\006\003\125\004\006\023\002\124\127\061\043\060  
\041\006\003\125\004\012\014\032\103\150\165\156\147\150\167\141  
\040\124\145\154\145\143\157\155\040\103\157\056\054\040\114\164  
\144\056\061\052\060\050\006\003\125\004\013\014\041\145\120\113  
\111\040\122\157\157\164\040\103\145\162\164\151\146\151\143\141  
\164\151\157\156\040\101\165\164\150\157\162\151\164\171\060\202  
\002\042\060\015\006\011\052\206\110\206\367\015\001\001\001\005  
\000\003\202\002\017\000\060\202\002\012\002\202\002\001\000\341  
\045\017\356\215\333\210\063\165\147\315\255\037\175\072\116\155  
\235\323\057\024\363\143\164\313\001\041\152\067\352\204\120\007  
\113\046\133\011\103\154\041\236\152\310\325\003\365\140\151\217  
\314\360\042\344\037\347\367\152\042\061\267\054\025\362\340\376  
\000\152\103\377\207\145\306\265\032\301\247\114\155\042\160\041  
\212\061\362\227\164\211\011\022\046\034\236\312\331\022\242\225  
\074\332\351\147\277\010\240\144\343\326\102\267\105\357\227\364  
\366\365\327\265\112\025\002\130\175\230\130\113\140\274\315\327  
\015\232\023\063\123\321\141\371\172\325\327\170\263\232\063\367  
\000\206\316\035\115\224\070\257\250\354\170\121\160\212\134\020  
\203\121\041\367\021\075\064\206\136\345\110\315\227\201\202\065  
\114\031\354\145\366\153\305\005\241\356\107\023\326\263\041\047  
\224\020\012\331\044\073\272\276\104\023\106\060\077\227\074\330  
\327\327\152\356\073\070\343\053\324\227\016\271\033\347\007\111  
\177\067\052\371\167\170\317\124\355\133\106\235\243\200\016\221  
\103\301\326\133\137\024\272\237\246\215\044\107\100\131\277\162  
\070\262\066\154\067\377\231\321\135\016\131\012\253\151\367\300  
\262\004\105\172\124\000\256\276\123\366\265\347\341\370\074\243  
\061\322\251\376\041\122\144\305\246\147\360\165\007\006\224\024  
\201\125\306\047\344\001\217\027\301\152\161\327\276\113\373\224  
\130\175\176\021\063\261\102\367\142\154\030\326\317\011\150\076  
\177\154\366\036\217\142\255\245\143\333\011\247\037\042\102\101  
\036\157\231\212\076\327\371\077\100\172\171\260\245\001\222\322  
\235\075\010\025\245\020\001\055\263\062\166\250\225\015\263\172  
\232\373\007\020\170\021\157\341\217\307\272\017\045\032\164\052  
\345\034\230\101\231\337\041\207\350\225\006\152\012\263\152\107  
\166\145\366\072\317\217\142\027\031\173\012\050\315\032\322\203  
\036\041\307\054\277\276\377\141\150\267\147\033\273\170\115\215  
\316\147\345\344\301\216\267\043\146\342\235\220\165\064\230\251  
\066\053\212\232\224\271\235\354\314\212\261\370\045\211\134\132  
\266\057\214\037\155\171\044\247\122\150\303\204\065\342\146\215  
\143\016\045\115\325\031\262\346\171\067\247\042\235\124\061\002  
\003\001\000\001\243\152\060\150\060\035\006\003\125\035\016\004  
\026\004\024\036\014\367\266\147\362\341\222\046\011\105\300\125  
\071\056\167\077\102\112\242\060\014\006\003\125\035\023\004\005  
\060\003\001\001\377\060\071\006\004\147\052\007\000\004\061\060  
\057\060\055\002\001\000\060\011\006\005\053\016\003\002\032\005  
\000\060\007\006\005\147\052\003\000\000\004\024\105\260\302\307  
\012\126\174\356\133\170\014\225\371\030\123\301\246\034\330\020

\060\015\006\011\052\206\110\206\367\015\001\001\005\005\000\003  
\202\002\001\000\011\263\203\123\131\001\076\225\111\271\361\201  
\272\371\166\040\043\265\047\140\164\324\152\231\064\136\154\000  
\123\331\237\362\246\261\044\007\104\152\052\306\245\216\170\022  
\350\107\331\130\033\023\052\136\171\233\237\012\052\147\246\045  
\077\006\151\126\163\303\212\146\110\373\051\201\127\164\006\312  
\234\352\050\350\070\147\046\053\361\325\265\077\145\223\370\066  
\135\216\215\215\100\040\207\031\352\357\047\300\075\264\071\017  
\045\173\150\120\164\125\234\014\131\175\132\075\101\224\045\122  
\010\340\107\054\025\061\031\325\277\007\125\306\273\022\265\227  
\364\137\203\205\272\161\301\331\154\201\021\166\012\012\260\277  
\202\227\367\352\075\372\372\354\055\251\050\224\073\126\335\322  
\121\056\256\300\275\010\025\214\167\122\064\226\326\233\254\323  
\035\216\141\017\065\173\233\256\071\151\013\142\140\100\040\066  
\217\257\373\066\356\055\010\112\035\270\277\233\134\370\352\245  
\033\240\163\246\330\370\156\340\063\004\137\150\252\047\207\355  
\331\301\220\234\355\275\343\152\065\257\143\337\253\030\331\272  
\346\351\112\352\120\212\017\141\223\036\342\055\031\342\060\224  
\065\222\135\016\266\007\257\031\200\217\107\220\121\113\056\115  
\335\205\342\322\012\122\012\027\232\374\032\260\120\002\345\001  
\243\143\067\041\114\104\304\233\121\231\021\016\163\234\006\217  
\124\056\247\050\136\104\071\207\126\055\067\275\205\104\224\341  
\014\113\054\234\303\222\205\064\141\313\017\270\233\112\103\122  
\376\064\072\175\270\351\051\334\166\251\310\060\370\024\161\200  
\306\036\066\110\164\042\101\134\207\202\350\030\161\213\101\211  
\104\347\176\130\133\250\270\215\023\351\247\154\303\107\355\263  
\032\235\142\256\215\202\352\224\236\335\131\020\303\255\335\342  
\115\343\061\325\307\354\350\362\260\376\222\036\026\012\032\374  
\331\363\370\047\266\311\276\035\264\154\144\220\177\364\344\304  
\133\327\067\256\102\016\335\244\032\157\174\210\124\305\026\156  
\341\172\150\056\370\072\277\015\244\074\211\073\170\247\116\143  
\203\004\041\010\147\215\362\202\111\320\133\375\261\315\017\203  
\204\324\076\040\205\367\112\075\053\234\375\052\012\011\115\352  
\201\370\021\234

END

CKA\_NSS\_Mozilla\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER

CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "ePKI Root Certification Authority"

# Issuer: OU=ePKI Root Certification Authority,O="Chunghwa Telecom Co., Ltd.",C=TW

# Serial Number: 15:c8:bd:65:47:5c:af:b8:97:00:5e:e4:06:d2:bc:9d

# Subject: OU=ePKI Root Certification Authority,O="Chunghwa Telecom Co., Ltd.",C=TW

# Not Valid Before: Mon Dec 20 02:31:27 2004

# Not Valid After : Wed Dec 20 02:31:27 2034

# Fingerprint (SHA-256):

```
C0:A6:F4:DC:63:A2:4B:FD:CF:54:EF:2A:6A:08:2A:0A:72:DE:35:80:3E:2F:F5:FF:52:7A:E5:D8:72:06:DF:D5
# Fingerprint (SHA1): 67:65:0D:F1:7E:8E:7E:5B:82:40:A4:F4:56:4B:CF:E2:3D:69:C6:F0
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "ePKI Root Certification Authority"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\147\145\015\361\176\216\176\133\202\100\244\364\126\113\317\342
\075\151\306\360
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\033\056\000\312\046\006\220\075\255\376\157\025\150\323\153\263
END
CKA_ISSUER
MULTILINE_OCTAL
\060\136\061\013\060\011\006\003\125\004\006\023\002\124\127\061
\043\060\041\006\003\125\004\012\014\032\103\150\165\156\147\150
\167\141\040\124\145\154\145\143\157\155\040\103\157\056\054\040
\114\164\144\056\061\052\060\050\006\003\125\004\013\014\041\145
\120\113\111\040\122\157\157\164\040\103\145\162\164\151\146\151
\143\141\164\151\157\156\040\101\165\164\150\157\162\151\164\171
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\020\025\310\275\145\107\134\257\270\227\000\136\344\006\322
\274\235
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "certSIGN ROOT CA"
#
# Issuer: OU=certSIGN ROOT CA,O=certSIGN,C=RO
# Serial Number:20:06:05:16:70:02
# Subject: OU=certSIGN ROOT CA,O=certSIGN,C=RO
# Not Valid Before: Tue Jul 04 17:20:04
2006
# Not Valid After : Fri Jul 04 17:20:04 2031
# Fingerprint (SHA-256):
EA:A9:62:C4:FA:4A:6B:AF:EB:E4:15:19:6D:35:1C:CD:88:8D:4F:53:F3:FA:8A:E6:D7:C4:66:A9:4E:60:42:BB
# Fingerprint (SHA1): FA:B7:EE:36:97:26:62:FB:2D:B0:2A:F6:BF:03:FD:E8:7C:4B:2F:9B
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
```

```
CKA_LABEL UTF8 "certSIGN ROOT CA"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\073\061\013\060\011\006\003\125\004\006\023\002\122\117\061
\021\060\017\006\003\125\004\012\023\010\143\145\162\164\123\111
\107\116\061\031\060\027\006\003\125\004\013\023\020\143\145\162
\164\123\111\107\116\040\122\117\117\124\040\103\101
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\073\061\013\060\011\006\003\125\004\006\023\002\122\117\061
\021\060\017\006\003\125\004\012\023\010\143\145\162\164\123\111
\107\116\061\031\060\027\006\003\125\004\013\023\020\143\145\162
\164\123\111\107\116\040\122\117\117\124\040\103\101
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\006\040\006\005\026\160\002
END
CKA_VALUE MULTILINE_OCTAL
\060\202\003\070\060\202\002\040\240\003\002\001\002\002\006\040
\006\005\026\160\002\060\015\006\011\052\206\110\206\367\015\001
\001\005\005\000\060\073\061\013\060\011\006\003\125\004\006\023
\002\122\117\061\021\060\017\006\003\125\004\012\023\010\143\145
\162\164\123\111\107\116\061\031\060\027\006\003\125\004\013\023
\020\143\145\162\164\123\111\107\116\040\122\117\117\124\040\103
\101\060\036\027\015\060\066\060\067\060\064\061\067\062\060\060
\064\132\027\015\063\061\060\067\060\064\061\067\062\060\060\064
\132\060\073\061\013\060\011\006\003\125\004\006\023\002\122\117
\061\021\060\017\006\003\125\004\012\023\010\143\145\162\164\123
\111\107\116\061\031\060\027\006\003\125\004\013\023\020\143\145
\162\164\123\111\107\116\040\122\117\117\124\040\103\101\060\202
\001\042\060\015\006\011\052\206\110\206\367\015\001\001\001\005
\000\003\202\001\017\000\060\202\001\012\002\202\001\001\000\267
\063\271\176\310\045\112\216\265\333\264\050\033\252\127\220\350
\321\042\323\144\272\323\223\350\324\254\206\141\100\152\140\127
\150\124\204\115\274\152\124\002\005\377\337\233\232\052\256\135
\007\217\112\303\050\177\357\373\053\372\171\361\307\255\360\020
\123\044\220\213\146\311\250\210\253\257\132\243\000\351\276\272
\106\356\133\163\173\054\027\202\201\136\142\054\241\002\145\263
\275\305\053\000\176\304\374\003\063\127\015\355\342\372\316\135
\105\326\070\315\065\266\262\301\320\234\201\112\252\344\262\001
\134\035\217\137\231\304\261\255\333\210\041\353\220\010\202\200
\363\060\243\103\346\220\202\256\125\050\111\355\133\327\251\020
\070\016\376\217\114\133\233\106\352\101\365\260\010\164\303\320
\210\063\266\174\327\164\337\334\204\321\103\016\165\071\241\045
\100\050\352\170\313\016\054\056\071\235\214\213\156\026\034\057
\046\202\020\342\343\145\224\012\004\300\136\367\135\133\370\020
```

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\342\320\272\172\113\373\336\067\000\000\032\133\050\343\322\234
\163\076\062\207\230\241\311\121\057\327\336\254\063\263\117\002
\003\001\000\001\243\102\060\100\060\017\006\003\125\035\023\001
\001\377\004\005\060\003\001\001\377\060\016\006\003\125\035\017
\001\001\377\004\004\003\002\001\306\060\035\006\003\125\035\016
\004\026\004\024\340\214\233\333\045\111\263\361\174\206\326\262
\102\207\013\320\153\240\331\344\060\015\006\011\052\206\110\206
\367\015\001\001\005\005\000\003\202\001\001\000\076\322\034\211
\056\065\374\370\165\335\346\177\145\210\364\162\114\311\054\327
\062\116\363\335\031\171\107\275\216\073\133\223\017\120\111\044
\023\153\024\006\162\357\011\323\241\241\343\100\204\311\347\030
\062\164\074\110\156\017\237\113\324\367\036\323\223\206\144\124
\227\143\162\120\325\125\317\372\040\223\002\242\233\303\043\223
\116\026\125\166\240\160\171\155\315\041\037\317\057\055\274\031
\343\210\061\370\131\032\201\011\310\227\246\164\307\140\304\133
\314\127\216\262\165\375\033\002\011\333\131\157\162\223\151\367
\061\101\326\210\070\277\207\262\275\026\171\371\252\344\276\210
\045\335\141\047\043\034\265\061\007\004\066\264\032\220\275\240
\164\161\120\211\155\274\024\343\017\206\256\361\253\076\307\240
\011\314\243\110\321\340\333\144\347\222\265\317\257\162\103\160
\213\371\303\204\074\023\252\176\222\233\127\123\223\372\160\302
\221\016\061\371\233\147\135\351\226\070\136\137\263\163\116\210
\025\147\336\236\166\020\142\040\276\125\151\225\103\000\071\115
\366\356\260\132\116\111\104\124\130\137\102\203
```

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "certSIGN ROOT CA"

# Issuer: OU=certSIGN ROOT CA,O=certSIGN,C=RO

# Serial Number:20:06:05:16:70:02

# Subject: OU=certSIGN ROOT CA,O=certSIGN,C=RO

# Not Valid Before: Tue Jul 04 17:20:04 2006

# Not Valid After : Fri Jul 04 17:20:04 2031

# Fingerprint (SHA-256):

EA:A9:62:C4:FA:4A:6B:AF:EB:E4:15:19:6D:35:1C:CD:88:8D:4F:53:F3:FA:8A:E6:D7:C4:66:A9:4E:60:42:BB

#

Fingerprint (SHA1): FA:B7:EE:36:97:26:62:FB:2D:B0:2A:F6:BF:03:FD:E8:7C:4B:2F:9B

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "certSIGN ROOT CA"

CKA\_CERT\_SHA1\_HASH MULTILINE\_OCTAL

```
\372\267\356\066\227\046\142\373\055\260\052\366\277\003\375\350
```

```
\174\113\057\233
```

```

END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\030\230\300\326\351\072\374\371\260\365\014\367\113\001\104\027
END
CKA_ISSUER MULTILINE_OCTAL
\060\073\061\013\060\011\006\003\125\004\006\023\002\122\117\061
\021\060\017\006\003\125\004\012\023\010\143\145\162\164\123\111
\107\116\061\031\060\027\006\003\125\004\013\023\020\143\145\162
\164\123\111\107\116\040\122\117\117\124\040\103\101
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\006\040\006\005\026\160\002
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED
CK_BBOOL CK_FALSE

#
# Certificate "NetLock Arany (Class Gold) Ftanúsítvány"
#
# Issuer: CN=NetLock Arany (Class Gold) F..tan..s..tv..ny,OU=Tan..s..tv..nykiad..k (Certification
Services),O=NetLock Kft.,L=Budapest,C=HU
# Serial Number:49:41:2c:e4:00:10
# Subject: CN=NetLock Arany (Class Gold) F..tan..s..tv..ny,OU=Tan..s..tv..nykiad..k (Certification
Services),O=NetLock Kft.,L=Budapest,C=HU
# Not Valid Before: Thu Dec 11 15:08:21 2008
# Not Valid After : Wed Dec 06 15:08:21 2028
# Fingerprint (SHA-256):
6C:61:DA:C3:A2:DE:F0:31:50:6B:E0:36:D2:A6:FE:40:19:94:FB:D1:3D:F9:C8:D4:66:59:92:74:C4:46:EC:98
# Fingerprint (SHA1): 06:08:3F:59:3F:15:A1:04:A0:69:A4:6B:A9:03:D0:06:B7:97:09:91
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "NetLock Arany (Class Gold) Ftanúsítvány"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\201\247\061\013\060\011\006\003\125\004\006\023\002\110\125
\061\021\060\017\006\003\125\004\007\014\010\102\165\144\141\160
\145\163\164\061\025\060\023\006\003\125\004\012\014\014\116\145
\164\114\157\143\153\040\113\146\164\056\061\067\060\065\006\003
\125\004\013\014\056\124\141\156\303\272\163\303\255\164\166\303
\241\156\171\153\151\141\144\303\263\153\040\050\103\145\162\164
\151\146\151\143\141\164\151\157\156\040\123\145\162\166\151\143
\145\163\051\061\065\060\063\006\003\125\004\003\014\054\116\145
\164\114\157\143\153\040\101\162\141\156\171\040\050\103\154\141

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\163\163\040\107\157\154\144\051\040\106\305\221\164\141\156\303
\272\163\303\255\164\166\303\241\156\171
END
CKA_ID
UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\201\247\061\013\060\011\006\003\125\004\006\023\002\110\125
\061\021\060\017\006\003\125\004\007\014\010\102\165\144\141\160
\145\163\164\061\025\060\023\006\003\125\004\012\014\014\116\145
\164\114\157\143\153\040\113\146\164\056\061\067\060\065\006\003
\125\004\013\014\056\124\141\156\303\272\163\303\255\164\166\303
\241\156\171\153\151\141\144\303\263\153\040\050\103\145\162\164
\151\146\151\143\141\164\151\157\156\040\123\145\162\166\151\143
\145\163\051\061\065\060\063\006\003\125\004\003\014\054\116\145
\164\114\157\143\153\040\101\162\141\156\171\040\050\103\154\141
\163\163\040\107\157\154\144\051\040\106\305\221\164\141\156\303
\272\163\303\255\164\166\303\241\156\171
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\006\111\101\054\344\000\020
END
CKA_VALUE MULTILINE_OCTAL
\060\202\004\025\060\202\002\375\240\003\002\001\002\002\006\111
\101\054\344\000\020\060\015\006\011\052\206\110\206\367\015\001
\001\013\005\000\060\201\247\061\013\060\011\006\003\125\004\006
\023\002\110\125\061\021\060\017\006\003\125\004\007\014\010\102
\165\144\141\160\145\163\164\061\025\060\023\006\003\125\004\012
\014\014\116\145\164\114\157\143\153\040\113\146\164\056\061\067
\060\065\006\003\125\004\013\014\056\124\141\156\303\272\163\303
\255\164\166\303\241\156\171\153\151\141\144\303\263\153\040\050
\103\145\162\164\151\146\151\143\141\164\151\157\156\040\123\145
\162\166\151\143\145\163\051\061\065\060\063\006\003\125\004\003
\014\054\116\145\164\114\157\143\153\040\101\162\141\156\171\040
\050\103\154\141\163\163\040\107\157\154\144\051\040\106\305\221
\164\141\156\303\272\163\303\255\164\166\303\241\156\171\060\036
\027\015\060\070\061\062\061\061\061\065\060\070\062\061\132\027
\015\062\070\061\062\060\066\061\065\060\070\062\061\132\060\201
\247\061\013\060\011\006\003\125\004\006\023\002\110\125\061\021
\060\017\006\003\125\004\007\014\010\102\165\144\141\160\145\163
\164\061\025\060\023\006\003\125\004\012\014\014\116\145\164\114
\157\143\153\040\113\146\164\056\061\067\060\065\006\003\125\004
\013\014\056\124\141\156\303\272\163\303\255\164\166\303\241\156
\171\153\151\141\144\303\263\153\040\050\103\145\162\164\151\146
\151\143\141\164\151\157\156\040\123\145\162\166\151\143\145\163
\051\061\065\060\063\006\003\125\004\003\014\054\116\145\164\114
\157\143\153\040\101\162\141\156\171\040\050\103\154\141\163\163
\040\107\157\154\144\051\040\106\305\221\164\141\156\303\272\163
```



\303\255\164\166\303\241\156\171\060\202\001\042\060\015\006\011  
\052\206\110\206\367\015\001\001\001\005\000\003\202\001\017\000  
\060\202\001\012\002\202\001\001\000\304\044\136\163\276\113\155  
\024\303\241\364\343\227\220\156\322\060\105\036\074\356\147\331  
\144\340\032\212\177\312\060\312\203\343\040\301\343\364\072\323  
\224\137\032\174\133\155\277\060\117\204\047\366\237\037\111\274  
\306\231\012\220\362\017\365\177\103\204\067\143\121\213\172\245  
\160\374\172\130\315\216\233\355\303\106\154\204\160\135\332\363  
\001\220\043\374\116\060\251\176\341\047\143\347\355\144\074\240  
\270\311\063\143\376\026\220\377\260\270\375\327\250\300\300\224  
\103\013\266\325\131\246\236\126\320\044\037\160\171\257\333\071  
\124\015\145\165\331\025\101\224\001\257\136\354\366\215\361\377  
\255\144\376\040\232\327\134\353\376\246\037\010\144\243\213\166  
\125\255\036\073\050\140\056\207\045\350\252\257\037\306\144\106  
\040\267\160\177\074\336\110\333\226\123\267\071\167\344\032\342  
\307\026\204\166\227\133\057\273\031\025\205\370\151\205\365\231  
\247\251\362\064\247\251\266\246\003\374\157\206\075\124\174\166  
\004\233\153\371\100\135\000\064\307\056\231\165\235\345\210\003  
\252\115\370\003\322\102\166\300\033\002\003\000\250\213\243\105  
\060\103\060\022\006\003\125\035\023\001\001\377\004\010\060\006  
\001\001\377\002\001\004\060\016\006\003\125\035\017\001\001\377  
\004\004\003\002\001\006\060\035\006\003\125\035\016\004\026\004  
\024\314\372\147\223\360\266\270\320\245\300\036\363\123\375\214  
\123\337\203\327\226\060\015\006\011\052\206\110\206\367\015\001  
\001\013\005\000\003\202\001\001\000\253\177\356\034\026\251\234  
\074\121\000\240\300\021\010\005\247\231\346\157\001\210\124\141  
\156\361\271\030\255\112\255\376\201\100\043\224\057\373\165\174  
\057\050\113\142\044\201\202\013\365\141\361\034\156\270\141\070  
\353\201\372\142\241\073\132\142\323\224\145\304\341\346\155\202  
\370\057\045\160\262\041\046\301\162\121\037\214\054\303\204\220  
\303\132\217\272\317\364\247\145\245\353\230\321\373\005\262\106  
\165\025\043\152\157\205\143\060\200\360\325\236\037\051\034\302  
\154\260\120\131\135\220\133\073\250\015\060\317\277\175\177\316  
\361\235\203\275\311\106\156\040\246\371\141\121\272\041\057\173  
\276\245\025\143\241\324\225\207\361\236\271\363\211\363\075\205  
\270\270\333\276\265\271\051\371\332\067\005\000\111\224\003\204  
\104\347\277\103\061\317\165\213\045\321\364\246\144\365\222\366  
\253\005\353\075\351\245\013\066\142\332\314\006\137\066\213\266  
\136\061\270\052\373\136\366\161\337\104\046\236\304\346\015\221  
\264\056\165\225\200\121\152\113\060\246\260\142\241\223\361\233  
\330\316\304\143\165\077\131\107\261

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "NetLock Arany (Class Gold) Ftanúsítvány"

```
# Issuer:
CN=NetLock Arany (Class Gold) F.tan..s..tv..ny,OU=Tan..s..tv..nykiad..k (Certification Services),O=NetLock
Kft.,L=Budapest,C=HU
# Serial Number:49:41:2c:e4:00:10
# Subject: CN=NetLock Arany (Class Gold) F.tan..s..tv..ny,OU=Tan..s..tv..nykiad..k (Certification
Services),O=NetLock Kft.,L=Budapest,C=HU
# Not Valid Before: Thu Dec 11 15:08:21 2008
# Not Valid After : Wed Dec 06 15:08:21 2028
# Fingerprint (SHA-256):
6C:61:DA:C3:A2:DE:F0:31:50:6B:E0:36:D2:A6:FE:40:19:94:FB:D1:3D:F9:C8:D4:66:59:92:74:C4:46:EC:98
# Fingerprint (SHA1): 06:08:3F:59:3F:15:A1:04:A0:69:A4:6B:A9:03:D0:06:B7:97:09:91
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "NetLock Arany (Class Gold) Ftanúsítvány"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\006\010\077\131\077\025\241\004\240\151\244\153\251\003\320\006
\267\227\011\221
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\305\241\267\377\163\335\326\327\064\062\030\337\374\074\255\210
END
CKA_ISSUER
MULTILINE_OCTAL
\060\201\247\061\013\060\011\006\003\125\004\006\023\002\110\125
\061\021\060\017\006\003\125\004\007\014\010\102\165\144\141\160
\145\163\164\061\025\060\023\006\003\125\004\012\014\014\116\145
\164\114\157\143\153\040\113\146\164\056\061\067\060\065\006\003
\125\004\013\014\056\124\141\156\303\272\163\303\255\164\166\303
\241\156\171\153\151\141\144\303\263\153\040\050\103\145\162\164
\151\146\151\143\141\164\151\157\156\040\123\145\162\166\151\143
\145\163\051\061\065\060\063\006\003\125\004\003\014\054\116\145
\164\114\157\143\153\040\101\162\141\156\171\040\050\103\154\141
\163\163\040\107\157\154\144\051\040\106\305\221\164\141\156\303
\272\163\303\255\164\166\303\241\156\171
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\006\111\101\054\344\000\020
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED
CK_BBOOL CK_FALSE

#
# Certificate "Hongkong Post Root CA 1"
```

```

#
# Issuer: CN=Hongkong Post Root CA 1,O=Hongkong Post,C=HK
# Serial Number: 1000 (0x3e8)
# Subject: CN=Hongkong Post Root CA 1,O=Hongkong Post,C=HK
# Not Valid Before: Thu May 15 05:13:14 2003
# Not Valid After : Mon May 15 04:52:29 2023
# Fingerprint (SHA-256):
F9:E6:7D:33:6C:51:00:2A:C0:54:C6:32:02:2D:66:DD:A2:E7:E3:FF:F1:0A:D0:61:ED:31:D8:BB:B4:10:CF:B2
# Fingerprint (SHA1): D6:DA:A8:20:8D:09:D2:15:4D:24:B5:2F:CB:34:6E:B2:58:B2:8A:58
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Hongkong Post Root CA 1"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\107\061\013\060\011\006\003\125\004\006\023\002\110\113\061
\026\060\024\006\003\125\004\012\023\015\110\157\156\147\153\157
\156\147\040\120\157\163\164\061\040\060\036\006\003\125\004\003
\023\027\110\157\156\147\153\157\156\147\040\120\157\163\164\040
\122\157\157\164\040\103\101\040\061
END
CKA_ID
UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\107\061\013\060\011\006\003\125\004\006\023\002\110\113\061
\026\060\024\006\003\125\004\012\023\015\110\157\156\147\153\157
\156\147\040\120\157\163\164\061\040\060\036\006\003\125\004\003
\023\027\110\157\156\147\153\157\156\147\040\120\157\163\164\040
\122\157\157\164\040\103\101\040\061
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\002\003\350
END
CKA_VALUE MULTILINE_OCTAL
\060\202\003\060\060\202\002\030\240\003\002\001\002\002\002\003
\350\060\015\006\011\052\206\110\206\367\015\001\001\005\005\000
\060\107\061\013\060\011\006\003\125\004\006\023\002\110\113\061
\026\060\024\006\003\125\004\012\023\015\110\157\156\147\153\157
\156\147\040\120\157\163\164\061\040\060\036\006\003\125\004\003
\023\027\110\157\156\147\153\157\156\147\040\120\157\163\164\040
\122\157\157\164\040\103\101\040\061\060\036\027\015\060\063\060\065
\065\061\065\060\065\061\063\061\064\132\027\015\062\063\060\065
\061\065\060\064\065\062\062\071\132\060\107\061\013\060\011\006
\003\125\004\006\023\002\110\113\061\026\060\024\006\003\125\004
\012\023\015\110\157\156\147\153\157\156\147\040\120\157\163\164
\061\040\060\036\006\003\125\004\003\023\027\110\157\156\147\153
\157\156\147\040\120\157\163\164\040\122\157\157\164\040\103\101

```

\040\061\060\202\001\042\060\015\006\011\052\206\110\206\367\015  
\001\001\001\005\000\003\202\001\017\000\060\202\001\012\002\202  
\001\001\000\254\377\070\266\351\146\002\111\343\242\264\341\220  
\371\100\217\171\371\342\275\171\376\002\275\356\044\222\035\042  
\366\332\205\162\151\376\327\077\011\324\335\221\265\002\234\320  
\215\132\341\125\303\120\206\271\051\046\302\343\331\240\361\151  
\003\050\040\200\105\042\055\126\247\073\124\225\126\042\131\037  
\050\337\037\040\075\155\242\066\276\043\240\261\156\265\261\047  
\077\071\123\011\352\253\152\350\164\262\302\145\134\216\277\174  
\303\170\204\315\236\026\374\365\056\117\040\052\010\237\167\363  
\305\036\304\232\122\146\036\110\136\343\020\006\217\042\230\341  
\145\216\033\135\043\146\073\270\245\062\121\310\206\252\241\251  
\236\177\166\224\302\246\154\267\101\360\325\310\006\070\346\324  
\014\342\363\073\114\155\120\214\304\203\047\301\023\204\131\075  
\236\165\164\266\330\002\136\072\220\172\300\102\066\162\354\152  
\115\334\357\304\000\337\023\030\127\137\046\170\310\326\012\171  
\167\277\367\257\267\166\271\245\013\204\027\135\020\352\157\341  
\253\225\021\137\155\074\243\134\115\203\133\362\263\031\212\200  
\213\013\207\002\003\001\000\001\243\046\060\044\060\022\006\003  
\125\035\023\001\001\377\004\010\060\006\001\001\377\002\001\003  
\060\016\006\003\125\035\017\001\001\377\004\004\003\002\001\306  
\060\015\006\011\052\206\110\206\367\015\001\001\005\005\000\003  
\202\001\001\000\016\106\325\074\256\342\207\331\136\201\213\002  
\230\101\010\214\114\274\332\333\356\047\033\202\347\152\105\354  
\026\213\117\205\240\363\262\160\275\132\226\272\312\156\155\356  
\106\213\156\347\052\056\226\263\031\063\353\264\237\250\262\067  
\356\230\250\227\266\056\266\147\047\324\246\111\375\034\223\145  
\166\236\102\057\334\042\154\232\117\362\132\025\071\261\161\327  
\053\121\350\155\034\230\300\331\052\364\241\202\173\325\311\101  
\242\043\001\164\070\125\213\017\271\056\147\242\040\004\067\332  
\234\013\323\027\041\340\217\227\171\064\157\204\110\002\040\063  
\033\346\064\104\237\221\160\364\200\136\204\103\302\051\322\154  
\022\024\344\141\215\254\020\220\236\204\120\273\360\226\157\105  
\237\212\363\312\154\117\372\021\072\025\025\106\303\315\037\203  
\133\055\101\022\355\120\147\101\023\075\041\253\224\212\252\116  
\174\301\261\373\247\326\265\047\057\227\253\156\340\035\342\321  
\034\054\037\104\342\374\276\221\241\234\373\326\051\123\163\206  
\237\123\330\103\016\135\326\143\202\161\035\200\164\312\366\342  
\002\153\331\132

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "Hongkong Post Root CA

1"

# Issuer: CN=Hongkong Post Root CA 1,O=Hongkong Post,C=HK

```

# Serial Number: 1000 (0x3e8)
# Subject: CN=Hongkong Post Root CA 1,O=Hongkong Post,C=HK
# Not Valid Before: Thu May 15 05:13:14 2003
# Not Valid After : Mon May 15 04:52:29 2023
# Fingerprint (SHA-256):
F9:E6:7D:33:6C:51:00:2A:C0:54:C6:32:02:2D:66:DD:A2:E7:E3:FF:F1:0A:D0:61:ED:31:D8:BB:B4:10:CF:B2
# Fingerprint (SHA1): D6:DA:A8:20:8D:09:D2:15:4D:24:B5:2F:CB:34:6E:B2:58:B2:8A:58
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Hongkong Post Root CA 1"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\326\332\250\040\215\011\322\025\115\044\265\057\313\064\156\262
\130\262\212\130
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\250\015\157\071\170\271\103\155\167\102\155\230\132\314\043\312
END
CKA_ISSUER MULTILINE_OCTAL
\060\107\061\013\060\011\006\003\125\004\006\023\002\110\113\061
\026\060\024\006\003\125\004\012\023\015\110\157\156\147\153\157
\156\147\040\120\157\163\164\061\040\060\036\006\003\125\004\003
\023\027\110\157\156\147\153\157\156\147\040\120\157\163\164\040
\122\157\157\164\040\103\101\040\061
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\002\003\350
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "SecureSign RootCA11"
#
# Issuer: CN=SecureSign RootCA11,O="Japan Certification Services, Inc.",C=JP
# Serial Number: 1 (0x1)
# Subject: CN=SecureSign RootCA11,O="Japan Certification Services, Inc.",C=JP
# Not Valid Before: Wed Apr 08 04:56:47 2009
# Not Valid After : Sun Apr 08 04:56:47 2029
# Fingerprint (SHA-256):
BF:0F:EE:FB:9E:3A:58:1A:D5:F9:E9:DB:75:89:98:57:43:D2:61:08:5C:4D:31:4F:6F:5D:72:59:AA:42:16:12
# Fingerprint (SHA1): 3B:C4:9F:48:F8:F3:73:A0:9C:1E:BD:F8:5B:B1:C3:65:C7:D8:11:B3
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN

```

```
CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "SecureSign RootCA11"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\130\061\013\060\011\006\003\125\004\006\023\002\112\120\061
\053\060\051\006\003\125\004\012\023\042\112\141\160\141\156\040
\103\145\162\164\151\146\151\143\141\164\151\157\156\040\123\145
\162\166\151\143\145\163\054\040\111\156\143\056\061\034\060\032
\006\003\125\004\003\023\023\123\145\143\165\162\145\123\151\147
\156\040\122\157\157\164\103\101\061\061
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\130\061\013\060\011\006\003\125\004\006\023\002\112\120\061
\053\060\051\006\003\125\004\012\023\042\112\141\160\141\156\040
\103\145\162\164\151\146\151\143\141\164\151\157\156\040\123\145
\162\166\151\143\145\163\054\040\111\156\143\056\061\034\060\032
\006\003\125\004\003\023\023\123\145\143\165\162\145\123\151\147
\156\040\122\157\157\164\103\101\061\061
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\001\001
END
CKA_VALUE MULTILINE_OCTAL
\060\202\003\155\060\202\002\125\240\003\002\001\002\002\001\001
\060\015\006\011\052\206\110\206\367\015\001\001\005\005\000\060
\130\061\013\060\011\006\003\125\004\006\023\002\112\120\061\053
\060\051\006\003\125\004\012\023\042\112\141\160\141\156\040\103
\145\162\164\151\146\151\143\141\164\151\157\156\040\123\145\162
\166\151\143\145\163\054\040\111\156\143\056\061\034\060\032\006
\003\125\004\003\023\023\123\145\143\165\162\145\123\151\147\156
\040\122\157\157\164\103\101\061\061\060\036\027\015\060\071\060
\064\060\070\060\064\065\066\064\067\132\027\015\062\071\060\064
\060\070\060\064\065\066\064\067\132\060\130\061\013\060\011\006
\003\125\004\006\023\002\112\120\061\053\060\051\006\003\125\004
\012\023\042\112\141\160\141\156\040\103\145\162\164\151\146\151
\143\141\164\151\157\156\040\123\145\162\166\151\143\145\163\054
\040\111\156\143\056\061\034\060\032\006\003\125\004\003\023\023
\123\145\143\165\162\145\123\151\147\156\040\122\157\157\164\103
\101\061\061\060\202\001\042\060\015\006\011\052\206\110\206\367
\015\001\001\001\005\000\003\202\001\017\000\060\202\001\012\002
\202\001\001\000\375\167\252\245\034\220\005\073\313\114\233\063
\213\132\024\105\244\347\220\026\321\337\127\322\041\020\244\027
\375\337\254\326\037\247\344\333\174\367\354\337\270\003\332\224
\130\375\135\162\174\214\077\137\001\147\164\025\226\343\002\074
```

\207\333\256\313\001\216\302\363\146\306\205\105\364\002\306\072  
\265\142\262\257\372\234\277\244\346\324\200\060\230\363\015\266  
\223\217\251\324\330\066\362\260\374\212\312\054\241\025\063\225  
\061\332\300\033\362\356\142\231\206\143\077\277\335\223\052\203  
\250\166\271\023\037\267\316\116\102\205\217\042\347\056\032\362  
\225\011\262\005\265\104\116\167\241\040\275\251\362\116\012\175  
\120\255\365\005\015\105\117\106\161\375\050\076\123\373\004\330  
\055\327\145\035\112\033\372\317\073\260\061\232\065\156\310\213  
\006\323\000\221\362\224\010\145\114\261\064\006\000\172\211\342  
\360\307\003\131\317\325\326\350\247\062\263\346\230\100\206\305  
\315\047\022\213\314\173\316\267\021\074\142\140\007\043\076\053  
\100\156\224\200\011\155\266\263\157\167\157\065\010\120\373\002  
\207\305\076\211\002\003\001\000\001\243\102\060\100\060\035\006  
\003\125\035\016\004\026\004\024\133\370\115\117\262\245\206\324  
\072\322\361\143\232\240\276\011\366\127\267\336\060\016\006\003  
\125\035\017\001\001\377\004\004\003\002\001\006\060\017\006\003  
\125\035\023\001\001\377\004\005\060\003\001\001\377\060\015\006  
\011\052\206\110\206\367\015\001\001\005\005\000\003\202\001\001  
\000\240\241\070\026\146\056\247\126\037\041\234\006\372\035\355  
\271\042\305\070\046\330\116\117\354\243\177\171\336\106\041\241  
\207\167\217\007\010\232\262\244\305\257\017\062\230\013\174\146  
\051\266\233\175\045\122\111\103\253\114\056\053\156\172\160\257  
\026\016\343\002\154\373\102\346\030\235\105\330\125\310\350\073  
\335\347\341\364\056\013\034\064\134\154\130\112\373\214\210\120  
\137\225\034\277\355\253\042\265\145\263\205\272\236\017\270\255  
\345\172\033\212\120\072\035\275\015\274\173\124\120\013\271\102  
\257\125\240\030\201\255\145\231\357\276\344\234\277\304\205\253  
\101\262\124\157\334\045\315\355\170\342\216\014\215\011\111\335  
\143\173\132\151\226\002\041\250\275\122\131\351\175\065\313\310  
\122\312\177\201\376\331\153\323\367\021\355\045\337\370\347\371  
\244\372\162\227\204\123\015\245\320\062\030\121\166\131\024\154  
\017\353\354\137\200\214\165\103\203\303\205\230\377\114\236\055  
\015\344\167\203\223\116\265\226\007\213\050\023\233\214\031\215  
\101\047\111\100\356\336\346\043\104\071\334\241\042\326\272\003  
\362

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "SecureSign RootCA11"

# Issuer: CN=SecureSign RootCA11,O="Japan Certification Services, Inc.",C=JP

# Serial Number: 1 (0x1)

# Subject: CN=SecureSign RootCA11,O="Japan Certification Services, Inc.",C=JP

#

Not Valid Before: Wed Apr 08 04:56:47 2009

# Not Valid After : Sun Apr 08 04:56:47 2029

```

# Fingerprint (SHA-256):
BF:0F:EE:FB:9E:3A:58:1A:D5:F9:E9:DB:75:89:98:57:43:D2:61:08:5C:4D:31:4F:6F:5D:72:59:AA:42:16:12
# Fingerprint (SHA1): 3B:C4:9F:48:F8:F3:73:A0:9C:1E:BD:F8:5B:B1:C3:65:C7:D8:11:B3
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "SecureSign RootCA11"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\073\304\237\110\370\363\163\240\234\036\275\370\133\261\303\145
\307\330\021\263
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\267\122\164\342\222\264\200\223\362\165\344\314\327\362\352\046
END
CKA_ISSUER MULTILINE_OCTAL
\060\130\061\013\060\011\006\003\125\004\006\023\002\112\120\061
\053\060\051\006\003\125\004\012\023\042\112\141\160\141\156\040
\103\145\162\164\151\146\151\143\141\164\151\157\156\040\123\145
\162\166\151\143\145\163\054\040\111\156\143\056\061\034\060\032
\006\003\125\004\003\023\023\123\145\143\165\162\145\123\151\147
\156\040\122\157\157\164\103\101\061\061
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\001\001
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "Microsec e-Szigno Root CA 2009"
#
# Issuer: E=info@e-szigno.hu,CN=Microsec e-Szigno Root CA 2009,O=Microsec Ltd.,L=Budapest,C=HU
# Serial Number:00:c2:7e:43:04:4e:47:3f:19
# Subject: E=info@e-szigno.hu,CN=Microsec e-Szigno Root CA 2009,O=Microsec Ltd.,L=Budapest,C=HU
# Not Valid Before: Tue Jun 16 11:30:18 2009
# Not Valid After : Sun Dec 30 11:30:18 2029
# Fingerprint (SHA-256):
3C:5F:81:FE:A5:FA:B8:2C:64:BF:A2:EA:EC:AF:CD:E8:E0:77:FC:86:20:A7:CA:E5:37:16:3D:F3:6E:DB:F3:78
# Fingerprint (SHA1): 89:DF:74:FE:5C:F4:0F:4A:80:F9:E3:37:7D:54:DA:91:E1:01:31:8E
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE
CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE

```



```
CKA_LABEL UTF8 "Microsec e-Szigno Root CA 2009"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\201\202\061\013\060\011\006\003\125\004\006\023\002\110\125
\061\021\060\017\006\003\125\004\007\014\010\102\165\144\141\160
\145\163\164\061\026\060\024\006\003\125\004\012\014\015\115\151
\143\162\157\163\145\143\040\114\164\144\056\061\047\060\045\006
\003\125\004\003\014\036\115\151\143\162\157\163\145\143\040\145
\055\123\172\151\147\156\157\040\122\157\157\164\040\103\101\040
\062\060\060\071\061\037\060\035\006\011\052\206\110\206\367\015
\001\011\001\026\020\151\156\146\157\100\145\055\163\172\151\147
\156\157\056\150\165
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\201\202\061\013\060\011\006\003\125\004\006\023\002\110\125
\061\021\060\017\006\003\125\004\007\014\010\102\165\144\141\160
\145\163\164\061\026\060\024\006\003\125\004\012\014\015\115\151
\143\162\157\163\145\143\040\114\164\144\056\061\047\060\045\006
\003\125\004\003\014\036\115\151\143\162\157\163\145\143\040\145
\055\123\172\151\147\156\157\040\122\157\157\164\040\103\101\040
\062\060\060\071\061\037\060\035\006\011\052\206\110\206\367\015
\001\011\001\026\020\151\156\146\157\100\145\055\163\172\151\147
\156\157\056\150\165
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\011\000\302\176\103\004\116\107\077\031
END
CKA_VALUE MULTILINE_OCTAL
\060\202\004\012\060\202\002\362\240\003\002\001\002\002\011\000
\302\176\103\004\116\107\077\031\060\015\006\011\052\206\110\206
\367\015\001\001\013\005\000\060\201\202\061\013\060\011\006\003
\125\004\006\023\002\110\125\061\021\060\017\006\003\125\004\007
\014\010\102\165\144\141\160\145\163\164\061\026\060\024\006\003
\125\004\012\014\015\115\151\143\162\157\163\145\143\040\114\164
\144\056\061\047\060\045\006\003\125\004\003\014\036\115\151\143
\162\157\163\145\143\040\145\055\123\172\151\147\156\157\040\122
\157\157\164\040\103\101\040\062\060\060\071\061\037\060\035\006
\011\052\206\110\206\367\015\001\011\001\026\020\151\156\146\157
\100\145\055\163\172\151\147\156\157\056\150\165\060\036\027\015
\060\071\060\066\061\066\061\061\063\060\061\070\132\027\015\062
\071\061\062\063\060\061\061\063\060\061\070\132\060\201\202\061
\013\060\011\006\003\125\004\006\023\002\110\125\061\021\060\017
\006\003\125\004\007\014\010\102\165\144\141\160\145\163\164\061
\026\060\024\006\003\125\004\012\014\015\115\151\143\162\157\163
\145\143\040\114\164\144\056\061\047\060\045\006\003\125\004\003
\014\036\115\151\143\162\157\163\145\143\040\145\055\123\172\151
```

\147\156\157\040\122\157\157\164\040\103\101\040\062\060\060\071  
\061\037\060\035\006\011\052\206\110\206\367\015\001\011\001\026  
\020\151\156\146\157\100\145\055\163\172\151\147\156\157\056\150  
\165\060\202\001\042\060\015\006\011\052\206\110\206\367\015\001  
\001\001\005\000\003\202\001\017\000\060\202\001\012\002\202\001  
\001\000\351\370\217\363\143\255\332\206\330\247\340\102\373\317  
\221\336\246\046\370\231\245\143\160\255\233\256\312\063\100\175  
\155\226\156\241\016\104\356\341\023\235\224\102\122\232\275\165  
\205\164\054\250\016\035\223\266\030\267\214\054\250\317\373\134  
\161\271\332\354\376\350\176\217\344\057\035\262\250\165\207\330  
\267\241\345\073\317\231\112\106\320\203\031\175\300\241\022\034  
\225\155\112\364\330\307\245\115\063\056\205\071\100\165\176\024  
\174\200\022\230\120\307\101\147\270\240\200\141\124\246\154\116  
\037\340\235\016\007\351\311\272\063\347\376\300\125\050\054\002  
\200\247\031\365\236\334\125\123\003\227\173\007\110\377\231\373  
\067\212\044\304\131\314\120\020\143\216\252\251\032\260\204\032  
\206\371\137\273\261\120\156\244\321\012\314\325\161\176\037\247  
\033\174\365\123\156\042\137\313\053\346\324\174\135\256\326\302  
\306\114\345\005\001\331\355\127\374\301\043\171\374\372\310\044  
\203\225\363\265\152\121\001\320\167\326\351\022\241\371\032\203  
\373\202\033\271\260\227\364\166\006\063\103\111\240\377\013\265  
\372\265\002\003\001\000\001\243\201\200\060\176\060\017\006\003  
\125\035\023\001\001\377\004\005\060\003\001\001\377\060\016\006  
\003\125\035\017\001\001\377\004\004\003\002\001\006\060\035\006  
\003\125\035\016\004\026\004\024\313\017\306\337\102\103\314\075  
\313\265\110\043\241\032\172\246\052\273\064\150\060\037\006\003  
\125\035\043\004\030\060\026\200\024\313\017\306\337\102\103\314  
\075\313\265\110\043\241\032\172\246\052\273\064\150\060\033\006  
\003\125\035\021\004\024\060\022\201\020\151\156\146\157\100\145  
\055\163\172\151\147\156\157\056\150\165\060\015\006\011\052\206  
\110\206\367\015\001\001\013\005\000\003\202\001\001\000\311\321  
\016\136\056\325\314\263\174\076\313\374\075\377\015\050\225\223  
\004\310\277\332\315\171\270\103\220\360\244\276\357\362\357\041  
\230\274\324\324\135\006\366\356\102\354\060\154\240\252\251\312  
\361\257\212\372\077\013\163\152\076\352\056\100\176\037\256\124  
\141\171\353\056\010\067\327\043\363\214\237\276\035\261\341\244  
\165\333\240\342\124\024\261\272\034\051\244\030\366\022\272\242  
\024\024\343\061\065\310\100\377\267\340\005\166\127\301\034\131  
\362\370\277\344\355\045\142\134\204\360\176\176\037\263\276\371  
\267\041\021\314\003\001\126\160\247\020\222\036\033\064\201\036  
\255\234\032\303\004\074\355\002\141\326\036\006\363\137\072\207  
\362\053\361\105\207\345\075\254\321\307\127\204\275\153\256\334  
\330\371\266\033\142\160\013\075\066\311\102\362\062\327\172\141  
\346\322\333\075\317\310\251\311\233\334\333\130\104\327\157\070  
\257\177\170\323\243\255\032\165\272\034\301\066\174\217\036\155  
\034\303\165\106\256\065\005\246\366\134\075\041\356\126\360\311  
\202\042\055\172\124\253\160\303\175\042\145\202\160\226

END

```

CKA_NSS_Mozilla_CA_POLICY
CK_BBOOL CK_TRUE
CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE
CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

# Trust for "Microsec e-Szigno Root CA 2009"
# Issuer: E=info@e-szigno.hu,CN=Microsec e-Szigno Root CA 2009,O=Microsec Ltd.,L=Budapest,C=HU
# Serial Number:00:c2:7e:43:04:4e:47:3f:19
# Subject: E=info@e-szigno.hu,CN=Microsec
e-Szigno Root CA 2009,O=Microsec Ltd.,L=Budapest,C=HU
# Not Valid Before: Tue Jun 16 11:30:18 2009
# Not Valid After : Sun Dec 30 11:30:18 2029
# Fingerprint (SHA-256):
3C:5F:81:FE:A5:FA:B8:2C:64:BF:A2:EA:EC:AF:CD:E8:E0:77:FC:86:20:A7:CA:E5:37:16:3D:F3:6E:DB:F3:78
# Fingerprint (SHA1): 89:DF:74:FE:5C:F4:0F:4A:80:F9:E3:37:7D:54:DA:91:E1:01:31:8E
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Microsec e-Szigno Root CA 2009"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\211\337\164\376\134\364\017\112\200\371\343\067\175\124\332\221
\341\001\061\216
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\370\111\364\003\274\104\055\203\276\110\151\175\051\144\374\261
END
CKA_ISSUER MULTILINE_OCTAL
\060\201\202\061\013\060\011\006\003\125\004\006\023\002\110\125
\061\021\060\017\006\003\125\004\007\014\010\102\165\144\141\160
\145\163\164\061\026\060\024\006\003\125\004\012\014\015\115\151
\143\162\157\163\145\143\040\114\164\144\056\061\047\060\045\006
\003\125\004\003\014\036\115\151\143\162\157\163\145\143\040\145
\055\123\172\151\147\156\157\040\122\157\157\164\040\103\101\040
\062\060\060\071\061\037\060\035\006\011\052\206\110\206\367\015
\001\011\001\026\020\151\156\146\157\100\145\055\163\172\151\147
\156\157\056\150\165
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\011\000\302\176\103\004\116\107\077\031
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#

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```
# Certificate "GlobalSign Root CA - R3"
#
# Issuer: CN=GlobalSign,O=GlobalSign,OU=GlobalSign Root CA - R3
# Serial Number:04:00:00:00:00:01:21:58:53:08:a2
# Subject: CN=GlobalSign,O=GlobalSign,OU=GlobalSign Root CA - R3
# Not Valid Before: Wed Mar 18 10:00:00 2009
# Not Valid After : Sun Mar 18 10:00:00 2029
# Fingerprint (SHA-256):
CB:B5:22:D7:B7:F1:27:AD:6A:01:13:86:5B:DF:1C:D4:10:2E:7D:07:59:AF:63:5A:7C:F4:72:0D:C9:63:C5:3B
#
Fingerprint (SHA1): D6:9B:56:11:48:F0:1C:77:C5:45:78:C1:09:26:DF:5B:85:69:76:AD
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "GlobalSign Root CA - R3"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\114\061\040\060\036\006\003\125\004\013\023\027\107\154\157
\142\141\154\123\151\147\156\040\122\157\157\164\040\103\101\040
\055\040\122\063\061\023\060\021\006\003\125\004\012\023\012\107
\154\157\142\141\154\123\151\147\156\061\023\060\021\006\003\125
\004\003\023\012\107\154\157\142\141\154\123\151\147\156
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\114\061\040\060\036\006\003\125\004\013\023\027\107\154\157
\142\141\154\123\151\147\156\040\122\157\157\164\040\103\101\040
\055\040\122\063\061\023\060\021\006\003\125\004\012\023\012\107
\154\157\142\141\154\123\151\147\156\061\023\060\021\006\003\125
\004\003\023\012\107\154\157\142\141\154\123\151\147\156
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\013\004\000\000\000\000\001\041\130\123\010\242
END
CKA_VALUE MULTILINE_OCTAL
\060\202\003\137\060\202\002\107\240\003\002\001\002\002\013\004
\000\000\000\000\001\041\130\123\010\242\060\015\006\011\052\206
\110\206\367\015\001\001\013\005\000\060\114\061\040\060\036\006
\003\125\004\013\023\027\107\154\157\142\141\154\123\151\147\156
\040\122\157\157\164\040\103\101\040\055\040\122\063\061\023\060
\021\006\003\125\004\012\023\012\107\154\157\142\141\154\123\151
\147\156\061\023\060\021\006\003\125\004\003\023\012\107\154\157
\142\141\154\123\151\147\156\060\036\027\015\060\071\060\063\061
\070\061\060\060\060\060\060\132\027\015\062\071\060\063\061\070
\061\060\060\060\060\060\132\060\114\061\040\060\036\006\003\125
\004\013\023\027\107\154\157\142\141\154\123\151\147\156\040\122
```

\157\157\164\040\103\101\040\055\040\122\063\061\023\060\021\006  
\003\125\004\012\023\012\107\154\157\142\141\154\123\151\147\156  
\061\023\060\021\006\003\125\004\003\023\012\107\154\157\142\141  
\154\123\151\147\156\060\202\001\042\060\015\006\011\052\206\110  
\206\367\015\001\001\001\005\000\003\202\001\017\000\060\202\001  
\012\002\202\001\001\000\314\045\166\220\171\006\170\042\026\365  
\300\203\266\204\312\050\236\375\005\166\021\305\255\210\162\374  
\106\002\103\307\262\212\235\004\137\044\313\056\113\341\140\202  
\106\341\122\253\014\201\107\160\154\335\144\321\353\365\054\243  
\017\202\075\014\053\256\227\327\266\024\206\020\171\273\073\023  
\200\167\214\010\341\111\322\152\142\057\037\136\372\226\150\337  
\211\047\225\070\237\006\327\076\311\313\046\131\015\163\336\260  
\310\351\046\016\203\025\306\357\133\213\322\004\140\312\111\246  
\050\366\151\073\366\313\310\050\221\345\235\212\141\127\067\254  
\164\024\334\164\340\072\356\162\057\056\234\373\320\273\277\365  
\075\000\341\006\063\350\202\053\256\123\246\072\026\163\214\335  
\101\016\040\072\300\264\247\241\351\262\117\220\056\062\140\351  
\127\313\271\004\222\150\150\345\070\046\140\165\262\237\167\377  
\221\024\357\256\040\111\374\255\100\025\110\321\002\061\141\031  
\136\270\227\357\255\167\267\144\232\172\277\137\301\023\357\233  
\142\373\015\154\340\124\151\026\251\003\332\156\351\203\223\161  
\166\306\151\205\202\027\002\003\001\000\001\243\102\060\100\060  
\016\006\003\125\035\017\001\001\377\004\004\003\002\001\006\060  
\017\006\003\125\035\023\001\001\377\004\005\060\003\001\001\377  
\060\035\006\003\125\035\016\004\026\004\024\217\360\113\177\250  
\056\105\044\256\115\120\372\143\232\213\336\342\335\033\274\060  
\015\006\011\052\206\110\206\367\015\001\001\013\005\000\003\202  
\001\001\000\113\100\333\300\120\252\376\310\014\357\367\226\124  
\105\111\273\226\000\011\101\254\263\023\206\206\050\007\063\312  
\153\346\164\271\272\000\055\256\244\012\323\365\361\361\017\212  
\277\163\147\112\203\307\104\173\170\340\257\156\154\157\003\051  
\216\063\071\105\303\216\344\271\127\154\252\374\022\226\354\123  
\306\055\344\044\154\271\224\143\373\334\123\150\147\126\076\203  
\270\317\065\041\303\311\150\376\316\332\302\123\252\314\220\212  
\351\360\135\106\214\225\335\172\130\050\032\057\035\336\315\000  
\067\101\217\355\104\155\327\123\050\227\176\363\147\004\036\025  
\327\212\226\264\323\336\114\047\244\114\033\163\163\166\364\027  
\231\302\037\172\016\343\055\010\255\012\034\054\377\074\253\125  
\016\017\221\176\066\353\303\127\111\276\341\056\055\174\140\213  
\303\101\121\023\043\235\316\367\062\153\224\001\250\231\347\054  
\063\037\072\073\045\322\206\100\316\073\054\206\170\311\141\057  
\024\272\356\333\125\157\337\204\356\005\011\115\275\050\330\162  
\316\323\142\120\145\036\353\222\227\203\061\331\263\265\312\107  
\130\077\137

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "GlobalSign Root CA - R3"

# Issuer: CN=GlobalSign,O=GlobalSign,OU=GlobalSign Root CA - R3

# Serial Number:04:00:00:00:01:21:58:53:08:a2

#

Subject: CN=GlobalSign,O=GlobalSign,OU=GlobalSign Root CA - R3

# Not Valid Before: Wed Mar 18 10:00:00 2009

# Not Valid After : Sun Mar 18 10:00:00 2029

# Fingerprint (SHA-256):

CB:B5:22:D7:B7:F1:27:AD:6A:01:13:86:5B:DF:1C:D4:10:2E:7D:07:59:AF:63:5A:7C:F4:72:0D:C9:63:C5:3B

# Fingerprint (SHA1): D6:9B:56:11:48:F0:1C:77:C5:45:78:C1:09:26:DF:5B:85:69:76:AD

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "GlobalSign Root CA - R3"

CKA\_CERT\_SHA1\_HASH MULTILINE\_OCTAL

\326\233\126\021\110\360\034\167\305\105\170\301\011\046\337\133

\205\151\166\255

END

CKA\_CERT\_MD5\_HASH MULTILINE\_OCTAL

\305\337\270\111\312\005\023\125\356\055\272\032\303\076\260\050

END

CKA\_ISSUER MULTILINE\_OCTAL

\060\114\061\040\060\036\006\003\125\004\013\023\027\107\154\157

\142\141\154\123\151\147\156\040\122\157\157\164\040\103\101\040

\055\040\122\063\061\023\060\021\006\003\125\004\012\023\012\107

\154\157\142\141\154\123\151\147\156\061\023\060\021\006\003\125

\004\003\023\012\107\154\157\142\141\154\123\151\147\156

END

CKA\_SERIAL\_NUMBER

MULTILINE\_OCTAL

\002\013\004\000\000\000\000\001\041\130\123\010\242

END

CKA\_TRUST\_SERVER\_AUTH CK\_TRUST CKT\_NSS\_TRUSTED\_DELEGATOR

CKA\_TRUST\_EMAIL\_PROTECTION CK\_TRUST CKT\_NSS\_TRUSTED\_DELEGATOR

CKA\_TRUST\_CODE\_SIGNING CK\_TRUST CKT\_NSS\_MUST\_VERIFY\_TRUST

CKA\_TRUST\_STEP\_UP\_APPROVED CK\_BBOOL CK\_FALSE

#

# Certificate "Autoridad de Certificacion Firmaprofesional CIF A62634068"

#

# Issuer: CN=Autoridad de Certificacion Firmaprofesional CIF A62634068,C=ES

# Serial Number:53:ec:3b:ee:fb:b2:48:5f

# Subject: CN=Autoridad de Certificacion Firmaprofesional CIF A62634068,C=ES

# Not Valid Before: Wed May 20 08:38:15 2009

# Not Valid After : Tue Dec 31 08:38:15 2030

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# Fingerprint (SHA-256):
04:04:80:28:BF:1F:28:64:D4:8F:9A:D4:D8:32:94:36:6A:82:88:56:55:3F:3B:14:30:3F:90:14:7F:5D:40:EF
# Fingerprint (SHA1): AE:C5:FB:3F:C8:E1:BF:C4:E5:4F:03:07:5A:9A:E8:00:B7:F7:B6:FA
CKA_CLASS
CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Autoridad de Certificacion Firmaprofesional CIF A62634068"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\121\061\013\060\011\006\003\125\004\006\023\002\105\123\061
\102\060\100\006\003\125\004\003\014\071\101\165\164\157\162\151
\144\141\144\040\144\145\040\103\145\162\164\151\146\151\143\141
\143\151\157\156\040\106\151\162\155\141\160\162\157\146\145\163
\151\157\156\141\154\040\103\111\106\040\101\066\062\066\063\064
\060\066\070
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\121\061\013\060\011\006\003\125\004\006\023\002\105\123\061
\102\060\100\006\003\125\004\003\014\071\101\165\164\157\162\151
\144\141\144\040\144\145\040\103\145\162\164\151\146\151\143\141
\143\151\157\156\040\106\151\162\155\141\160\162\157\146\145\163
\151\157\156\141\154\040\103\111\106\040\101\066\062\066\063\064
\060\066\070
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\010\123\354\073\356\373\262\110\137
END
CKA_VALUE MULTILINE_OCTAL
\060\202\006\024\060\202\003\374\240\003\002\001\002\002\010\123
\354\073\356\373\262\110\137\060\015\006\011\052\206\110\206\367
\015\001\001\005\005\000\060\121\061\013\060\011\006\003\125\004
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CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "Autoridad de Certificacion Firmaprofesional CIF A62634068"

# Issuer: CN=Autoridad de Certificacion Firmaprofesional CIF A62634068,C=ES

# Serial Number:53:ec:3b:ee:fb:b2:48:5f

# Subject: CN=Autoridad de Certificacion Firmaprofesional CIF A62634068,C=ES

# Not Valid Before: Wed May 20 08:38:15 2009

# Not Valid After : Tue Dec 31 08:38:15 2030

# Fingerprint (SHA-256):

04:04:80:28:BF:1F:28:64:D4:8F:9A:D4:D8:32:94:36:6A:82:88:56:55:3F:3B:14:30:3F:90:14:7F:5D:40:EF

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#
Fingerprint (SHA1): AE:C5:FB:3F:C8:E1:BF:C4:E5:4F:03:07:5A:9A:E8:00:B7:F7:B6:FA
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Autoridad de Certificacion Firmaprofesional CIF A62634068"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\256\305\373\077\310\341\277\304\345\117\003\007\132\232\350\000
\267\367\266\372
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\163\072\164\172\354\273\243\226\246\302\344\342\310\233\300\303
END
CKA_ISSUER MULTILINE_OCTAL
\060\121\061\013\060\011\006\003\125\004\006\023\002\105\123\061
\102\060\100\006\003\125\004\003\014\071\101\165\164\157\162\151
\144\141\144\040\144\145\040\103\145\162\164\151\146\151\143\141
\143\151\157\156\040\106\151\162\155\141\160\162\157\146\145\163
\151\157\156\141\154\040\103\111\106\040\101\066\062\066\063\064
\060\066\070
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\010\123\354\073\356\373\262\110\137
END
CKA_TRUST_SERVER_AUTH
CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

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#
# Certificate "Izenpe.com"
#
# Issuer: CN=Izenpe.com,O=IZENPE S.A.,C=ES
# Serial Number:00:b0:b7:5a:16:48:5f:bf:e1:cb:f5:8b:d7:19:e6:7d
# Subject: CN=Izenpe.com,O=IZENPE S.A.,C=ES
# Not Valid Before: Thu Dec 13 13:08:28 2007
# Not Valid After : Sun Dec 13 08:27:25 2037
# Fingerprint (SHA-256):
25:30:CC:8E:98:32:15:02:BA:D9:6F:9B:1F:BA:1B:09:9E:2D:29:9E:0F:45:48:BB:91:4F:36:3B:C0:D4:53:1F
# Fingerprint (SHA1): 2F:78:3D:25:52:18:A7:4A:65:39:71:B5:2C:A2:9C:45:15:6F:E9:19
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Izenpe.com"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509

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CKA\_SUBJECT MULTILINE\_OCTAL

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END

CKA\_ID

UTF8 "0"

CKA\_ISSUER MULTILINE\_OCTAL

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END

CKA\_SERIAL\_NUMBER MULTILINE\_OCTAL

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END

CKA\_VALUE MULTILINE\_OCTAL

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\167\320\135\345\201\042\041\207\376\224\175\204\330\223\255\326
\150\103\110\262\333\353\163\044\347\221\177\124\244\266\200\076
\235\243\074\114\162\302\127\304\240\324\314\070\047\316\325\006
\236\242\110\331\351\237\316\202\160\066\223\232\073\337\226\041
\343\131\267\014\332\221\067\360\375\131\132\263\231\310\151\154
\103\046\001\065\143\140\125\211\003\072\165\330\272\112\331\124
\377\356\336\200\330\055\321\070\325\136\055\013\230\175\076\154
\333\374\046\210\307
```

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "Izenpe.com"

#

Issuer: CN=Izenpe.com,O=IZENPE S.A.,C=ES

# Serial Number:00:b0:b7:5a:16:48:5f:bf:e1:cb:f5:8b:d7:19:e6:7d

# Subject: CN=Izenpe.com,O=IZENPE S.A.,C=ES

# Not Valid Before: Thu Dec 13 13:08:28 2007

# Not Valid After : Sun Dec 13 08:27:25 2037

# Fingerprint (SHA-256):

25:30:CC:8E:98:32:15:02:BA:D9:6F:9B:1F:BA:1B:09:9E:2D:29:9E:0F:45:48:BB:91:4F:36:3B:C0:D4:53:1F

# Fingerprint (SHA1): 2F:78:3D:25:52:18:A7:4A:65:39:71:B5:2C:A2:9C:45:15:6F:E9:19

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "Izenpe.com"

CKA\_CERT\_SHA1\_HASH MULTILINE\_OCTAL

```
\057\170\075\045\122\030\247\112\145\071\161\265\054\242\234\105
\025\157\351\031
```

END

CKA\_CERT\_MD5\_HASH MULTILINE\_OCTAL

```
\246\260\315\205\200\332\134\120\064\243\071\220\057\125\147\163
```

END

CKA\_ISSUER MULTILINE\_OCTAL

```
\060\070\061\013\060\011\006\003\125\004\006\023\002\105\123\061
\024\060\022\006\003\125\004\012\014\013\111\132\105\116\120\105
\040\123\056\101\056\061\023\060\021\006\003\125\004\003\014\012
\111\172\145\156\160\145\056\143\157\155
```

END

CKA\_SERIAL\_NUMBER

MULTILINE\_OCTAL

```
\002\020\000\260\267\132\026\110\137\277\341\313\365\213\327\031
\346\175
```

END

CKA\_TRUST\_SERVER\_AUTH CK\_TRUST CKT\_NSS\_TRUSTED\_DELEGATOR

CKA\_TRUST\_EMAIL\_PROTECTION CK\_TRUST CKT\_NSS\_MUST\_VERIFY\_TRUST

CKA\_TRUST\_CODE\_SIGNING CK\_TRUST CKT\_NSS\_MUST\_VERIFY\_TRUST

CKA\_TRUST\_STEP\_UP\_APPROVED CK\_BBOOL CK\_FALSE

#

# Certificate "Chambers of Commerce Root - 2008"

#

# Issuer: CN=Chambers of Commerce Root - 2008,O=AC Camerfirma S.A.,serialNumber=A82743287,L=Madrid  
(see current address at [www.camerfirma.com/address](http://www.camerfirma.com/address)),C=EU

# Serial Number:00:a3:da:42:7e:a4:b1:ae:da

# Subject: CN=Chambers of Commerce Root - 2008,O=AC Camerfirma S.A.,serialNumber=A82743287,L=Madrid  
(see current address at [www.camerfirma.com/address](http://www.camerfirma.com/address)),C=EU

# Not Valid Before: Fri Aug 01 12:29:50 2008

# Not Valid After : Sat Jul 31 12:29:50 2038

# Fingerprint (SHA-256):

06:3E:4A:FA:C4:91:DF:D3:32:F3:08:9B:85:42:E9:46:17:D8:93:D7:FE:94:4E:10:A7:93:7E:E2:9D:96:93:C0

#

Fingerprint (SHA1): 78:6A:74:AC:76:AB:14:7F:9C:6A:30:50:BA:9E:A8:7E:FE:9A:CE:3C

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_CERTIFICATE

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "Chambers of Commerce Root - 2008"

CKA\_CERTIFICATE\_TYPE CK\_CERTIFICATE\_TYPE CKC\_X\_509

CKA\_SUBJECT MULTILINE\_OCTAL

```
\060\201\256\061\013\060\011\006\003\125\004\006\023\002\105\125
\061\103\060\101\006\003\125\004\007\023\072\115\141\144\162\151
\144\040\050\163\145\145\040\143\165\162\162\145\156\164\040\141
\144\144\162\145\163\163\040\141\164\040\167\167\167\056\143\141
\155\145\162\146\151\162\155\141\056\143\157\155\057\141\144\144
\162\145\163\163\051\061\022\060\020\006\003\125\004\005\023\011
\101\070\062\067\064\063\062\070\067\061\033\060\031\006\003\125
\004\012\023\022\101\103\040\103\141\155\145\162\146\151\162\155
\141\040\123\056\101\056\061\051\060\047\006\003\125\004\003\023
\040\103\150\141\155\142\145\162\163\040\157\146\040\103\157\155
\155\145\162\143\145\040\122\157\157\164\040\055\040\062\060\060
\070
```

END

CKA\_ID

UTF8 "0"

CKA\_ISSUER MULTILINE\_OCTAL

\060\201\256\061\013\060\011\006\003\125\004\006\023\002\105\125  
\061\103\060\101\006\003\125\004\007\023\072\115\141\144\162\151  
\144\040\050\163\145\145\040\143\165\162\162\145\156\164\040\141  
\144\144\162\145\163\163\040\141\164\040\167\167\167\056\143\141  
\155\145\162\146\151\162\155\141\056\143\157\155\057\141\144\144  
\162\145\163\163\051\061\022\060\020\006\003\125\004\005\023\011  
\101\070\062\067\064\063\062\070\067\061\033\060\031\006\003\125  
\004\012\023\022\101\103\040\103\141\155\145\162\146\151\162\155  
\141\040\123\056\101\056\061\051\060\047\006\003\125\004\003\023  
\040\103\150\141\155\142\145\162\163\040\157\146\040\103\157\155  
\155\145\162\143\145\040\122\157\157\164\040\055\040\062\060\060  
\070

END

CKA\_SERIAL\_NUMBER MULTILINE\_OCTAL

\002\011\000\243\332\102\176\244\261\256\332

END

CKA\_VALUE MULTILINE\_OCTAL

\060\202\007\117\060\202\005\067\240\003\002\001\002\002\011\000  
\243\332\102\176\244\261\256\332\060\015\006\011\052\206\110\206  
\367\015\001\001\005\005\000\060\201\256\061\013\060\011\006\003  
\125\004\006\023\002\105\125\061\103\060\101\006\003\125\004\007  
\023\072\115\141\144\162\151\144\040\050\163\145\145\040\143\165  
\162\162\145\156\164\040\141\144\144\162\145\163\163\040\141\164  
\040\167\167\167\056\143\141\155\145\162\146\151\162\155\141\056  
\143\157\155\057\141\144\144\162\145\163\163\051\061\022\060\020  
\006\003\125\004\005\023\011\101\070\062\067\064\063\062\070\067  
\061\033\060\031\006\003\125\004\012\023\022\101\103\040\103\141  
\155\145\162\146\151\162\155\141\040\123\056\101\056\061\051\060  
\047\006\003\125\004\003\023\040\103\150\141\155\142\145\162\163  
\040\157\146\040\103\157\155\155\145\162\143\145\040\122\157\157  
\164\040\055\040\062\060\060\070\060\036\027\015\060\070\060\070  
\060\061\061\062\062\071\065\060\132\027\015\063\070\060\067\063  
\061\061\062\062\071\065\060\132\060\201\256\061\013\060\011\006  
\003\125\004\006\023\002\105\125\061\103\060\101\006\003\125\004  
\007\023\072\115\141\144\162\151\144\040\050\163\145\145\040\143  
\165\162\162\145\156\164\040\141\144\144\162\145\163\163\040\141  
\164\040\167\167\167\056\143\141\155\145\162\146\151\162\155\141  
\056\143\157\155\057\141\144\144\162\145\163\163\051\061\022\060  
\020\006\003\125\004\005\023\011\101\070\062\067\064\063\062\070  
\067\061\033\060\031\006\003\125\004\012\023\022\101\103\040\103  
\141\155\145\162\146\151\162\155\141\040\123\056\101\056\061\051  
\060\047\006\003\125\004\003\023\040\103\150\141\155\142\145\162  
\163\040\157\146\040\103\157\155\155\145\162\143\145\040\122\157  
\157\164\040\055\040\062\060\060\070\060\202\002\042\060\015\006

\011\052\206\110\206\367\015\001\001\001\005\000\003\202\002\017  
\000\060\202\002\012\002\202\002\001\000\257\000\313\160\067\053  
\200\132\112\072\154\170\224\175\243\177\032\037\366\065\325\275  
\333\313\015\104\162\076\046\262\220\122\272\143\073\050\130\157  
\245\263\155\224\246\363\335\144\014\125\366\366\347\362\042\042  
\200\136\341\142\306\266\051\341\201\154\362\277\345\175\062\152  
\124\240\062\031\131\376\037\213\327\075\140\206\205\044\157\343  
\021\263\167\076\040\226\065\041\153\263\010\331\160\056\144\367  
\204\222\123\326\016\260\220\212\212\343\207\215\006\323\275\220  
\016\342\231\241\033\206\016\332\232\012\273\013\141\120\006\122  
\361\236\177\166\354\313\017\320\036\015\317\231\060\075\034\304  
\105\020\130\254\326\323\350\327\345\352\305\001\007\167\326\121  
\346\003\177\212\110\245\115\150\165\271\351\274\236\116\031\161  
\365\062\113\234\155\140\031\013\373\314\235\165\334\277\046\315  
\217\223\170\071\171\163\136\045\016\312\134\353\167\022\007\313  
\144\101\107\162\223\253\120\303\353\011\166\144\064\322\071\267  
\166\021\011\015\166\105\304\251\256\075\152\257\265\175\145\057  
\224\130\020\354\134\174\257\176\342\266\030\331\320\233\116\132  
\111\337\251\146\013\314\074\306\170\174\247\234\035\343\316\216  
\123\276\005\336\140\017\153\345\032\333\077\343\341\041\311\051  
\301\361\353\007\234\122\033\001\104\121\074\173\045\327\304\345  
\122\124\135\045\007\312\026\040\270\255\344\101\356\172\010\376  
\231\157\203\246\221\002\260\154\066\125\152\347\175\365\226\346  
\312\201\326\227\361\224\203\351\355\260\261\153\022\151\036\254  
\373\135\251\305\230\351\264\133\130\172\276\075\242\104\072\143  
\131\324\013\045\336\033\117\275\345\001\236\315\322\051\325\237  
\027\031\012\157\277\014\220\323\011\137\331\343\212\065\314\171  
\132\115\031\067\222\267\304\301\255\257\364\171\044\232\262\001  
\013\261\257\134\226\363\200\062\373\134\075\230\361\240\077\112  
\336\276\257\224\056\331\125\232\027\156\140\235\143\154\270\143  
\311\256\201\134\030\065\340\220\273\276\074\117\067\042\271\176  
\353\317\236\167\041\246\075\070\201\373\110\332\061\075\053\343  
\211\365\320\265\275\176\340\120\304\022\211\263\043\232\020\061  
\205\333\256\157\357\070\063\030\166\021\002\003\001\000\001\243  
\202\001\154\060\202\001\150\060\022\006\003\125\035\023\001\001  
\377\004\010\060\006\001\001\377\002\001\014\060\035\006\003\125  
\035\016\004\026\004\024\371\044\254\017\262\265\370\171\300\372  
\140\210\033\304\331\115\002\236\027\031\060\201\343\006\003\125  
\035\043\004\201\333\060\201\330\200\024\371\044\254\017\262\265  
\370\171\300\372\140\210\033\304\331\115\002\236\027\031\241\201  
\264\244\201\261\060\201\256\061\013\060\011\006\003\125\004\006  
\023\002\105\125\061\103\060\101\006\003\125\004\007\023\072\115  
\141\144\162\151\144\040\050\163\145\145\040\143\165\162\162\145  
\156\164\040\141\144\144\162\145\163\163\040\141\164\040\167\167  
\167\056\143\141\155\145\162\146\151\162\155\141\056\143\157\155  
\057\141\144\144\162\145\163\163\051\061\022\060\020\006\003\125  
\004\005\023\011\101\070\062\067\064\063\062\070\067\061\033\060  
\031\006\003\125\004\012\023\022\101\103\040\103\141\155\145\162



\146\151\162\155\141\040\123\056\101\056\061\051\060\047\006\003  
\125\004\003\023\040\103\150\141\155\142\145\162\163\040\157\146  
\040\103\157\155\155\145\162\143\145\040\122\157\157\164\040\055  
\040\062\060\060\070\202\011\000\243\332\102\176\244\261\256\332  
\060\016\006\003\125\035\017\001\001\377\004\004\003\002\001\006  
\060\075\006\003\125\035\040\004\066\060\064\060\062\006\004\125  
\035\040\000\060\052\060\050\006\010\053\006\001\005\005\007\002  
\001\026\034\150\164\164\160\072\057\057\160\157\154\151\143\171  
\056\143\141\155\145\162\146\151\162\155\141\056\143\157\155\060  
\015\006\011\052\206\110\206\367\015\001\001\005\005\000\003\202  
\002\001\000\220\022\257\042\065\302\243\071\360\056\336\351\265  
\351\170\174\110\276\077\175\105\222\136\351\332\261\031\374\026  
\074\237\264\133\146\236\152\347\303\271\135\210\350\017\255\317  
\043\017\336\045\072\136\314\117\245\301\265\055\254\044\322\130  
\007\336\242\317\151\204\140\063\350\020\015\023\251\043\320\205  
\345\216\173\246\236\075\162\023\162\063\365\252\175\306\143\037  
\010\364\376\001\177\044\317\053\054\124\011\336\342\053\155\222  
\306\071\117\026\352\074\176\172\106\324\105\152\106\250\353\165  
\202\126\247\253\240\174\150\023\063\366\235\060\360\157\047\071  
\044\043\052\220\375\220\051\065\362\223\337\064\245\306\367\370  
\357\214\017\142\112\174\256\323\365\124\370\215\266\232\126\207  
\026\202\072\063\253\132\042\010\367\202\272\352\056\340\107\232  
\264\265\105\243\005\073\331\334\056\105\100\073\352\334\177\350  
\073\353\321\354\046\330\065\244\060\305\072\254\127\236\263\166  
\245\040\173\371\036\112\005\142\001\246\050\165\140\227\222\015  
\156\076\115\067\103\015\222\025\234\030\042\315\121\231\240\051  
\032\074\137\212\062\063\133\060\307\211\057\107\230\017\243\003  
\306\366\361\254\337\062\360\331\201\032\344\234\275\366\200\024  
\360\321\054\271\205\365\330\243\261\310\245\041\345\034\023\227  
\356\016\275\337\051\251\357\064\123\133\323\344\152\023\204\006  
\266\062\002\304\122\256\042\322\334\262\041\102\032\332\100\360  
\051\311\354\012\014\134\342\320\272\314\110\323\067\012\314\022  
\012\212\171\260\075\003\177\151\113\364\064\040\175\263\064\352  
\216\113\144\365\076\375\263\043\147\025\015\004\270\360\055\301  
\011\121\074\262\154\025\360\245\043\327\203\164\344\345\056\311  
\376\230\047\102\306\253\306\236\260\320\133\070\245\233\120\336  
\176\030\230\265\105\073\366\171\264\350\367\032\173\006\203\373  
\320\213\332\273\307\275\030\253\010\157\074\200\153\100\077\031  
\031\272\145\212\346\276\325\134\323\066\327\357\100\122\044\140  
\070\147\004\061\354\217\363\202\306\336\271\125\363\073\061\221  
\132\334\265\010\025\255\166\045\012\015\173\056\207\342\014\246  
\006\274\046\020\155\067\235\354\335\170\214\174\200\305\360\331  
\167\110\320

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

```
# Trust for "Chambers of Commerce Root - 2008"
# Issuer: CN=Chambers of Commerce Root - 2008,O=AC Camerfirma S.A.,serialNumber=A82743287,L=Madrid
(see current address at www.camerfirma.com/address),C=EU
# Serial Number:00:a3:da:42:7e:a4:b1:ae:da
#
Subject: CN=Chambers of Commerce Root - 2008,O=AC Camerfirma S.A.,serialNumber=A82743287,L=Madrid
(see current address at www.camerfirma.com/address),C=EU
# Not Valid Before: Fri Aug 01 12:29:50 2008
# Not Valid After : Sat Jul 31 12:29:50 2038
# Fingerprint (SHA-256):
06:3E:4A:FA:C4:91:DF:D3:32:F3:08:9B:85:42:E9:46:17:D8:93:D7:FE:94:4E:10:A7:93:7E:E2:9D:96:93:C0
# Fingerprint (SHA1): 78:6A:74:AC:76:AB:14:7F:9C:6A:30:50:BA:9E:A8:7E:FE:9A:CE:3C
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Chambers of Commerce Root - 2008"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\170\152\164\254\166\253\024\177\234\152\060\120\272\236\250\176
\376\232\316\074
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\136\200\236\204\132\016\145\013\027\002\363\125\030\052\076\327
END
CKA_ISSUER MULTILINE_OCTAL
\060\201\256\061\013\060\011\006\003\125\004\006\023\002\105\125
\061\103\060\101\006\003\125\004\007\023\072\115\141\144\162\151
\144\040\050\163\145\145\040\143\165\162\162\145\156\164\040\141
\144\144\162\145\163\163\040\141\164\040\167\167\167\056\143\141
\155\145\162\146\151\162\155\141\056\143\157\155\057\141\144\144
\162\145\163\163\051\061\022\060\020\006\003\125\004\005\023\011
\101\070\062\067\064\063\062\070\067\061\033\060\031\006\003\125
\004\012\023\022\101\103\040\103\141\155\145\162\146\151\162\155
\141\040\123\056\101\056\061\051\060\047\006\003\125\004\003\023
\040\103\150\141\155\142\145\162\163\040\157\146\040\103\157\155
\155\145\162\143\145\040\122\157\157\164\040\055\040\062\060\060
\070
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\011\000\243\332\102\176\244\261\256\332
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE
```

```

#
# Certificate "Global Chambersign Root - 2008"
#
# Issuer: CN=Global Chambersign
Root - 2008,O=AC Camerfirma S.A.,serialNumber=A82743287,L=Madrid (see current address at
www.camerfirma.com/address),C=EU
# Serial Number:00:c9:cd:d3:e9:d5:7d:23:ce
# Subject: CN=Global Chambersign Root - 2008,O=AC Camerfirma S.A.,serialNumber=A82743287,L=Madrid
(see current address at www.camerfirma.com/address),C=EU
# Not Valid Before: Fri Aug 01 12:31:40 2008
# Not Valid After : Sat Jul 31 12:31:40 2038
# Fingerprint (SHA-256):
13:63:35:43:93:34:A7:69:80:16:A0:D3:24:DE:72:28:4E:07:9D:7B:52:20:BB:8F:BD:74:78:16:EE:BE:BA:CA
# Fingerprint (SHA1): 4A:BD:EE:EC:95:0D:35:9C:89:AE:C7:52:A1:2C:5B:29:F6:D6:AA:0C
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Global Chambersign Root - 2008"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\201\254\061\013\060\011\006\003\125\004\006\023\002\105\125
\061\103\060\101\006\003\125\004\007\023\072\115\141\144\162\151
\144\040\050\163\145\145\040\143\165\162\162\145\156\164\040\141
\144\144\162\145\163\163\040\141\164\040\167\167\167\056\143\141
\155\145\162\146\151\162\155\141\056\143\157\155\057\141\144\144
\162\145\163\163\051\061\022\060\020\006\003\125\004\005\023\011
\101\070\062\067\064\063\062\070\067\061\033\060\031\006\003\125
\004\012\023\022\101\103\040\103\141\155\145\162\146\151\162\155
\141\040\123\056\101\056\061\047\060\045\006\003\125\004\003\023
\036\107\154\157\142\141\154\040\103\150\141\155\142\145\162\163
\151\147\156\040\122\157\157\164\040\055\040\062\060\060\070
END
CKA_ID
UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\201\254\061\013\060\011\006\003\125\004\006\023\002\105\125
\061\103\060\101\006\003\125\004\007\023\072\115\141\144\162\151
\144\040\050\163\145\145\040\143\165\162\162\145\156\164\040\141
\144\144\162\145\163\163\040\141\164\040\167\167\167\056\143\141
\155\145\162\146\151\162\155\141\056\143\157\155\057\141\144\144
\162\145\163\163\051\061\022\060\020\006\003\125\004\005\023\011
\101\070\062\067\064\063\062\070\067\061\033\060\031\006\003\125
\004\012\023\022\101\103\040\103\141\155\145\162\146\151\162\155
\141\040\123\056\101\056\061\047\060\045\006\003\125\004\003\023
\036\107\154\157\142\141\154\040\103\150\141\155\142\145\162\163
\151\147\156\040\122\157\157\164\040\055\040\062\060\060\070
END

```

CKA\_SERIAL\_NUMBER

MULTILINE\_OCTAL

\002\011\000\311\315\323\351\325\175\043\316

END

CKA\_VALUE MULTILINE\_OCTAL

\060\202\007\111\060\202\005\061\240\003\002\001\002\002\011\000  
\311\315\323\351\325\175\043\316\060\015\006\011\052\206\110\206  
\367\015\001\001\005\005\000\060\201\254\061\013\060\011\006\003  
\125\004\006\023\002\105\125\061\103\060\101\006\003\125\004\007  
\023\072\115\141\144\162\151\144\040\050\163\145\145\040\143\165  
\162\162\145\156\164\040\141\144\144\162\145\163\163\040\141\164  
\040\167\167\167\056\143\141\155\145\162\146\151\162\155\141\056  
\143\157\155\057\141\144\144\162\145\163\163\051\061\022\060\020  
\006\003\125\004\005\023\011\101\070\062\067\064\063\062\070\067  
\061\033\060\031\006\003\125\004\012\023\022\101\103\040\103\141  
\155\145\162\146\151\162\155\141\040\123\056\101\056\061\047\060  
\045\006\003\125\004\003\023\036\107\154\157\142\141\154\040\103  
\150\141\155\142\145\162\163\151\147\156\040\122\157\157\164\040  
\055\040\062\060\060\070\060\036\027\015\060\070\060\070\060\061  
\061\062\063\061\064\060\132\027\015\063\070\060\067\063\061\061  
\062\063\061\064\060\132\060\201\254\061\013\060\011\006\003\125  
\004\006\023\002\105\125\061\103\060\101\006\003\125\004\007\023  
\072\115\141\144\162\151\144\040\050\163\145\145\040\143\165\162  
\162\145\156\164\040\141\144\144\162\145\163\163\040\141\164\040  
\167\167\167\056\143\141\155\145\162\146\151\162\155\141\056\143  
\157\155\057\141\144\144\162\145\163\163\051\061\022\060\020\006  
\003\125\004\005\023\011\101\070\062\067\064\063\062\070\067\061  
\033\060\031\006\003\125\004\012\023\022\101\103\040\103\141\155  
\145\162\146\151\162\155\141\040\123\056\101\056\061\047\060\045  
\006\003\125\004\003\023\036\107\154\157\142\141\154\040\103\150  
\141\155\142\145\162\163\151\147\156\040\122\157\157\164\040\055  
\040\062\060\060\070\060\202\002\042\060\015\006\011\052\206\110  
\206\367\015\001\001\001\005\000\003\202\002\017\000\060\202\002  
\012\002\202\002\001\000\300\337\126\323\344\072\233\166\105\264  
\023\333\377\301\266\031\213\067\101\030\225\122\107\353\027\235  
\051\210\216\065\154\006\062\056\107\142\363\111\004\277\175\104  
\066\261\161\314\275\132\011\163\325\331\205\104\377\221\127\045  
\337\136\066\216\160\321\134\161\103\035\331\332\357\134\322\373  
\033\275\072\265\313\255\243\314\104\247\015\256\041\025\077\271  
\172\133\222\165\330\244\022\070\211\031\212\267\200\322\342\062  
\157\126\234\221\326\210\020\013\263\164\144\222\164\140\363\366  
\317\030\117\140\262\043\320\307\073\316\141\113\231\217\302\014  
\320\100\262\230\334\015\250\116\243\271\012\256\140\240\255\105  
\122\143\272\146\275\150\340\371\276\032\250\201\273\036\101\170  
\165\323\301\376\000\125\260\207\124\350\047\220\065\035\114\063  
\255\227\374\227\056\230\204\277\054\311\243\277\321\230\021\024  
\355\143\370\312\230\210\130\027\231\355\105\003\227\176\074\206  
\036\210\214\276\362\221\204\217\145\064\330\000\114\175\267\061

\027\132\051\172\012\030\044\060\243\067\265\172\251\001\175\046  
\326\371\016\216\131\361\375\033\063\265\051\073\027\073\101\266  
\041\335\324\300\075\245\237\237\037\103\120\311\273\274\154\172  
\227\230\356\315\214\037\373\234\121\256\213\160\275\047\237\161  
\300\153\254\175\220\146\350\327\135\072\015\260\325\302\215\325  
\310\235\235\301\155\320\320\277\121\344\343\370\303\070\066\256  
\326\247\165\346\257\204\103\135\223\222\014\152\007\336\073\035  
\230\042\326\254\301\065\333\243\240\045\377\162\265\166\035\336  
\155\351\054\146\054\122\204\320\105\222\316\034\345\345\063\035  
\334\007\123\124\243\252\202\073\232\067\057\334\335\240\144\351  
\346\335\275\256\374\144\205\035\074\247\311\006\336\204\377\153  
\350\153\032\074\305\242\263\102\373\213\011\076\137\010\122\307  
\142\304\324\005\161\277\304\144\344\370\241\203\350\076\022\233  
\250\036\324\066\115\057\161\366\215\050\366\203\251\023\322\141  
\301\221\273\110\300\064\217\101\214\113\114\333\151\022\377\120  
\224\234\040\203\131\163\355\174\241\362\361\375\335\367\111\323  
\103\130\240\126\143\312\075\075\345\065\126\131\351\016\312\040  
\314\053\113\223\051\017\002\003\001\000\001\243\202\001\152\060  
\202\001\146\060\022\006\003\125\035\023\001\001\377\004\010\060  
\006\001\001\377\002\001\014\060\035\006\003\125\035\016\004\026  
\004\024\271\011\312\234\036\333\323\154\072\153\256\355\124\361  
\133\223\006\065\056\136\060\201\341\006\003\125\035\043\004\201  
\331\060\201\326\200\024\271\011\312\234\036\333\323\154\072\153  
\256\355\124\361\133\223\006\065\056\136\241\201\262\244\201\257  
\060\201\254\061\013\060\011\006\003\125\004\006\023\002\105\125  
\061\103\060\101\006\003\125\004\007\023\072\115\141\144\162\151  
\144\040\050\163\145\145\040\143\165\162\162\145\156\164\040\141  
\144\144\162\145\163\163\040\141\164\040\167\167\167\056\143\141  
\155\145\162\146\151\162\155\141\056\143\157\155\057\141\144\144  
\162\145\163\163\051\061\022\060\020\006\003\125\004\005\023\011  
\101\070\062\067\064\063\062\070\067\061\033\060\031\006\003\125  
\004\012\023\022\101\103\040\103\141\155\145\162\146\151\162\155  
\141\040\123\056\101\056\061\047\060\045\006\003\125\004\003\023  
\036\107\154\157\142\141\154\040\103\150\141\155\142\145\162\163  
\151\147\156\040\122\157\157\164\040\055\040\062\060\060\070\202  
\011\000\311\315\323\351\325\175\043\316\060\016\006\003\125\035  
\017\001\001\377\004\004\003\002\001\006\060\075\006\003\125\035  
\040\004\066\060\064\060\062\006\004\125\035\040\000\060\052\060  
\050\006\010\053\006\001\005\005\007\002\001\026\034\150\164\164  
\160\072\057\057\160\157\154\151\143\171\056\143\141\155\145\162  
\146\151\162\155\141\056\143\157\155\060\015\006\011\052\206\110  
\206\367\015\001\001\005\005\000\003\202\002\001\000\200\210\177  
\160\336\222\050\331\005\224\106\377\220\127\251\361\057\337\032  
\015\153\372\174\016\034\111\044\171\047\330\106\252\157\051\131  
\122\210\160\022\352\335\075\365\233\123\124\157\341\140\242\250  
\011\271\354\353\131\174\306\065\361\334\030\351\361\147\345\257  
\272\105\340\011\336\312\104\017\302\027\016\167\221\105\172\063  
\137\137\226\054\150\213\301\107\217\230\233\075\300\354\313\365

\325\202\222\204\065\321\276\066\070\126\162\061\133\107\055\252  
\027\244\143\121\353\012\001\255\177\354\165\236\313\241\037\361  
\177\022\261\271\344\144\177\147\326\043\052\364\270\071\135\230  
\350\041\247\341\275\075\102\032\164\232\160\257\150\154\120\135  
\111\317\377\373\016\135\346\054\107\327\201\072\131\000\265\163  
\153\143\040\366\061\105\010\071\016\364\160\176\100\160\132\077  
\320\153\102\251\164\075\050\057\002\155\165\162\225\011\215\110  
\143\306\306\043\127\222\223\136\065\301\215\371\012\367\054\235  
\142\034\366\255\174\335\246\061\036\266\261\307\176\205\046\372  
\244\152\265\332\143\060\321\357\223\067\262\146\057\175\005\367  
\347\267\113\230\224\065\300\331\072\051\301\235\262\120\063\035  
\112\251\132\246\311\003\357\355\364\347\250\156\212\264\127\204  
\353\244\077\320\356\252\252\207\133\143\350\223\342\153\250\324  
\270\162\170\153\033\355\071\344\135\313\233\252\207\325\117\116  
\000\376\331\152\237\074\061\017\050\002\001\175\230\350\247\260  
\242\144\236\171\370\110\362\025\251\314\346\310\104\353\077\170  
\231\362\173\161\076\074\361\230\247\305\030\022\077\346\273\050  
\063\102\351\105\012\174\155\362\206\171\057\305\202\031\175\011  
\211\174\262\124\166\210\256\336\301\363\314\341\156\333\061\326  
\223\256\231\240\357\045\152\163\230\211\133\072\056\023\210\036  
\277\300\222\224\064\033\343\047\267\213\036\157\102\377\347\351  
\067\233\120\035\055\242\371\002\356\313\130\130\072\161\274\150  
\343\252\301\257\034\050\037\242\334\043\145\077\201\352\256\231  
\323\330\060\317\023\015\117\025\311\204\274\247\110\055\370\060  
\043\167\330\106\113\171\155\366\214\355\072\177\140\021\170\364  
\351\233\256\325\124\300\164\200\321\013\102\237\301

END

CKA\_NSS\_Mozilla\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "Global Chambersign Root - 2008"

# Issuer: CN=Global Chambersign Root - 2008,O=AC Camerfirma S.A.,serialNumber=A82743287,L=Madrid (see current address at [www.camerfirma.com/address](http://www.camerfirma.com/address)),C=EU

# Serial Number:00:c9:cd:d3:e9:d5:7d:23:ce

# Subject: CN=Global Chambersign Root - 2008,O=AC Camerfirma S.A.,serialNumber=A82743287,L=Madrid (see current address at [www.camerfirma.com/address](http://www.camerfirma.com/address)),C=EU

# Not Valid Before: Fri Aug 01 12:31:40 2008

# Not Valid After : Sat Jul 31 12:31:40 2038

# Fingerprint (SHA-256):

13:63:35:43:93:34:A7:69:80:16:A0:D3:24:DE:72:28:4E:07:9D:7B:52:20:BB:8F:BD:74:78:16:EE:BE:BA:CA

# Fingerprint (SHA1): 4A:BD:EE:EC:95:0D:35:9C:89:AE:C7:52:A1:2C:5B:29:F6:D6:AA:0C

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL

```

CK_FALSE
CKA_LABEL UTF8 "Global Chambersign Root - 2008"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\112\275\356\354\225\015\065\234\211\256\307\122\241\054\133\051
\366\326\252\014
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\236\200\377\170\001\014\056\301\066\275\376\226\220\156\010\363
END
CKA_ISSUER MULTILINE_OCTAL
\060\201\254\061\013\060\011\006\003\125\004\006\023\002\105\125
\061\103\060\101\006\003\125\004\007\023\072\115\141\144\162\151
\144\040\050\163\145\145\040\143\165\162\162\145\156\164\040\141
\144\144\162\145\163\163\040\141\164\040\167\167\167\056\143\141
\155\145\162\146\151\162\155\141\056\143\157\155\057\141\144\144
\162\145\163\163\051\061\022\060\020\006\003\125\004\005\023\011
\101\070\062\067\064\063\062\070\067\061\033\060\031\006\003\125
\004\012\023\022\101\103\040\103\141\155\145\162\146\151\162\155
\141\040\123\056\101\056\061\047\060\045\006\003\125\004\003\023
\036\107\154\157\142\141\154\040\103\150\141\155\142\145\162\163
\151\147\156\040\122\157\157\164\040\055\040\062\060\060\070
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\011\000\311\315\323\351\325\175\043\316
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "Go Daddy Root Certificate Authority - G2"
#
# Issuer: CN=Go Daddy Root Certificate Authority - G2,O="GoDaddy.com, Inc.",L=Scottsdale,ST=Arizona,C=US
# Serial Number: 0 (0x0)
# Subject: CN=Go Daddy Root Certificate Authority - G2,O="GoDaddy.com,
Inc.",L=Scottsdale,ST=Arizona,C=US
# Not Valid Before: Tue Sep 01 00:00:00 2009
# Not Valid After : Thu Dec 31 23:59:59 2037
# Fingerprint (SHA-256):
45:14:0B:32:47:EB:9C:C8:C5:B4:F0:D7:B5:30:91:F7:32:92:08:9E:6E:5A:63:E2:74:9D:D3:AC:A9:19:8E:DA
# Fingerprint (SHA1): 47:BE:AB:C9:22:EA:E8:0E:78:78:34:62:A7:9F:45:C2:54:FD:E6:8B
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE
CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE

```

```
CKA_LABEL UTF8 "Go Daddy Root Certificate Authority - G2"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\201\203\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\020\060\016\006\003\125\004\010\023\007\101\162\151\172\157
\156\141\061\023\060\021\006\003\125\004\007\023\012\123\143\157
\164\164\163\144\141\154\145\061\032\060\030\006\003\125\004\012
\023\021\107\157\104\141\144\144\171\056\143\157\155\054\040\111
\156\143\056\061\061\060\057\006\003\125\004\003\023\050\107\157
\040\104\141\144\144\171\040\122\157\157\164\040\103\145\162\164
\151\146\151\143\141\164\145\040\101\165\164\150\157\162\151\164
\171\040\055\040\107\062
END
```

```
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\201\203\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\020\060\016\006\003\125\004\010\023\007\101\162\151\172\157
\156\141\061\023\060\021\006\003\125\004\007\023\012\123\143\157
\164\164\163\144\141\154\145\061\032\060\030\006\003\125\004\012
\023\021\107\157\104\141\144\144\171\056\143\157\155\054\040\111
\156\143\056\061\061\060\057\006\003\125\004\003\023\050\107\157
\040\104\141\144\144\171\040\122\157\157\164\040\103\145\162\164
\151\146\151\143\141\164\145\040\101\165\164\150\157\162\151\164
\171\040\055\040\107\062
END
```

```
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\001\000
END
```

```
CKA_VALUE MULTILINE_OCTAL
\060\202\003\305\060\202\002\255\240\003\002\001\002\002\001\000
\060\015\006\011\052\206\110\206\367\015\001\001\013\005\000\060
\201\203\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\020\060\016\006\003\125\004\010\023\007\101\162\151\172\157\156
\141\061\023\060\021\006\003\125\004\007\023\012\123\143\157\164
\164\163\144\141\154\145\061\032\060\030\006\003\125\004\012\023
\021\107\157\104\141\144\144\171\056\143\157\155\054\040\111\156
\143\056\061\061\060\057\006\003\125\004\003\023\050\107\157\040
\104\141\144\144\171\040\122\157\157\164\040\103\145\162\164\151
\146\151\143\141\164\145\040\101\165\164\150\157\162\151\164\171
\040\055\040\107\062\060\036\027\015\060\071\060\071\060\061\060
\060\060\060\060\060\132\027\015\063\067\061\062\063\061\062\063
\065\071\065\071\132\060\201\203\061\013\060\011\006\003\125\004
\006\023\002\125\123\061\020\060\016\006\003\125\004\010\023\007
\101\162\151\172\157\156\141\061\023\060\021\006\003\125\004\007
\023\012\123\143\157\164\164\163\144\141\154\145\061\032\060\030
\006\003\125\004\012\023\021\107\157\104\141\144\144\171\056\143
\157\155\054\040\111\156\143\056\061\061\060\057\006\003\125\004
```



\003\023\050\107\157\040\104\141\144\144\171\040\122\157\157\164  
\040\103\145\162\164\151\146\151\143\141\164\145\040\101\165\164  
\150\157\162\151\164\171\040\055\040\107\062\060\202\001\042\060  
\015\006\011\052\206\110\206\367\015\001\001\001\005\000\003\202  
\001\017\000\060\202\001\012\002\202\001\001\000\277\161\142\010  
\361\372\131\064\367\033\311\030\243\367\200\111\130\351\042\203  
\023\246\305\040\103\001\073\204\361\346\205\111\237\047\352\366  
\204\033\116\240\264\333\160\230\307\062\001\261\005\076\007\116  
\356\364\372\117\057\131\060\042\347\253\031\126\153\342\200\007  
\374\363\026\165\200\071\121\173\345\371\065\266\164\116\251\215  
\202\023\344\266\077\251\003\203\372\242\276\212\025\152\177\336  
\013\303\266\031\024\005\312\352\303\250\004\224\073\106\174\062  
\015\363\000\146\042\310\215\151\155\066\214\021\030\267\323\262  
\034\140\264\070\372\002\214\316\323\335\106\007\336\012\076\353  
\135\174\310\174\373\260\053\123\244\222\142\151\121\045\005\141  
\032\104\201\214\054\251\103\226\043\337\254\072\201\232\016\051  
\305\034\251\351\135\036\266\236\236\060\012\071\316\361\210\200  
\373\113\135\314\062\354\205\142\103\045\064\002\126\047\001\221  
\264\073\160\052\077\156\261\350\234\210\001\175\237\324\371\333  
\123\155\140\235\277\054\347\130\253\270\137\106\374\316\304\033  
\003\074\011\353\111\061\134\151\106\263\340\107\002\003\001\000  
\001\243\102\060\100\060\017\006\003\125\035\023\001\001\377\004  
\005\060\003\001\001\377\060\016\006\003\125\035\017\001\001\377  
\004\004\003\002\001\006\060\035\006\003\125\035\016\004\026\004  
\024\072\232\205\007\020\147\050\266\357\366\275\005\101\156\040  
\301\224\332\017\336\060\015\006\011\052\206\110\206\367\015\001  
\001\013\005\000\003\202\001\001\000\231\333\135\171\325\371\227  
\131\147\003\141\361\176\073\006\061\165\055\241\040\216\117\145  
\207\264\367\246\234\274\330\351\057\320\333\132\356\317\164\214  
\163\264\070\102\332\005\173\370\002\165\270\375\245\261\327\256  
\366\327\336\023\313\123\020\176\212\106\321\227\372\267\056\053  
\021\253\220\260\047\200\371\350\237\132\351\067\237\253\344\337  
\154\263\205\027\235\075\331\044\117\171\221\065\326\137\004\353  
\200\203\253\232\002\055\265\020\364\330\220\307\004\163\100\355  
\162\045\240\251\237\354\236\253\150\022\231\127\306\217\022\072  
\011\244\275\104\375\006\025\067\301\233\344\062\243\355\070\350  
\330\144\363\054\176\024\374\002\352\237\315\377\007\150\027\333  
\042\220\070\055\172\215\321\124\361\151\343\137\063\312\172\075  
\173\012\343\312\177\137\071\345\342\165\272\305\166\030\063\316  
\054\360\057\114\255\367\261\347\316\117\250\304\233\112\124\006  
\305\177\175\325\010\017\342\034\376\176\027\270\254\136\366\324  
\026\262\103\011\014\115\366\247\153\264\231\204\145\312\172\210  
\342\342\104\276\134\367\352\034\365

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

```

# Trust for "Go Daddy Root Certificate Authority - G2"
# Issuer: CN=Go Daddy Root Certificate Authority - G2,O="GoDaddy.com, Inc.",L=Scottsdale,ST=Arizona,C=US
# Serial Number: 0 (0x0)
# Subject: CN=Go Daddy Root Certificate Authority - G2,O="GoDaddy.com,
Inc.",L=Scottsdale,ST=Arizona,C=US
# Not Valid Before: Tue Sep 01 00:00:00 2009
# Not Valid After : Thu Dec 31 23:59:59 2037
# Fingerprint (SHA-256):
45:14:0B:32:47:EB:9C:C8:C5:B4:F0:D7:B5:30:91:F7:32:92:08:9E:6E:5A:63:E2:74:9D:D3:AC:A9:19:8E:DA
# Fingerprint
(SHA1): 47:BE:AB:C9:22:EA:E8:0E:78:78:34:62:A7:9F:45:C2:54:FD:E6:8B
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Go Daddy Root Certificate Authority - G2"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\107\276\253\311\042\352\350\016\170\170\064\142\247\237\105\302
\124\375\346\213
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\200\072\274\042\301\346\373\215\233\073\047\112\062\033\232\001
END
CKA_ISSUER MULTILINE_OCTAL
\060\201\203\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\020\060\016\006\003\125\004\010\023\007\101\162\151\172\157
\156\141\061\023\060\021\006\003\125\004\007\023\012\123\143\157
\164\164\163\144\141\154\145\061\032\060\030\006\003\125\004\012
\023\021\107\157\104\141\144\144\171\056\143\157\155\054\040\111
\156\143\056\061\061\060\057\006\003\125\004\003\023\050\107\157
\040\104\141\144\144\171\040\122\157\157\164\040\103\145\162\164
\151\146\151\143\141\164\145\040\101\165\164\150\157\162\151\164
\171\040\055\040\107\062
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\001\000
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "Starfield Root Certificate Authority - G2"
#
# Issuer: CN=Starfield Root Certificate Authority - G2,O="Starfield Technologies,

```

```
Inc.",L=Scottsdale,ST=Arizona,C=US
# Serial Number: 0 (0x0)
# Subject: CN=Starfield Root Certificate Authority - G2,O="Starfield Technologies,
Inc.",L=Scottsdale,ST=Arizona,C=US
# Not Valid Before: Tue Sep 01 00:00:00 2009
# Not Valid After : Thu Dec 31 23:59:59 2037
# Fingerprint (SHA-256):
2C:E1:CB:0B:F9:D2:F9:E1:02:99:3F:BE:21:51:52:C3:B2:DD:0C:AB:DE:1C:68:E5:31:9B:83:91:54:DB:B7:F5
# Fingerprint (SHA1): B5:1C:06:7C:EE:2B:0C:3D:F8:55:AB:2D:92:F4:FE:39:D4:E7:0F:0E
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN
CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Starfield Root Certificate Authority - G2"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\201\217\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\020\060\016\006\003\125\004\010\023\007\101\162\151\172\157
\156\141\061\023\060\021\006\003\125\004\007\023\012\123\143\157
\164\164\163\144\141\154\145\061\045\060\043\006\003\125\004\012
\023\034\123\164\141\162\146\151\145\154\144\040\124\145\143\150
\156\157\154\157\147\151\145\163\054\040\111\156\143\056\061\062
\060\060\006\003\125\004\003\023\051\123\164\141\162\146\151\145
\154\144\040\122\157\157\164\040\103\145\162\164\151\146\151\143
\141\164\145\040\101\165\164\150\157\162\151\164\171\040\055\040
\107\062
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\201\217\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\020\060\016\006\003\125\004\010\023\007\101\162\151\172\157
\156\141\061\023\060\021\006\003\125\004\007\023\012\123\143\157
\164\164\163\144\141\154\145\061\045\060\043\006\003\125\004\012
\023\034\123\164\141\162\146\151\145\154\144\040\124\145\143\150
\156\157\154\157\147\151\145\163\054\040\111\156\143\056\061\062
\060\060\006\003\125\004\003\023\051\123\164\141\162\146\151\145
\154\144\040\122\157\157\164\040\103\145\162\164\151\146\151\143
\141\164\145\040\101\165\164\150\157\162\151\164\171\040\055\040
\107\062
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\001\000
END
CKA_VALUE MULTILINE_OCTAL
\060\202\003\335\060\202\002\305\240\003\002\001\002\002\001\000
\060\015\006\011\052\206\110\206\367\015\001\001\013\005\000\060
```

\201\217\061\013\060\011\006\003\125\004\006\023\002\125\123\061  
\020\060\016\006\003\125\004\010\023\007\101\162\151\172\157\156  
\141\061\023\060\021\006\003\125\004\007\023\012\123\143\157\164  
\164\163\144\141\154\145\061\045\060\043\006\003\125\004\012\023  
\034\123\164\141\162\146\151\145\154\144\040\124\145\143\150\156  
\157\154\157\147\151\145\163\054\040\111\156\143\056\061\062\060  
\060\006\003\125\004\003\023\051\123\164\141\162\146\151\145\154  
\144\040\122\157\157\164\040\103\145\162\164\151\146\151\143\141  
\164\145\040\101\165\164\150\157\162\151\164\171\040\055\040\107  
\062\060\036\027\015\060\071\060\071\060\061\060\060\060\060\060  
\060\132\027\015\063\067\061\062\063\061\062\063\065\071\065\071  
\132\060\201\217\061\013\060\011\006\003\125\004\006\023\002\125  
\123\061\020\060\016\006\003\125\004\010\023\007\101\162\151\172  
\157\156\141\061\023\060\021\006\003\125\004\007\023\012\123\143  
\157\164\164\163\144\141\154\145\061\045\060\043\006\003\125\004  
\012\023\034\123\164\141\162\146\151\145\154\144\040\124\145\143  
\150\156\157\154\157\147\151\145\163\054\040\111\156\143\056\061  
\062\060\060\006\003\125\004\003\023\051\123\164\141\162\146\151  
\145\154\144\040\122\157\157\164\040\103\145\162\164\151\146\151  
\143\141\164\145\040\101\165\164\150\157\162\151\164\171\040\055  
\040\107\062\060\202\001\042\060\015\006\011\052\206\110\206\367  
\015\001\001\001\005\000\003\202\001\017\000\060\202\001\012\002  
\202\001\001\000\275\355\301\003\374\366\217\374\002\261\157\133  
\237\110\331\235\171\342\242\267\003\141\126\030\303\107\266\327  
\312\075\065\056\211\103\367\241\151\233\336\212\032\375\023\040  
\234\264\111\167\062\051\126\375\271\354\214\335\042\372\162\334  
\047\141\227\356\366\132\204\354\156\031\271\211\054\334\204\133  
\325\164\373\153\137\305\211\245\020\122\211\106\125\364\270\165  
\034\346\177\344\124\256\113\370\125\162\127\002\031\370\027\161  
\131\353\036\050\007\164\305\235\110\276\154\264\364\244\260\363  
\144\067\171\222\300\354\106\136\177\341\155\123\114\142\257\315  
\037\013\143\273\072\235\373\374\171\000\230\141\164\317\046\202  
\100\143\363\262\162\152\031\015\231\312\324\016\165\314\067\373  
\213\211\301\131\361\142\177\137\263\137\145\060\370\247\267\115  
\166\132\036\166\136\064\300\350\226\126\231\212\263\360\177\244  
\315\275\334\062\061\174\221\317\340\137\021\370\153\252\111\134  
\321\231\224\321\242\343\143\133\011\166\265\126\142\341\113\164  
\035\226\324\046\324\010\004\131\320\230\016\016\346\336\374\303  
\354\037\220\361\002\003\001\000\001\243\102\060\100\060\017\006  
\003\125\035\023\001\001\377\004\005\060\003\001\001\377\060\016  
\006\003\125\035\017\001\001\377\004\004\003\002\001\006\060\035  
\006\003\125\035\016\004\026\004\024\174\014\062\037\247\331\060  
\177\304\175\150\243\142\250\241\316\253\007\133\047\060\015\006  
\011\052\206\110\206\367\015\001\001\013\005\000\003\202\001\001  
\000\021\131\372\045\117\003\157\224\231\073\232\037\202\205\071  
\324\166\005\224\136\341\050\223\155\142\135\011\302\240\250\324  
\260\165\070\361\064\152\235\344\237\212\206\046\121\346\054\321  
\306\055\156\225\040\112\222\001\354\270\212\147\173\061\342\147

```
\056\214\225\003\046\056\103\235\112\061\366\016\265\014\273\267
\342\067\177\042\272\000\243\016\173\122\373\153\273\073\304\323
\171\121\116\315\220\364\147\007\031\310\074\106\172\015\001\175
\305\130\347\155\346\205\060\027\232\044\304\020\340\004\367\340
\362\177\324\252\012\377\102\035\067\355\224\345\144\131\022\040
\167\070\323\062\076\070\201\165\226\163\372\150\217\261\313\316
\037\305\354\372\234\176\317\176\261\361\007\055\266\374\277\312
\244\277\320\227\005\112\274\352\030\050\002\220\275\124\170\011
\041\161\323\321\175\035\331\026\260\251\141\075\320\012\000\042
\374\307\173\313\011\144\105\013\073\100\201\367\175\174\062\365
\230\312\130\216\175\052\356\220\131\163\144\371\066\164\136\045
\241\365\146\005\056\177\071\025\251\052\373\120\213\216\205\151
\364
```

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "Starfield Root Certificate Authority - G2"

# Issuer: CN=Starfield Root Certificate Authority - G2,O="Starfield Technologies,  
Inc.",L=Scottsdale,ST=Arizona,C=US

# Serial Number: 0 (0x0)

# Subject: CN=Starfield Root Certificate Authority - G2,O="Starfield Technologies,  
Inc.",L=Scottsdale,ST=Arizona,C=US

#

Not Valid Before: Tue Sep 01 00:00:00 2009

# Not Valid After : Thu Dec 31 23:59:59 2037

# Fingerprint (SHA-256):

2C:E1:CB:0B:F9:D2:F9:E1:02:99:3F:BE:21:51:52:C3:B2:DD:0C:AB:DE:1C:68:E5:31:9B:83:91:54:DB:B7:F5

# Fingerprint (SHA1): B5:1C:06:7C:EE:2B:0C:3D:F8:55:AB:2D:92:F4:FE:39:D4:E7:0F:0E

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "Starfield Root Certificate Authority - G2"

CKA\_CERT\_SHA1\_HASH MULTILINE\_OCTAL

```
\265\034\006\174\356\053\014\075\370\125\253\055\222\364\376\071
\324\347\017\016
```

END

CKA\_CERT\_MD5\_HASH MULTILINE\_OCTAL

```
\326\071\201\306\122\176\226\151\374\374\312\146\355\005\362\226
```

END

CKA\_ISSUER MULTILINE\_OCTAL

```
\060\201\217\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\020\060\016\006\003\125\004\010\023\007\101\162\151\172\157
\156\141\061\023\060\021\006\003\125\004\007\023\012\123\143\157
\164\164\163\144\141\154\145\061\045\060\043\006\003\125\004\012
```

```
\023\034\123\164\141\162\146\151\145\154\144\040\124\145\143\150
\156\157\154\157\147\151\145\163\054\040\111\156\143\056\061\062
\060\060\006\003\125\004\003\023\051\123\164\141\162\146\151\145
\154\144\040\122\157\157\164\040\103\145\162\164\151\146\151\143
\141\164\145\040\101\165\164\150\157\162\151\164\171\040\055\040
\107\062
```

END

CKA\_SERIAL\_NUMBER

MULTILINE\_OCTAL

```
\002\001\000
```

END

CKA\_TRUST\_SERVER\_AUTH CK\_TRUST CKT\_NSS\_TRUSTED\_DELEGATOR

CKA\_TRUST\_EMAIL\_PROTECTION CK\_TRUST CKT\_NSS\_MUST\_VERIFY\_TRUST

CKA\_TRUST\_CODE\_SIGNING CK\_TRUST CKT\_NSS\_MUST\_VERIFY\_TRUST

CKA\_TRUST\_STEP\_UP\_APPROVED CK\_BBOOL CK\_FALSE

#

# Certificate "Starfield Services Root Certificate Authority - G2"

#

# Issuer: CN=Starfield Services Root Certificate Authority - G2,O="Starfield Technologies,  
Inc.",L=Scottsdale,ST=Arizona,C=US

# Serial Number: 0 (0x0)

# Subject: CN=Starfield Services Root Certificate Authority - G2,O="Starfield Technologies,  
Inc.",L=Scottsdale,ST=Arizona,C=US

# Not Valid Before:

Tue Sep 01 00:00:00 2009

# Not Valid After : Thu Dec 31 23:59:59 2037

# Fingerprint (SHA-256):

56:8D:69:05:A2:C8:87:08:A4:B3:02:51:90:ED:CF:ED:B1:97:4A:60:6A:13:C6:E5:29:0F:CB:2A:E6:3E:DA:B5

# Fingerprint (SHA1): 92:5A:8F:8D:2C:6D:04:E0:66:5F:59:6A:FF:22:D8:63:E8:25:6F:3F

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_CERTIFICATE

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "Starfield Services Root Certificate Authority - G2"

CKA\_CERTIFICATE\_TYPE CK\_CERTIFICATE\_TYPE CKC\_X\_509

CKA\_SUBJECT MULTILINE\_OCTAL

```
\060\201\230\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\020\060\016\006\003\125\004\010\023\007\101\162\151\172\157
\156\141\061\023\060\021\006\003\125\004\007\023\012\123\143\157
\164\164\163\144\141\154\145\061\045\060\043\006\003\125\004\012
\023\034\123\164\141\162\146\151\145\154\144\040\124\145\143\150
\156\157\154\157\147\151\145\163\054\040\111\156\143\056\061\073
\060\071\006\003\125\004\003\023\062\123\164\141\162\146\151\145
\154\144\040\123\145\162\166\151\143\145\163\040\122\157\157\164
\040\103\145\162\164\151\146\151\143\141\164\145\040\101\165\164
\150\157\162\151\164\171\040\055\040\107\062
```

END

CKA\_ID

UTF8 "0"

CKA\_ISSUER MULTILINE\_OCTAL

\060\201\230\061\013\060\011\006\003\125\004\006\023\002\125\123  
\061\020\060\016\006\003\125\004\010\023\007\101\162\151\172\157  
\156\141\061\023\060\021\006\003\125\004\007\023\012\123\143\157  
\164\164\163\144\141\154\145\061\045\060\043\006\003\125\004\012  
\023\034\123\164\141\162\146\151\145\154\144\040\124\145\143\150  
\156\157\154\157\147\151\145\163\054\040\111\156\143\056\061\073  
\060\071\006\003\125\004\003\023\062\123\164\141\162\146\151\145  
\154\144\040\123\145\162\166\151\143\145\163\040\122\157\157\164  
\040\103\145\162\164\151\146\151\143\141\164\145\040\101\165\164  
\150\157\162\151\164\171\040\055\040\107\062

END

CKA\_SERIAL\_NUMBER MULTILINE\_OCTAL

\002\001\000

END

CKA\_VALUE MULTILINE\_OCTAL

\060\202\003\357\060\202\002\327\240\003\002\001\002\002\001\000  
\060\015\006\011\052\206\110\206\367\015\001\001\013\005\000\060  
\201\230\061\013\060\011\006\003\125\004\006\023\002\125\123\061  
\020\060\016\006\003\125\004\010\023\007\101\162\151\172\157\156  
\141\061\023\060\021\006\003\125\004\007\023\012\123\143\157\164  
\164\163\144\141\154\145\061\045\060\043\006\003\125\004\012\023  
\034\123\164\141\162\146\151\145\154\144\040\124\145\143\150\156  
\157\154\157\147\151\145\163\054\040\111\156\143\056\061\073\060  
\071\006\003\125\004\003\023\062\123\164\141\162\146\151\145\154  
\144\040\123\145\162\166\151\143\145\163\040\122\157\157\164\040  
\103\145\162\164\151\146\151\143\141\164\145\040\101\165\164\150  
\157\162\151\164\171\040\055\040\107\062\060\036\027\015\060\071  
\060\071\060\061\060\060\060\060\060\060\132\027\015\063\067\061  
\062\063\061\062\063\065\071\065\071\132\060\201\230\061\013\060  
\011\006\003\125\004\006\023\002\125\123\061\020\060\016\006\003  
\125\004\010\023\007\101\162\151\172\157\156\141\061\023\060\021  
\006\003\125\004\007\023\012\123\143\157\164\164\163\144\141\154  
\145\061\045\060\043\006\003\125\004\012\023\034\123\164\141\162  
\146\151\145\154\144\040\124\145\143\150\156\157\154\157\147\151  
\145\163\054\040\111\156\143\056\061\073\060\071\006\003\125\004  
\003\023\062\123\164\141\162\146\151\145\154\144\040\123\145\162  
\166\151\143\145\163\040\122\157\157\164\040\103\145\162\164\151  
\146\151\143\141\164\145\040\101\165\164\150\157\162\151\164\171  
\040\055\040\107\062\060\202\001\042\060\015\006\011\052\206\110  
\206\367\015\001\001\001\005\000\003\202\001\017\000\060\202\001  
\012\002\202\001\001\000\325\014\072\304\052\371\116\342\365\276  
\031\227\137\216\210\123\261\037\077\313\317\237\040\023\155\051  
\072\310\017\175\074\367\153\166\070\143\331\066\140\250\233\136  
\134\000\200\262\057\131\177\366\207\371\045\103\206\347\151\033  
\122\232\220\341\161\343\330\055\015\116\157\366\310\111\331\266

\363\032\126\256\053\266\164\024\353\317\373\046\343\032\272\035  
\226\056\152\073\130\224\211\107\126\377\045\240\223\160\123\203  
\332\204\164\024\303\147\236\004\150\072\337\216\100\132\035\112  
\116\317\103\221\073\347\126\326\000\160\313\122\356\173\175\256  
\072\347\274\061\371\105\366\302\140\317\023\131\002\053\200\314  
\064\107\337\271\336\220\145\155\002\317\054\221\246\246\347\336  
\205\030\111\174\146\116\243\072\155\251\265\356\064\056\272\015  
\003\270\063\337\107\353\261\153\215\045\331\233\316\201\321\105  
\106\062\226\160\207\336\002\016\111\103\205\266\154\163\273\144  
\352\141\101\254\311\324\124\337\207\057\307\042\262\046\314\237  
\131\124\150\237\374\276\052\057\304\125\034\165\100\140\027\205  
\002\125\071\213\177\005\002\003\001\000\001\243\102\060\100\060  
\017\006\003\125\035\023\001\001\377\004\005\060\003\001\001\377  
\060\016\006\003\125\035\017\001\001\377\004\004\003\002\001\006  
\060\035\006\003\125\035\016\004\026\004\024\234\137\000\337\252  
\001\327\060\053\070\210\242\270\155\112\234\362\021\221\203\060  
\015\006\011\052\206\110\206\367\015\001\001\013\005\000\003\202  
\001\001\000\113\066\246\204\167\151\335\073\031\237\147\043\010  
\157\016\141\311\375\204\334\137\330\066\201\315\330\033\101\055  
\237\140\335\307\032\150\331\321\156\206\341\210\043\317\023\336  
\103\317\342\064\263\004\235\037\051\325\277\370\136\310\325\301  
\275\356\222\157\062\164\362\221\202\057\275\202\102\172\255\052  
\267\040\175\115\274\172\125\022\302\025\352\275\367\152\225\056  
\154\164\237\317\034\264\362\305\001\243\205\320\162\076\255\163  
\253\013\233\165\014\155\105\267\216\224\254\226\067\265\240\320  
\217\025\107\016\343\350\203\335\217\375\357\101\001\167\314\047  
\251\142\205\063\362\067\010\357\161\317\167\006\336\310\031\035  
\210\100\317\175\106\035\377\036\307\341\316\377\043\333\306\372  
\215\125\116\251\002\347\107\021\106\076\364\375\275\173\051\046  
\273\251\141\142\067\050\266\055\052\366\020\206\144\311\160\247  
\322\255\267\051\160\171\352\074\332\143\045\237\375\150\267\060  
\354\160\373\165\212\267\155\140\147\262\036\310\271\351\330\250  
\157\002\213\147\015\115\046\127\161\332\040\374\301\112\120\215  
\261\050\272

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "Starfield Services Root Certificate Authority - G2"

# Issuer: CN=Starfield Services Root Certificate Authority - G2,O="Starfield Technologies,  
Inc.",L=Scottsdale,ST=Arizona,C=US

# Serial Number: 0 (0x0)

# Subject: CN=Starfield Services Root Certificate Authority - G2,O="Starfield Technologies,  
Inc.",L=Scottsdale,ST=Arizona,C=US

# Not Valid Before: Tue Sep 01 00:00:00 2009

# Not Valid After : Thu Dec 31 23:59:59 2037



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# Fingerprint (SHA-256):
56:8D:69:05:A2:C8:87:08:A4:B3:02:51:90:ED:CF:ED:B1:97:4A:60:6A:13:C6:E5:29:0F:CB:2A:E6:3E:DA:B5
# Fingerprint (SHA1): 92:5A:8F:8D:2C:6D:04:E0:66:5F:59:6A:FF:22:D8:63:E8:25:6F:3F
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Starfield Services Root
Certificate Authority - G2"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\222\132\217\215\054\155\004\340\146\137\131\152\377\042\330\143
\350\045\157\077
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\027\065\164\257\173\141\034\353\364\371\074\342\356\100\371\242
END
CKA_ISSUER MULTILINE_OCTAL
\060\201\230\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\020\060\016\006\003\125\004\010\023\007\101\162\151\172\157
\156\141\061\023\060\021\006\003\125\004\007\023\012\123\143\157
\164\164\163\144\141\154\145\061\045\060\043\006\003\125\004\012
\023\034\123\164\141\162\146\151\145\154\144\040\124\145\143\150
\156\157\154\157\147\151\145\163\054\040\111\156\143\056\061\073
\060\071\006\003\125\004\003\023\062\123\164\141\162\146\151\145
\154\144\040\123\145\162\166\151\143\145\163\040\122\157\157\164
\040\103\145\162\164\151\146\151\143\141\164\145\040\101\165\164
\150\157\162\151\164\171\040\055\040\107\062
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\001\000
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION
CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "AffirmTrust Commercial"
#
# Issuer: CN=AffirmTrust Commercial,O=AffirmTrust,C=US
# Serial Number:77:77:06:27:26:a9:b1:7c
# Subject: CN=AffirmTrust Commercial,O=AffirmTrust,C=US
# Not Valid Before: Fri Jan 29 14:06:06 2010
# Not Valid After : Tue Dec 31 14:06:06 2030
# Fingerprint (SHA-256):
03:76:AB:1D:54:C5:F9:80:3C:E4:B2:E2:01:A0:EE:7E:EF:7B:57:B6:36:E8:A9:3C:9B:8D:48:60:C9:6F:5F:A7
# Fingerprint (SHA1): F9:B5:B6:32:45:5F:9C:BE:EC:57:5F:80:DC:E9:6E:2C:C7:B2:78:B7

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```
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "AffirmTrust Commercial"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\104\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\024\060\022\006\003\125\004\012\014\013\101\146\146\151\162\155
\124\162\165\163\164\061\037\060\035\006\003\125\004\003\014\026
\101\146\146\151\162\155\124\162\165\163\164\040\103\157\155\155
\145\162\143\151\141\154
END
CKA_ID
UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\104\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\024\060\022\006\003\125\004\012\014\013\101\146\146\151\162\155
\124\162\165\163\164\061\037\060\035\006\003\125\004\003\014\026
\101\146\146\151\162\155\124\162\165\163\164\040\103\157\155\155
\145\162\143\151\141\154
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\010\167\167\006\047\046\251\261\174
END
CKA_VALUE MULTILINE_OCTAL
\060\202\003\114\060\202\002\064\240\003\002\001\002\002\010\167
\167\006\047\046\251\261\174\060\015\006\011\052\206\110\206\367
\015\001\001\013\005\000\060\104\061\013\060\011\006\003\125\004
\006\023\002\125\123\061\024\060\022\006\003\125\004\012\014\013
\101\146\146\151\162\155\124\162\165\163\164\061\037\060\035\006
\003\125\004\003\014\026\101\146\146\151\162\155\124\162\165\163
\164\040\103\157\155\155\145\162\143\151\141\154\060\036\027\015
\061\060\060\061\062\071\061\064\060\066\060\066\132\027\015\063
\060\061\062\063\061\061\064\060\066\060\066\132\060\104\061\013
\060\011\006\003\125\004\006\023\002\125\123\061\024\060\022\006
\003\125\004\012\014\013\101\146\146\151\162\155\124\162\165\163
\164\061\037\060\035\006\003\125\004\003\014\026\101\146\146\151
\162\155\124\162\165\163\164\040\103\157\155\155\145\162\143\151
\141\154\060\202\001\042\060\015\006\011\052\206\110\206\367\015
\001\001\001\005\000\003\202\001\017\000\060\202\001\012\002\202
\001\001\000\366\033\117\147\007\053\241\025\365\006\042\313\037
\001\262\343\163\105\006\104\111\054\273\111\045\024\326\316\303
\267\253\054\117\306\101\062\224\127\372\022\247\133\016\342\217
\037\036\206\031\247\252\265\055\271\137\015\212\302\257\205\065
\171\062\055\273\034\142\067\362\261\133\112\075\312\315\161\137
\351\102\276\224\350\310\336\371\042\110\144\306\345\253\306\053
\155\255\005\360\372\325\013\317\232\345\360\120\244\213\073\107
```

\245\043\133\172\172\370\063\077\270\357\231\227\343\040\301\326  
\050\211\317\224\373\271\105\355\343\100\027\021\324\164\360\013  
\061\342\053\046\152\233\114\127\256\254\040\076\272\105\172\005  
\363\275\233\151\025\256\175\116\040\143\304\065\166\072\007\002  
\311\067\375\307\107\356\350\361\166\035\163\025\362\227\244\265  
\310\172\171\331\102\252\053\177\134\376\316\046\117\243\146\201  
\065\257\104\272\124\036\034\060\062\145\235\346\074\223\136\120  
\116\172\343\072\324\156\314\032\373\371\322\067\256\044\052\253  
\127\003\042\050\015\111\165\177\267\050\332\165\277\216\343\334  
\016\171\061\002\003\001\000\001\243\102\060\100\060\035\006\003  
\125\035\016\004\026\004\024\235\223\306\123\213\136\312\257\077  
\237\036\017\345\231\225\274\044\366\224\217\060\017\006\003\125  
\035\023\001\001\377\004\005\060\003\001\001\377\060\016\006\003  
\125\035\017\001\001\377\004\004\003\002\001\006\060\015\006\011  
\052\206\110\206\367\015\001\001\013\005\000\003\202\001\001\000  
\130\254\364\004\016\315\300\015\377\012\375\324\272\026\137\051  
\275\173\150\231\130\111\322\264\035\067\115\177\047\175\106\006  
\135\103\306\206\056\076\163\262\046\175\117\223\251\266\304\052  
\232\253\041\227\024\261\336\214\323\253\211\025\330\153\044\324  
\361\026\256\330\244\134\324\177\121\216\355\030\001\261\223\143  
\275\274\370\141\200\232\236\261\316\102\160\342\251\175\006\045  
\175\047\241\376\157\354\263\036\044\332\343\113\125\032\000\073  
\065\264\073\331\327\135\060\375\201\023\211\362\302\006\053\355  
\147\304\216\311\103\262\134\153\025\211\002\274\142\374\116\362  
\265\063\252\262\157\323\012\242\120\343\366\073\350\056\104\302  
\333\146\070\251\063\126\110\361\155\033\063\215\015\214\077\140  
\067\235\323\312\155\176\064\176\015\237\162\166\213\033\237\162  
\375\122\065\101\105\002\226\057\034\262\232\163\111\041\261\111  
\107\105\107\264\357\152\064\021\311\115\232\314\131\267\326\002  
\236\132\116\145\265\224\256\033\337\051\260\026\361\277\000\236  
\007\072\027\144\265\004\265\043\041\231\012\225\073\227\174\357  
END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "AffirmTrust Commercial"

# Issuer: CN=AffirmTrust Commercial,O=AffirmTrust,C=US

# Serial Number:77:77:06:27:26:a9:b1:7c

# Subject: CN=AffirmTrust Commercial,O=AffirmTrust,C=US

# Not Valid Before: Fri Jan 29 14:06:06 2010

# Not Valid After : Tue Dec 31 14:06:06 2030

# Fingerprint (SHA-256):

03:76:AB:1D:54:C5:F9:80:3C:E4:B2:E2:01:A0:EE:7E:EF:7B:57:B6:36:E8:A9:3C:9B:8D:48:60:C9:6F:5F:A7

# Fingerprint (SHA1): F9:B5:B6:32:45:5F:9C:BE:EC:57:5F:80:DC:E9:6E:2C:C7:B2:78:B7

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

```

CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "AffirmTrust Commercial"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\371\265\266\062\105\137\234\276\354\127\137\200\334\351\156\054
\307\262\170\267
END
CKA_CERT_MD5_HASH
MULTILINE_OCTAL
\202\222\272\133\357\315\212\157\246\075\125\371\204\366\326\267
END
CKA_ISSUER MULTILINE_OCTAL
\060\104\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\024\060\022\006\003\125\004\012\014\013\101\146\146\151\162\155
\124\162\165\163\164\061\037\060\035\006\003\125\004\003\014\026
\101\146\146\151\162\155\124\162\165\163\164\040\103\157\155\155
\145\162\143\151\141\154
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\010\167\167\006\047\046\251\261\174
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "AffirmTrust Networking"
#
# Issuer: CN=AffirmTrust Networking,O=AffirmTrust,C=US
# Serial Number:7c:4f:04:39:1c:d4:99:2d
# Subject: CN=AffirmTrust Networking,O=AffirmTrust,C=US
# Not Valid Before: Fri Jan 29 14:08:24 2010
# Not Valid After : Tue Dec
31 14:08:24 2030
# Fingerprint (SHA-256):
0A:81:EC:5A:92:97:77:F1:45:90:4A:F3:8D:5D:50:9F:66:B5:E2:C5:8F:CD:B5:31:05:8B:0E:17:F3:F0:B4:1B
# Fingerprint (SHA1): 29:36:21:02:8B:20:ED:02:F5:66:C5:32:D1:D6:ED:90:9F:45:00:2F
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "AffirmTrust Networking"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\104\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\024\060\022\006\003\125\004\012\014\013\101\146\146\151\162\155
\124\162\165\163\164\061\037\060\035\006\003\125\004\003\014\026

```

```
\101\146\146\151\162\155\124\162\165\163\164\040\116\145\164\167
\157\162\153\151\156\147
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\104\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\024\060\022\006\003\125\004\012\014\013\101\146\146\151\162\155
\124\162\165\163\164\061\037\060\035\006\003\125\004\003\014\026
\101\146\146\151\162\155\124\162\165\163\164\040\116\145\164\167
\157\162\153\151\156\147
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\010\174\117\004\071\034\324\231\055
END
CKA_VALUE MULTILINE_OCTAL
\060\202\003\114\060\202\002\064\240\003\002\001\002\002\010\174
\117\004\071\034\324\231\055\060\015\006\011\052\206\110\206\367
\015\001\001\005\005\000\060\104\061\013\060\011\006\003\125\004
\006\023\002\125\123\061\024\060\022\006\003\125\004\012\014\013
\101\146\146\151\162\155\124\162\165\163\164\061\037\060\035\006
\003\125\004\003\014\026\101\146\146\151\162\155\124\162\165\163
\164\040\116\145\164\167\157\162\153\151\156\147\060\036\027\015
\061\060\060\061\062\071\061\064\060\070\062\064\132\027\015\063
\060\061\062\063\061\061\064\060\070\062\064\132\060\104\061\013
\060\011\006\003\125\004\006\023\002\125\123\061\024\060\022\006
\003\125\004\012\014\013\101\146\146\151\162\155\124\162\165\163
\164\061\037\060\035\006\003\125\004\003\014\026\101\146\146\151
\162\155\124\162\165\163\164\040\116\145\164\167\157\162\153\151
\156\147\060\202\001\042\060\015\006\011\052\206\110\206\367\015
\001\001\001\005\000\003\202\001\017\000\060\202\001\012\002\202
\001\001\000\264\204\314\063\027\056\153\224\154\153\141\122\240
\353\243\317\171\224\114\345\224\200\231\313\125\144\104\145\217
\147\144\342\006\343\134\067\111\366\057\233\204\204\036\055\362
\140\235\060\116\314\204\205\342\054\317\036\236\376\066\253\063
\167\065\104\330\065\226\032\075\066\350\172\016\330\325\107\241
\152\151\213\331\374\273\072\256\171\132\325\364\326\161\273\232
\220\043\153\232\267\210\164\207\014\036\137\271\236\055\372\253
\123\053\334\273\166\076\223\114\010\010\214\036\242\043\034\324
\152\255\042\272\231\001\056\155\145\313\276\044\146\125\044\113
\100\104\261\033\327\341\302\205\300\336\020\077\075\355\270\374
\361\361\043\123\334\277\145\227\157\331\371\100\161\215\175\275
\225\324\316\276\240\136\047\043\336\375\246\320\046\016\000\051
\353\074\106\360\075\140\277\077\120\322\334\046\101\121\236\024
\067\102\004\243\160\127\250\033\207\355\055\372\173\356\214\012
\343\251\146\211\031\313\101\371\335\104\066\141\317\342\167\106
\310\175\366\364\222\201\066\375\333\064\361\162\176\363\014\026
\275\264\025\002\003\001\000\001\243\102\060\100\060\035\006\003
```

```
\125\035\016\004\026\004\024\007\037\322\347\234\332\302\156\242
\100\264\260\172\120\020\120\164\304\310\275\060\017\006\003\125
\035\023\001\001\377\004\005\060\003\001\001\377\060\016\006\003
\125\035\017\001\001\377\004\004\003\002\001\006\060\015\006\011
\052\206\110\206\367\015\001\001\005\005\000\003\202\001\001\000
\211\127\262\026\172\250\302\375\326\331\233\233\064\302\234\264
\062\024\115\247\244\337\354\276\247\276\370\103\333\221\067\316
\264\062\056\120\125\032\065\116\166\103\161\040\357\223\167\116
\025\160\056\207\303\301\035\155\334\313\265\047\324\054\126\321
\122\123\072\104\322\163\310\304\033\005\145\132\142\222\234\356
\101\215\061\333\347\064\352\131\041\325\001\172\327\144\270\144
\071\315\311\355\257\355\113\003\110\247\240\231\001\200\334\145
\243\066\256\145\131\110\117\202\113\310\145\361\127\035\345\131
\056\012\077\154\330\321\365\345\011\264\154\124\000\012\340\025
\115\207\165\155\267\130\226\132\335\155\322\000\240\364\233\110
\276\303\067\244\272\066\340\174\207\205\227\032\025\242\336\056
\242\133\275\257\030\371\220\120\315\160\131\370\047\147\107\313
\307\240\007\072\175\321\054\135\154\031\072\146\265\175\375\221
\157\202\261\276\010\223\333\024\107\361\242\067\307\105\236\074
\307\167\257\144\250\223\337\366\151\203\202\140\362\111\102\064
\355\132\000\124\205\034\026\066\222\014\134\372\246\255\277\333
END
```

```
CKA_NSS_MOZILLA_CA_POLICY
```

```
CK_BBOOL CK_TRUE
```

```
CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE
```

```
CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE
```

```
# Trust for "AffirmTrust Networking"
```

```
# Issuer: CN=AffirmTrust Networking,O=AffirmTrust,C=US
```

```
# Serial Number:7c:4f:04:39:1c:d4:99:2d
```

```
# Subject: CN=AffirmTrust Networking,O=AffirmTrust,C=US
```

```
# Not Valid Before: Fri Jan
```

```
29 14:08:24 2010
```

```
# Not Valid After : Tue Dec 31 14:08:24 2030
```

```
# Fingerprint (SHA-256):
```

```
0A:81:EC:5A:92:97:77:F1:45:90:4A:F3:8D:5D:50:9F:66:B5:E2:C5:8F:CD:B5:31:05:8B:0E:17:F3:F0:B4:1B
```

```
# Fingerprint (SHA1): 29:36:21:02:8B:20:ED:02:F5:66:C5:32:D1:D6:ED:90:9F:45:00:2F
```

```
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
```

```
CKA_TOKEN CK_BBOOL CK_TRUE
```

```
CKA_PRIVATE CK_BBOOL CK_FALSE
```

```
CKA_MODIFIABLE CK_BBOOL CK_FALSE
```

```
CKA_LABEL UTF8 "AffirmTrust Networking"
```

```
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
```

```
\051\066\041\002\213\040\355\002\365\146\305\062\321\326\355\220
```

```
\237\105\000\057
```

```
END
```

```
CKA_CERT_MD5_HASH MULTILINE_OCTAL
```

```
\102\145\312\276\001\232\232\114\251\214\101\111\315\300\325\177
```

```

END
CKA_ISSUER MULTILINE_OCTAL
\060\104\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\024\060\022\006\003\125\004\012\014\013\101\146\146\151\162\155
\124\162\165\163\164\061\037\060\035\006\003\125\004\003\014\026
\101\146\146\151\162\155\124\162\165\163\164\040\116\145\164\167
\157\162\153\151\156\147
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\010\174\117\004\071\034\324\231\055
END
CKA_TRUST_SERVER_AUTH
CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "AffirmTrust Premium"
#
# Issuer: CN=AffirmTrust Premium,O=AffirmTrust,C=US
# Serial Number:6d:8c:14:46:b1:a6:0a:ee
# Subject: CN=AffirmTrust Premium,O=AffirmTrust,C=US
# Not Valid Before: Fri Jan 29 14:10:36 2010
# Not Valid After : Mon Dec 31 14:10:36 2040
# Fingerprint (SHA-256):
70:A7:3F:7F:37:6B:60:07:42:48:90:45:34:B1:14:82:D5:BF:0E:69:8E:CC:49:8D:F5:25:77:EB:F2:E9:3B:9A
# Fingerprint (SHA1): D8:A6:33:2C:E0:03:6F:B1:85:F6:63:4F:7D:6A:06:65:26:32:28:27
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "AffirmTrust Premium"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\101\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\024\060\022\006\003\125\004\012\014\013\101\146\146\151\162\155
\124\162\165\163\164\061\034\060\032\006\003\125\004\003\014\023
\101\146\146\151\162\155\124\162\165\163\164\040\120\162\145\155
\151\165\155
END
CKA_ID
UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\101\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\024\060\022\006\003\125\004\012\014\013\101\146\146\151\162\155
\124\162\165\163\164\061\034\060\032\006\003\125\004\003\014\023
\101\146\146\151\162\155\124\162\165\163\164\040\120\162\145\155

```

\151\165\155

END

CKA\_SERIAL\_NUMBER MULTILINE\_OCTAL

\002\010\155\214\024\106\261\246\012\356

END

CKA\_VALUE MULTILINE\_OCTAL

\060\202\005\106\060\202\003\056\240\003\002\001\002\002\010\155  
\214\024\106\261\246\012\356\060\015\006\011\052\206\110\206\367  
\015\001\001\014\005\000\060\101\061\013\060\011\006\003\125\004  
\006\023\002\125\123\061\024\060\022\006\003\125\004\012\014\013  
\101\146\146\151\162\155\124\162\165\163\164\061\034\060\032\006  
\003\125\004\003\014\023\101\146\146\151\162\155\124\162\165\163  
\164\040\120\162\145\155\151\165\155\060\036\027\015\061\060\060  
\061\062\071\061\064\061\060\063\066\132\027\015\064\060\061\062  
\063\061\061\064\061\060\063\066\132\060\101\061\013\060\011\006  
\003\125\004\006\023\002\125\123\061\024\060\022\006\003\125\004  
\012\014\013\101\146\146\151\162\155\124\162\165\163\164\061\034  
\060\032\006\003\125\004\003\014\023\101\146\146\151\162\155\124  
\162\165\163\164\040\120\162\145\155\151\165\155\060\202\002\042  
\060\015\006\011\052\206\110\206\367\015\001\001\001\005\000\003  
\202\002\017\000\060\202\002\012\002\202\002\001\000\304\022\337  
\251\137\376\101\335\335\365\237\212\343\366\254\341\074\170\232  
\274\330\360\177\172\240\063\052\334\215\040\133\256\055\157\347  
\223\331\066\160\152\150\317\216\121\243\205\133\147\004\240\020  
\044\157\135\050\202\301\227\127\330\110\051\023\266\341\276\221  
\115\337\205\014\123\030\232\036\044\242\117\217\360\242\205\013  
\313\364\051\177\322\244\130\356\046\115\311\252\250\173\232\331  
\372\070\336\104\127\025\345\370\214\310\331\110\342\015\026\047  
\035\036\310\203\205\045\267\272\252\125\101\314\003\042\113\055  
\221\215\213\346\211\257\146\307\351\377\053\351\074\254\332\322  
\263\303\341\150\234\211\370\172\000\126\336\364\125\225\154\373  
\272\144\335\142\213\337\013\167\062\353\142\314\046\232\233\273  
\252\142\203\114\264\006\172\060\310\051\277\355\006\115\227\271  
\034\304\061\053\325\137\274\123\022\027\234\231\127\051\146\167  
\141\041\061\007\056\045\111\235\030\362\356\363\053\161\214\265  
\272\071\007\111\167\374\357\056\222\220\005\215\055\057\167\173  
\357\103\277\065\273\232\330\371\163\247\054\362\320\127\356\050  
\116\046\137\217\220\150\011\057\270\370\334\006\351\056\232\076  
\121\247\321\042\304\012\247\070\110\154\263\371\377\175\253\206  
\127\343\272\326\205\170\167\272\103\352\110\177\366\330\276\043  
\155\036\277\321\066\154\130\134\361\356\244\031\124\032\365\003  
\322\166\346\341\214\275\074\263\323\110\113\342\310\370\177\222  
\250\166\106\234\102\145\076\244\036\301\007\003\132\106\055\270  
\227\363\267\325\262\125\041\357\272\334\114\000\227\373\024\225  
\047\063\277\350\103\107\106\322\010\231\026\140\073\232\176\322  
\346\355\070\352\354\001\036\074\110\126\111\011\307\114\067\000  
\236\210\016\300\163\341\157\146\351\162\107\060\076\020\345\013  
\003\311\232\102\000\154\305\224\176\141\304\212\337\177\202\032



\013\131\304\131\062\167\263\274\140\151\126\071\375\264\006\173  
\054\326\144\066\331\275\110\355\204\037\176\245\042\217\052\270  
\102\364\202\267\324\123\220\170\116\055\032\375\201\157\104\327  
\073\001\164\226\102\340\000\342\056\153\352\305\356\162\254\273  
\277\376\352\252\250\370\334\366\262\171\212\266\147\002\003\001  
\000\001\243\102\060\100\060\035\006\003\125\035\016\004\026\004  
\024\235\300\147\246\014\042\331\046\365\105\253\246\145\122\021  
\047\330\105\254\143\060\017\006\003\125\035\023\001\001\377\004  
\005\060\003\001\001\377\060\016\006\003\125\035\017\001\001\377  
\004\004\003\002\001\006\060\015\006\011\052\206\110\206\367\015  
\001\001\014\005\000\003\202\002\001\000\263\127\115\020\142\116  
\072\344\254\352\270\034\257\062\043\310\263\111\132\121\234\166  
\050\215\171\252\127\106\027\325\365\122\366\267\104\350\010\104  
\277\030\204\322\013\200\315\305\022\375\000\125\005\141\207\101  
\334\265\044\236\074\304\330\310\373\160\236\057\170\226\203\040  
\066\336\174\017\151\023\210\245\165\066\230\010\246\306\337\254  
\316\343\130\326\267\076\336\272\363\353\064\100\330\242\201\365  
\170\077\057\325\245\374\331\242\324\136\004\016\027\255\376\101  
\360\345\262\162\372\104\202\063\102\350\055\130\367\126\214\142  
\077\272\102\260\234\014\134\176\056\145\046\134\123\117\000\262  
\170\176\241\015\231\055\215\270\035\216\242\304\260\375\140\320  
\060\244\216\310\004\142\251\304\355\065\336\172\227\355\016\070  
\136\222\057\223\160\245\251\234\157\247\175\023\035\176\306\010  
\110\261\136\147\353\121\010\045\351\346\045\153\122\051\221\234  
\322\071\163\010\127\336\231\006\264\133\235\020\006\341\302\000  
\250\270\034\112\002\012\024\320\301\101\312\373\214\065\041\175  
\202\070\362\251\124\221\031\065\223\224\155\152\072\305\262\320  
\273\211\206\223\350\233\311\017\072\247\172\270\241\360\170\106  
\372\374\067\057\345\212\204\363\337\376\004\331\241\150\240\057  
\044\342\011\225\006\325\225\312\341\044\226\353\174\366\223\005  
\273\355\163\351\055\321\165\071\327\347\044\333\330\116\137\103  
\217\236\320\024\071\277\125\160\110\231\127\061\264\234\356\112  
\230\003\226\060\037\140\006\356\033\043\376\201\140\043\032\107  
\142\205\245\314\031\064\200\157\263\254\032\343\237\360\173\110  
\255\325\001\331\147\266\251\162\223\352\055\146\265\262\270\344  
\075\074\262\357\114\214\352\353\007\277\253\065\232\125\206\274  
\030\246\265\250\136\264\203\154\153\151\100\323\237\334\361\303  
\151\153\271\341\155\011\364\361\252\120\166\012\172\175\172\027  
\241\125\226\102\231\061\011\335\140\021\215\005\060\176\346\216  
\106\321\235\024\332\307\027\344\005\226\214\304\044\265\033\317  
\024\007\262\100\370\243\236\101\206\274\004\320\153\226\310\052  
\200\064\375\277\357\006\243\335\130\305\205\075\076\217\376\236  
\051\340\266\270\011\150\031\034\030\103

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

```

# Trust for "AffirmTrust Premium"
# Issuer: CN=AffirmTrust Premium,O=AffirmTrust,C=US
# Serial Number:6d:8c:14:46:b1:a6:0a:ee
# Subject: CN=AffirmTrust Premium,O=AffirmTrust,C=US
# Not Valid Before: Fri Jan 29 14:10:36 2010
# Not Valid After : Mon Dec 31 14:10:36 2040
# Fingerprint (SHA-256):
70:A7:3F:7F:37:6B:60:07:42:48:90:45:34:B1:14:82:D5:BF:0E:69:8E:CC:49:8D:F5:25:77:EB:F2:E9:3B:9A
# Fingerprint (SHA1): D8:A6:33:2C:E0:03:6F:B1:85:F6:63:4F:7D:6A:06:65:26:32:28:27
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "AffirmTrust Premium"
CKA_CERT_SHA1_HASH
MULTILINE_OCTAL
\330\246\063\054\340\003\157\261\205\366\143\117\175\152\006\145
\046\062\050\047
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\304\135\016\110\266\254\050\060\116\012\274\371\070\026\207\127
END
CKA_ISSUER MULTILINE_OCTAL
\060\101\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\024\060\022\006\003\125\004\012\014\013\101\146\146\151\162\155
\124\162\165\163\164\061\034\060\032\006\003\125\004\003\014\023
\101\146\146\151\162\155\124\162\165\163\164\040\120\162\145\155
\151\165\155
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\010\155\214\024\106\261\246\012\356
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "AffirmTrust Premium ECC"
#
# Issuer: CN=AffirmTrust Premium ECC,O=AffirmTrust,C=US
# Serial Number:74:97:25:8a:c7:3f:7a:54
# Subject: CN=AffirmTrust Premium ECC,O=AffirmTrust,C=US
#
# Not Valid Before: Fri Jan 29 14:20:24 2010
# Not Valid After : Mon Dec 31 14:20:24 2040
# Fingerprint (SHA-256):

```

BD:71:FD:F6:DA:97:E4:CF:62:D1:64:7A:DD:25:81:B0:7D:79:AD:F8:39:7E:B4:EC:BA:9C:5E:84:88:82:14:23

# Fingerprint (SHA1): B8:23:6B:00:2F:1D:16:86:53:01:55:6C:11:A4:37:CA:EB:FF:C3:BB

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_CERTIFICATE

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "AffirmTrust Premium ECC"

CKA\_CERTIFICATE\_TYPE CK\_CERTIFICATE\_TYPE CKC\_X\_509

CKA\_SUBJECT MULTILINE\_OCTAL

\060\105\061\013\060\011\006\003\125\004\006\023\002\125\123\061  
\024\060\022\006\003\125\004\012\014\013\101\146\146\151\162\155  
\124\162\165\163\164\061\040\060\036\006\003\125\004\003\014\027  
\101\146\146\151\162\155\124\162\165\163\164\040\120\162\145\155  
\151\165\155\040\105\103\103

END

CKA\_ID UTF8 "0"

CKA\_ISSUER MULTILINE\_OCTAL

\060\105\061\013\060\011\006\003\125\004\006\023\002\125\123\061  
\024\060\022\006\003\125\004\012\014\013\101\146\146\151\162\155  
\124\162\165\163\164\061\040\060\036\006\003\125\004\003\014\027  
\101\146\146\151\162\155\124\162\165\163\164\040\120\162\145\155  
\151\165\155\040\105\103\103

END

CKA\_SERIAL\_NUMBER

MULTILINE\_OCTAL

\002\010\164\227\045\212\307\077\172\124

END

CKA\_VALUE MULTILINE\_OCTAL

\060\202\001\376\060\202\001\205\240\003\002\001\002\002\010\164  
\227\045\212\307\077\172\124\060\012\006\010\052\206\110\316\075  
\004\003\003\060\105\061\013\060\011\006\003\125\004\006\023\002  
\125\123\061\024\060\022\006\003\125\004\012\014\013\101\146\146  
\151\162\155\124\162\165\163\164\061\040\060\036\006\003\125\004  
\003\014\027\101\146\146\151\162\155\124\162\165\163\164\040\120  
\162\145\155\151\165\155\040\105\103\103\060\036\027\015\061\060  
\060\061\062\071\061\064\062\060\062\064\132\027\015\064\060\061  
\062\063\061\061\064\062\060\062\064\132\060\105\061\013\060\011  
\006\003\125\004\006\023\002\125\123\061\024\060\022\006\003\125  
\004\012\014\013\101\146\146\151\162\155\124\162\165\163\164\061  
\040\060\036\006\003\125\004\003\014\027\101\146\146\151\162\155  
\124\162\165\163\164\040\120\162\145\155\151\165\155\040\105\103  
\103\060\166\060\020\006\007\052\206\110\316\075\002\001\006\005  
\053\201\004\000\042\003\142\000\004\015\060\136\033\025\235\003  
\320\241\171\065\267\072\074\222\172\312\025\034\315\142\363\234  
\046\134\007\075\345\124\372\243\326\314\022\352\364\024\137\350  
\216\031\253\057\056\110\346\254\030\103\170\254\320\067\303\275  
\262\315\054\346\107\342\032\346\143\270\075\056\057\170\304\117  
\333\364\017\244\150\114\125\162\153\225\035\116\030\102\225\170

\314\067\074\221\342\233\145\053\051\243\102\060\100\060\035\006  
\003\125\035\016\004\026\004\024\232\257\051\172\300\021\065\065  
\046\121\060\000\303\152\376\100\325\256\326\074\060\017\006\003  
\125\035\023\001\001\377\004\005\060\003\001\001\377\060\016\006  
\003\125\035\017\001\001\377\004\004\003\002\001\006\060\012\006  
\010\052\206\110\316\075\004\003\003\003\147\000\060\144\002\060  
\027\011\363\207\210\120\132\257\310\300\102\277\107\137\365\154  
\152\206\340\304\047\164\344\070\123\327\005\177\033\064\343\306  
\057\263\312\011\074\067\235\327\347\270\106\361\375\241\342\161  
\002\060\102\131\207\103\324\121\337\272\323\011\062\132\316\210  
\176\127\075\234\137\102\153\365\007\055\265\360\202\223\371\131  
\157\256\144\372\130\345\213\036\343\143\276\265\201\315\157\002  
\214\171

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "AffirmTrust Premium ECC"

# Issuer: CN=AffirmTrust Premium ECC,O=AffirmTrust,C=US

# Serial Number:74:97:25:8a:c7:3f:7a:54

# Subject: CN=AffirmTrust Premium ECC,O=AffirmTrust,C=US

# Not Valid Before: Fri Jan 29 14:20:24 2010

# Not Valid After : Mon Dec 31 14:20:24 2040

# Fingerprint (SHA-256):

BD:71:FD:F6:DA:97:E4:CF:62:D1:64:7A:DD:25:81:B0:7D:79:AD:F8:39:7E:B4:EC:BA:9C:5E:84:88:82:14:23

# Fingerprint (SHA1): B8:23:6B:00:2F:1D:16:86:53:01:55:6C:11:A4:37:CA:EB:FF:C3:BB

CKA\_CLASS

CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "AffirmTrust Premium ECC"

CKA\_CERT\_SHA1\_HASH MULTILINE\_OCTAL

\270\043\153\000\057\035\026\206\123\001\125\154\021\244\067\312

\353\377\303\273

END

CKA\_CERT\_MD5\_HASH MULTILINE\_OCTAL

\144\260\011\125\317\261\325\231\342\276\023\253\246\135\352\115

END

CKA\_ISSUER MULTILINE\_OCTAL

\060\105\061\013\060\011\006\003\125\004\006\023\002\125\123\061

\024\060\022\006\003\125\004\012\014\013\101\146\146\151\162\155

\124\162\165\163\164\061\040\060\036\006\003\125\004\003\014\027

\101\146\146\151\162\155\124\162\165\163\164\040\120\162\145\155

\151\165\155\040\105\103\103

END

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CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\010\164\227\045\212\307\077\172\124
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED
CK_BBOOL CK_FALSE

#
# Certificate "Certum Trusted Network CA"
#
# Issuer: CN=Certum Trusted Network CA,OU=Certum Certification Authority,O=Unizeto Technologies
S.A.,C=PL
# Serial Number: 279744 (0x444c0)
# Subject: CN=Certum Trusted Network CA,OU=Certum Certification Authority,O=Unizeto Technologies
S.A.,C=PL
# Not Valid Before: Wed Oct 22 12:07:37 2008
# Not Valid After : Mon Dec 31 12:07:37 2029
# Fingerprint (SHA-256):
5C:58:46:8D:55:F5:8E:49:7E:74:39:82:D2:B5:00:10:B6:D1:65:37:4A:CF:83:A7:D4:A3:2D:B7:68:C4:40:8E
# Fingerprint (SHA1): 07:E0:32:E0:20:B7:2C:3F:19:2F:06:28:A2:59:3A:19:A7:0F:06:9E
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Certum Trusted Network CA"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\176\061\013\060\011\006\003\125\004\006\023\002\120\114\061
\042\060\040\006\003\125\004\012\023\031\125\156\151\172\145\164
\157\040\124\145\143\150\156\157\154\157\147\151\145\163\040\123
\056\101\056\061\047\060\045\006\003\125\004\013\023\036\103\145
\162\164\165\155\040\103\145\162\164\151\146\151\143\141\164\151
\157\156\040\101\165\164\150\157\162\151\164\171\061\042\060\040
\006\003\125\004\003\023\031\103\145\162\164\165\155\040\124\162
\165\163\164\145\144\040\116\145\164\167\157\162\153\040\103\101
END
CKA_ID
UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\176\061\013\060\011\006\003\125\004\006\023\002\120\114\061
\042\060\040\006\003\125\004\012\023\031\125\156\151\172\145\164
\157\040\124\145\143\150\156\157\154\157\147\151\145\163\040\123
\056\101\056\061\047\060\045\006\003\125\004\013\023\036\103\145
\162\164\165\155\040\103\145\162\164\151\146\151\143\141\164\151
\157\156\040\101\165\164\150\157\162\151\164\171\061\042\060\040
\006\003\125\004\003\023\031\103\145\162\164\165\155\040\124\162

```

\165\163\164\145\144\040\116\145\164\167\157\162\153\040\103\101  
END  
CKA\_SERIAL\_NUMBER MULTILINE\_OCTAL  
\002\003\004\104\300  
END  
CKA\_VALUE  
MULTILINE\_OCTAL  
\060\202\003\273\060\202\002\243\240\003\002\001\002\002\003\004  
\104\300\060\015\006\011\052\206\110\206\367\015\001\001\005\005  
\000\060\176\061\013\060\011\006\003\125\004\006\023\002\120\114  
\061\042\060\040\006\003\125\004\012\023\031\125\156\151\172\145  
\164\157\040\124\145\143\150\156\157\154\157\147\151\145\163\040  
\123\056\101\056\061\047\060\045\006\003\125\004\013\023\036\103  
\145\162\164\165\155\040\103\145\162\164\151\146\151\143\141\164  
\151\157\156\040\101\165\164\150\157\162\151\164\171\061\042\060  
\040\006\003\125\004\003\023\031\103\145\162\164\165\155\040\124  
\162\165\163\164\145\144\040\116\145\164\167\157\162\153\040\103  
\101\060\036\027\015\060\070\061\060\062\062\061\062\060\067\063  
\067\132\027\015\062\071\061\062\063\061\061\062\060\067\063\067  
\132\060\176\061\013\060\011\006\003\125\004\006\023\002\120\114  
\061\042\060\040\006\003\125\004\012\023\031\125\156\151\172\145  
\164\157\040\124\145\143\150\156\157\154\157\147\151\145\163\040  
\123\056\101\056\061\047\060\045\006\003\125\004\013\023\036\103  
\145\162\164\165\155\040\103\145\162\164\151\146\151\143\141\164  
\151\157\156\040\101\165\164\150\157\162\151\164\171\061\042\060  
\040\006\003\125\004\003\023\031\103\145\162\164\165\155\040\124  
\162\165\163\164\145\144\040\116\145\164\167\157\162\153\040\103  
\101\060\202\001\042\060\015\006\011\052\206\110\206\367\015\001  
\001\001\005\000\003\202\001\017\000\060\202\001\012\002\202\001  
\001\000\343\373\175\243\162\272\302\360\311\024\207\365\153\001  
\116\341\156\100\007\272\155\047\135\177\367\133\055\263\132\307  
\121\137\253\244\062\246\141\207\266\156\017\206\322\060\002\227  
\370\327\151\127\241\030\071\135\152\144\171\306\001\131\254\074  
\061\112\070\174\322\004\322\113\050\350\040\137\073\007\242\314  
\115\163\333\363\256\117\307\126\325\132\247\226\211\372\363\253  
\150\324\043\206\131\047\317\011\047\274\254\156\162\203\034\060  
\162\337\340\242\351\322\341\164\165\031\275\052\236\173\025\124  
\004\033\327\103\071\255\125\050\305\342\032\273\364\300\344\256  
\070\111\063\314\166\205\237\071\105\322\244\236\362\022\214\121  
\370\174\344\055\177\365\254\137\353\026\237\261\055\321\272\314  
\221\102\167\114\045\311\220\070\157\333\360\314\373\216\036\227  
\131\076\325\140\116\346\005\050\355\111\171\023\113\272\110\333  
\057\371\162\323\071\312\376\037\330\064\162\365\264\100\317\061  
\001\303\354\336\021\055\027\135\037\270\120\321\136\031\247\151  
\336\007\063\050\312\120\225\371\247\124\313\124\206\120\105\251  
\371\111\002\003\001\000\001\243\102\060\100\060\017\006\003\125  
\035\023\001\001\377\004\005\060\003\001\001\377\060\035\006\003  
\125\035\016\004\026\004\024\010\166\315\313\007\377\044\366\305

\315\355\273\220\274\342\204\067\106\165\367\060\016\006\003\125  
\035\017\001\001\377\004\004\003\002\001\006\060\015\006\011\052  
\206\110\206\367\015\001\001\005\005\000\003\202\001\001\000\246  
\250\255\042\316\001\075\246\243\377\142\320\110\235\213\136\162  
\260\170\104\343\334\034\257\011\375\043\110\372\275\052\304\271  
\125\004\265\020\243\215\047\336\013\202\143\320\356\336\014\067  
\171\101\133\042\262\260\232\101\134\246\160\340\324\320\167\313  
\043\323\000\340\154\126\057\341\151\015\015\331\252\277\041\201  
\120\331\006\245\250\377\225\067\320\252\376\342\263\365\231\055  
\105\204\212\345\102\011\327\164\002\057\367\211\330\231\351\274  
\047\324\107\215\272\015\106\034\167\317\024\244\034\271\244\061  
\304\234\050\164\003\064\377\063\031\046\245\351\015\164\267\076  
\227\306\166\350\047\226\243\146\335\341\256\362\101\133\312\230  
\126\203\163\160\344\206\032\322\061\101\272\057\276\055\023\132  
\166\157\116\350\116\201\016\077\133\003\042\240\022\276\146\130  
\021\112\313\003\304\264\052\052\055\226\027\340\071\124\274\110  
\323\166\047\235\232\055\006\246\311\354\071\322\253\333\237\232  
\013\047\002\065\051\261\100\225\347\371\350\234\125\210\031\106  
\326\267\064\365\176\316\071\232\331\070\361\121\367\117\054

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER

CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "Certum Trusted Network CA"

# Issuer: CN=Certum Trusted Network CA,OU=Certum Certification Authority,O=Unizeto Technologies  
S.A.,C=PL

# Serial Number: 279744 (0x444c0)

# Subject: CN=Certum Trusted Network CA,OU=Certum Certification Authority,O=Unizeto Technologies  
S.A.,C=PL

# Not Valid Before: Wed Oct 22 12:07:37 2008

# Not Valid After : Mon Dec 31 12:07:37 2029

# Fingerprint (SHA-256):

5C:58:46:8D:55:F5:8E:49:7E:74:39:82:D2:B5:00:10:B6:D1:65:37:4A:CF:83:A7:D4:A3:2D:B7:68:C4:40:8E

# Fingerprint (SHA1): 07:E0:32:E0:20:B7:2C:3F:19:2F:06:28:A2:59:3A:19:A7:0F:06:9E

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "Certum Trusted Network CA"

CKA\_CERT\_SHA1\_HASH MULTILINE\_OCTAL

\007\340\062\340\040\267\054\077\031\057\006\050\242\131\072\031  
\247\017\006\236

END

CKA\_CERT\_MD5\_HASH MULTILINE\_OCTAL

\325\351\201\100\305\030\151\374\106\054\211\165\142\017\252\170

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END
CKA_ISSUER
MULTILINE_OCTAL
\060\176\061\013\060\011\006\003\125\004\006\023\002\120\114\061
\042\060\040\006\003\125\004\012\023\031\125\156\151\172\145\164
\157\040\124\145\143\150\156\157\154\157\147\151\145\163\040\123
\056\101\056\061\047\060\045\006\003\125\004\013\023\036\103\145
\162\164\165\155\040\103\145\162\164\151\146\151\143\141\164\151
\157\156\040\101\165\164\150\157\162\151\164\171\061\042\060\040
\006\003\125\004\003\023\031\103\145\162\164\165\155\040\124\162
\165\163\164\145\144\040\116\145\164\167\157\162\153\040\103\101
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\003\004\104\300
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "TWCA Root Certification Authority"
#
# Issuer: CN=TWCA Root Certification Authority,OU=Root
CA,O=TAIWAN-CA,C=TW
# Serial Number: 1 (0x1)
# Subject: CN=TWCA Root Certification Authority,OU=Root CA,O=TAIWAN-CA,C=TW
# Not Valid Before: Thu Aug 28 07:24:33 2008
# Not Valid After : Tue Dec 31 15:59:59 2030
# Fingerprint (SHA-256):
BF:D8:8F:E1:10:1C:41:AE:3E:80:1B:F8:BE:56:35:0E:E9:BA:D1:A6:B9:BD:51:5E:DC:5C:6D:5B:87:11:AC:44
# Fingerprint (SHA1): CF:9E:87:6D:D3:EB:FC:42:26:97:A3:B5:A3:7A:A0:76:A9:06:23:48
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "TWCA Root Certification Authority"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\137\061\013\060\011\006\003\125\004\006\023\002\124\127\061
\022\060\020\006\003\125\004\012\014\011\124\101\111\127\101\116
\055\103\101\061\020\060\016\006\003\125\004\013\014\007\122\157
\157\164\040\103\101\061\052\060\050\006\003\125\004\003\014\041
\124\127\103\101\040\122\157\157\164\040\103\145\162\164\151\146
\151\143\141\164\151\157\156\040\101\165\164\150\157\162\151\164
\171
END
CKA_ID

```



UTF8 "0"

CKA\_ISSUER MULTILINE\_OCTAL

\060\137\061\013\060\011\006\003\125\004\006\023\002\124\127\061  
\022\060\020\006\003\125\004\012\014\011\124\101\111\127\101\116  
\055\103\101\061\020\060\016\006\003\125\004\013\014\007\122\157  
\157\164\040\103\101\061\052\060\050\006\003\125\004\003\014\041  
\124\127\103\101\040\122\157\157\164\040\103\145\162\164\151\146  
\151\143\141\164\151\157\156\040\101\165\164\150\157\162\151\164  
\171

END

CKA\_SERIAL\_NUMBER MULTILINE\_OCTAL

\002\001\001

END

CKA\_VALUE MULTILINE\_OCTAL

\060\202\003\173\060\202\002\143\240\003\002\001\002\002\001\001  
\060\015\006\011\052\206\110\206\367\015\001\001\005\005\000\060  
\137\061\013\060\011\006\003\125\004\006\023\002\124\127\061\022  
\060\020\006\003\125\004\012\014\011\124\101\111\127\101\116\055  
\103\101\061\020\060\016\006\003\125\004\013\014\007\122\157\157  
\164\040\103\101\061\052\060\050\006\003\125\004\003\014\041\124  
\127\103\101\040\122\157\157\164\040\103\145\162\164\151\146\151  
\143\141\164\151\157\156\040\101\165\164\150\157\162\151\164\171  
\060\036\027\015\060\070\060\070\062\070\060\067\062\064\063\063  
\132\027\015\063\060\061\062\063\061\061\065\065\071\065\071\132  
\060\137\061\013\060\011\006\003\125\004\006\023\002\124\127\061  
\022\060\020\006\003\125\004\012\014\011\124\101\111\127\101\116  
\055\103\101\061\020\060\016\006\003\125\004\013\014\007\122\157  
\157\164\040\103\101\061\052\060\050\006\003\125\004\003\014\041  
\124\127\103\101\040\122\157\157\164\040\103\145\162\164\151\146  
\151\143\141\164\151\157\156\040\101\165\164\150\157\162\151\164  
\171\060\202\001\042\060\015\006\011\052\206\110\206\367\015\001  
\001\001\005\000\003\202\001\017\000\060\202\001\012\002\202\001  
\001\000\260\176\162\270\244\003\224\346\247\336\011\070\221\112  
\021\100\207\247\174\131\144\024\173\265\021\020\335\376\277\325  
\300\273\126\342\205\045\364\065\162\017\370\123\320\101\341\104  
\001\302\264\034\303\061\102\026\107\205\063\042\166\262\012\157  
\017\345\045\120\117\205\206\276\277\230\056\020\147\036\276\021  
\005\206\005\220\304\131\320\174\170\020\260\200\134\267\341\307  
\053\165\313\174\237\256\265\321\235\043\067\143\247\334\102\242  
\055\222\004\033\120\301\173\270\076\033\311\126\004\213\057\122  
\233\255\251\126\351\301\377\255\251\130\207\060\266\201\367\227  
\105\374\031\127\073\053\157\344\107\364\231\105\376\035\361\370  
\227\243\210\035\067\034\134\217\340\166\045\232\120\370\240\124  
\377\104\220\166\043\322\062\306\303\253\006\277\374\373\277\363  
\255\175\222\142\002\133\051\323\065\243\223\232\103\144\140\135  
\262\372\062\377\073\004\257\115\100\152\371\307\343\357\043\375  
\153\313\345\017\213\070\015\356\012\374\376\017\230\237\060\061  
\335\154\122\145\371\213\201\276\042\341\034\130\003\272\221\033

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\211\007\002\003\001\000\001\243\102\060\100\060\016\006\003\125
\035\017\001\001\377\004\004\003\002\001\006\060\017\006\003\125
\035\023\001\001\377\004\005\060\003\001\001\377\060\035\006\003
\125\035\016\004\026\004\024\152\070\133\046\215\336\213\132\362
\117\172\124\203\031\030\343\010\065\246\272\060\015\006\011\052
\206\110\206\367\015\001\001\005\005\000\003\202\001\001\000\074
\325\167\075\332\337\211\272\207\014\010\124\152\040\120\222\276
\260\101\075\271\046\144\203\012\057\350\100\300\227\050\047\202
\060\112\311\223\377\152\347\246\000\177\211\102\232\326\021\345
\123\316\057\314\362\332\005\304\376\342\120\304\072\206\175\314
\332\176\020\011\073\222\065\052\123\262\376\353\053\005\331\154
\135\346\320\357\323\152\146\236\025\050\205\172\350\202\000\254
\036\247\011\151\126\102\323\150\121\030\276\124\232\277\104\101
\272\111\276\040\272\151\134\356\270\167\315\316\154\037\255\203
\226\030\175\016\265\024\071\204\361\050\351\055\243\236\173\036
\172\162\132\203\263\171\157\357\264\374\320\012\245\130\117\106
\337\373\155\171\131\362\204\042\122\256\017\314\373\174\073\347
\152\312\107\141\303\172\370\323\222\004\037\270\040\204\341\066
\124\026\307\100\336\073\212\163\334\337\306\011\114\337\354\332
\377\324\123\102\241\311\362\142\035\042\203\074\227\305\371\031
\142\047\254\145\042\327\323\074\306\345\216\262\123\314\111\316
\274\060\376\173\016\063\220\373\355\322\024\221\037\007\257
```

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "TWCA Root Certification Authority"

# Issuer: CN=TWCA Root Certification Authority,OU=Root CA,O=TAIWAN-CA,C=TW

# Serial Number: 1 (0x1)

# Subject: CN=TWCA Root Certification Authority,OU=Root CA,O=TAIWAN-CA,C=TW

# Not Valid Before: Thu Aug 28 07:24:33 2008

# Not Valid After : Tue Dec 31 15:59:59 2030

# Fingerprint (SHA-256):

BF:D8:8F:E1:10:1C:41:AE:3E:80:1B:F8:BE:56:35:0E:E9:BA:D1:A6:B9:BD:51:5E:DC:5C:6D:5B:87:11:AC:44

# Fingerprint (SHA1): CF:9E:87:6D:D3:EB:FC:42:26:97:A3:B5:A3:7A:A0:76:A9:06:23:48

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE

CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "TWCA Root Certification Authority"

CKA\_CERT\_SHA1\_HASH MULTILINE\_OCTAL

```
\317\236\207\155\323\353\374\102\046\227\243\265\243\172\240\166
\251\006\043\110
```

END

CKA\_CERT\_MD5\_HASH MULTILINE\_OCTAL

\252\010\217\366\371\173\267\362\261\247\036\233\352\352\275\171

END

CKA\_ISSUER MULTILINE\_OCTAL

\060\137\061\013\060\011\006\003\125\004\006\023\002\124\127\061  
\022\060\020\006\003\125\004\012\014\011\124\101\111\127\101\116  
\055\103\101\061\020\060\016\006\003\125\004\013\014\007\122\157  
\157\164\040\103\101\061\052\060\050\006\003\125\004\003\014\041  
\124\127\103\101\040\122\157\157\164\040\103\145\162\164\151\146  
\151\143\141\164\151\157\156\040\101\165\164\150\157\162\151\164  
\171

END

CKA\_SERIAL\_NUMBER MULTILINE\_OCTAL

\002\001\001

END

CKA\_TRUST\_SERVER\_AUTH CK\_TRUST CKT\_NSS\_TRUSTED\_DELEGATOR

CKA\_TRUST\_EMAIL\_PROTECTION CK\_TRUST CKT\_NSS\_TRUSTED\_DELEGATOR

CKA\_TRUST\_CODE\_SIGNING CK\_TRUST CKT\_NSS\_MUST\_VERIFY\_TRUST

CKA\_TRUST\_STEP\_UP\_APPROVED CK\_BBOOL CK\_FALSE

#

#

Certificate "Explicitly Distrust DigiNotar Root CA"

#

# Issuer: E=info@diginotar.nl,CN=DigiNotar Root CA,O=DigiNotar,C=NL

# Serial Number:0f:ff:ff:ff:ff:ff:ff:ff:ff:ff:ff:ff:ff:ff:ff

# Subject: E=info@diginotar.nl,CN=DigiNotar Root CA,O=DigiNotar,C=NL

# Not Valid Before: Fri Jul 27 17:19:37 2007

# Not Valid After : Mon Mar 31 18:19:22 2025

# Fingerprint (MD5): 0A:A4:D5:CC:BA:B4:FB:A3:59:E3:E6:01:DD:53:D9:4E

# Fingerprint (SHA1): C1:77:CB:4B:E0:B4:26:8E:F5:C7:CF:45:99:22:B9:B0:CE:BA:21:2F

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_CERTIFICATE

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "Explicitly Distrust DigiNotar Root CA"

CKA\_CERTIFICATE\_TYPE CK\_CERTIFICATE\_TYPE CKC\_X\_509

CKA\_SUBJECT MULTILINE\_OCTAL

\060\137\061\013\060\011\006\003\125\004\006\023\002\116\114\061  
\022\060\020\006\003\125\004\012\023\011\104\151\147\151\116\157  
\164\141\162\061\032\060\030\006\003\125\004\003\023\021\104\151  
\147\151\116\157\164\141\162\040\122\157\157\164\040\103\101\061  
\040\060\036\006\011\052\206\110\206\367\015\001\011\001\026\021  
\151\156\146\157\100\144\151\147\151\156\157\164\141\162\056\156  
\154

END

CKA\_ID

UTF8 "0"

CKA\_ISSUER MULTILINE\_OCTAL

\060\137\061\013\060\011\006\003\125\004\006\023\002\116\114\061  
\022\060\020\006\003\125\004\012\023\011\104\151\147\151\116\157  
\164\141\162\061\032\060\030\006\003\125\004\003\023\021\104\151  
\147\151\116\157\164\141\162\040\122\157\157\164\040\103\101\061  
\040\060\036\006\011\052\206\110\206\367\015\001\011\001\026\021  
\151\156\146\157\100\144\151\147\151\156\157\164\141\162\056\156  
\154

END

CKA\_SERIAL\_NUMBER MULTILINE\_OCTAL

\002\020\017\377\377\377\377\377\377\377\377\377\377\377\377  
\377\377

END

CKA\_VALUE MULTILINE\_OCTAL

\060\202\005\212\060\202\003\162\240\003\002\001\002\002\020\017  
\377\377\377\377\377\377\377\377\377\377\377\377\377\377\377\060  
\015\006\011\052\206\110\206\367\015\001\001\005\005\000\060\137  
\061\013\060\011\006\003\125\004\006\023\002\116\114\061\022\060  
\020\006\003\125\004\012\023\011\104\151\147\151\116\157\164\141  
\162\061\032\060\030\006\003\125\004\003\023\021\104\151\147\151  
\116\157\164\141\162\040\122\157\157\164\040\103\101\061\040\060  
\036\006\011\052\206\110\206\367\015\001\011\001\026\021\151\156  
\146\157\100\144\151\147\151\156\157\164\141\162\056\156\154\060  
\036\027\015\060\067\060\067\062\067\061\067\061\071\063\067\132  
\027\015\062\065\060\063\063\061\061\070\061\071\062\062\132\060  
\137\061\013\060\011\006\003\125\004\006\023\002\116\114\061\022  
\060\020\006\003\125\004\012\023\011\104\151\147\151\116\157\164  
\141\162\061\032\060\030\006\003\125\004\003\023\021\104\151\147  
\151\116\157\164\141\162\040\122\157\157\164\040\103\101\061\040  
\060\036\006\011\052\206\110\206\367\015\001\011\001\026\021\151  
\156\146\157\100\144\151\147\151\156\157\164\141\162\056\156\154  
\060\202\002\042\060\015\006\011\052\206\110\206\367\015\001\001  
\001\005\000\003\202\002\017\000\060\202\002\012\002\202\002\001  
\000\254\260\130\301\000\275\330\041\010\013\053\232\376\156\126  
\060\005\237\033\167\220\020\101\134\303\015\207\021\167\216\201  
\361\312\174\351\214\152\355\070\164\065\273\332\337\371\273\300  
\011\067\264\226\163\201\175\063\032\230\071\367\223\157\225\177  
\075\271\261\165\207\272\121\110\350\213\160\076\225\004\305\330  
\266\303\026\331\210\260\261\207\035\160\332\206\264\017\024\213  
\172\317\020\321\164\066\242\022\173\167\206\112\171\346\173\337  
\002\021\150\245\116\206\256\064\130\233\044\023\170\126\042\045  
\036\001\213\113\121\161\373\202\314\131\226\151\210\132\150\123  
\305\271\015\002\067\313\113\274\146\112\220\176\052\013\005\007  
\355\026\137\125\220\165\330\106\311\033\203\342\010\276\361\043  
\314\231\035\326\052\017\203\040\025\130\047\202\056\372\342\042  
\302\111\261\271\001\201\152\235\155\235\100\167\150\166\116\041  
\052\155\204\100\205\116\166\231\174\202\363\363\267\002\131\324  
\046\001\033\216\337\255\123\006\321\256\030\335\342\262\072\313  
\327\210\070\216\254\133\051\271\031\323\230\371\030\003\317\110

\202\206\146\013\033\151\017\311\353\070\210\172\046\032\005\114  
\222\327\044\324\226\362\254\122\055\243\107\325\122\366\077\376  
\316\204\006\160\246\252\076\242\362\266\126\064\030\127\242\344  
\201\155\347\312\360\152\323\307\221\153\002\203\101\174\025\357  
\153\232\144\136\343\320\074\345\261\353\173\135\206\373\313\346  
\167\111\315\243\145\334\367\271\234\270\344\013\137\223\317\314  
\060\032\062\034\316\034\143\225\245\371\352\341\164\213\236\351  
\053\251\060\173\240\030\037\016\030\013\345\133\251\323\321\154  
\036\007\147\217\221\113\251\212\274\322\146\252\223\001\210\262  
\221\372\061\134\325\246\301\122\010\011\315\012\143\242\323\042  
\246\350\241\331\071\006\227\365\156\215\002\220\214\024\173\077  
\200\315\033\234\272\304\130\162\043\257\266\126\237\306\172\102  
\063\051\007\077\202\311\346\037\005\015\315\114\050\066\213\323  
\310\076\034\306\210\357\136\356\211\144\351\035\353\332\211\176  
\062\246\151\321\335\314\210\237\321\320\311\146\041\334\006\147  
\305\224\172\232\155\142\114\175\314\340\144\200\262\236\107\216  
\243\002\003\001\000\001\243\102\060\100\060\017\006\003\125\035  
\023\001\001\377\004\005\060\003\001\001\377\060\016\006\003\125  
\035\017\001\001\377\004\004\003\002\001\006\060\035\006\003\125  
\035\016\004\026\004\024\210\150\277\340\216\065\304\073\070\153  
\142\367\050\073\204\201\310\014\327\115\060\015\006\011\052\206  
\110\206\367\015\001\001\005\005\000\003\202\002\001\000\073\002  
\215\313\074\060\350\156\240\255\362\163\263\137\236\045\023\004  
\005\323\366\343\213\273\013\171\316\123\336\344\226\305\321\257  
\163\274\325\303\320\100\125\174\100\177\315\033\137\011\325\362  
\174\237\150\035\273\135\316\172\071\302\214\326\230\173\305\203  
\125\250\325\175\100\312\340\036\367\211\136\143\135\241\023\302  
\135\212\266\212\174\000\363\043\303\355\205\137\161\166\360\150  
\143\252\105\041\071\110\141\170\066\334\361\103\223\324\045\307  
\362\200\145\341\123\002\165\121\374\172\072\357\067\253\204\050  
\127\014\330\324\324\231\126\154\343\242\376\131\204\264\061\350  
\063\370\144\224\224\121\227\253\071\305\113\355\332\335\200\013  
\157\174\051\015\304\216\212\162\015\347\123\024\262\140\101\075  
\204\221\061\150\075\047\104\333\345\336\364\372\143\105\310\114  
\076\230\365\077\101\272\116\313\067\015\272\146\230\361\335\313  
\237\134\367\124\066\202\153\054\274\023\141\227\102\370\170\273  
\314\310\242\237\312\360\150\275\153\035\262\337\215\157\007\235  
\332\216\147\307\107\036\312\271\277\052\102\221\267\143\123\146  
\361\102\243\341\364\132\115\130\153\265\344\244\063\255\134\160  
\035\334\340\362\353\163\024\221\232\003\301\352\000\145\274\007  
\374\317\022\021\042\054\256\240\275\072\340\242\052\330\131\351  
\051\323\030\065\244\254\021\137\031\265\265\033\377\042\112\134  
\306\172\344\027\357\040\251\247\364\077\255\212\247\232\004\045  
\235\016\312\067\346\120\375\214\102\051\004\232\354\271\317\113  
\162\275\342\010\066\257\043\057\142\345\312\001\323\160\333\174  
\202\043\054\026\061\014\306\066\007\220\172\261\037\147\130\304  
\073\130\131\211\260\214\214\120\263\330\206\313\150\243\304\012  
\347\151\113\040\316\301\036\126\113\225\251\043\150\330\060\330

\303\353\260\125\121\315\345\375\053\270\365\273\021\237\123\124  
\366\064\031\214\171\011\066\312\141\027\045\027\013\202\230\163  
\014\167\164\303\325\015\307\250\022\114\307\247\124\161\107\056  
\054\032\175\311\343\053\073\110\336\047\204\247\143\066\263\175  
\217\240\144\071\044\015\075\173\207\257\146\134\164\033\113\163  
\262\345\214\360\206\231\270\345\305\337\204\301\267\353

END

#

Trust for Certificate "Explicitly Distrust DigiNotar Root CA"

# Issuer: E=info@diginotar.nl,CN=DigiNotar Root CA,O=DigiNotar,C=NL

# Serial Number:0f:ff:ff:ff:ff:ff:ff:ff:ff:ff:ff:ff:ff:ff:ff

# Subject: E=info@diginotar.nl,CN=DigiNotar Root CA,O=DigiNotar,C=NL

# Not Valid Before: Fri Jul 27 17:19:37 2007

# Not Valid After : Mon Mar 31 18:19:22 2025

# Fingerprint (MD5): 0A:A4:D5:CC:BA:B4:FB:A3:59:E3:E6:01:DD:53:D9:4E

# Fingerprint (SHA1): C1:77:CB:4B:E0:B4:26:8E:F5:C7:CF:45:99:22:B9:B0:CE:BA:21:2F

CKA\_CLASS

CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "Explicitly Distrust DigiNotar Root CA"

CKA\_CERT\_SHA1\_HASH MULTILINE\_OCTAL

\301\167\313\113\340\264\046\216\365\307\317\105\231\042\271\260  
\316\272\041\057

END

CKA\_CERT\_MD5\_HASH MULTILINE\_OCTAL

\012\244\325\314\272\264\373\243\131\343\346\001\335\123\331\116

END

CKA\_ISSUER MULTILINE\_OCTAL

\060\137\061\013\060\011\006\003\125\004\006\023\002\116\114\061  
\022\060\020\006\003\125\004\012\023\011\104\151\147\151\116\157  
\164\141\162\061\032\060\030\006\003\125\004\003\023\021\104\151  
\147\151\116\157\164\141\162\040\122\157\157\164\040\103\101\061  
\040\060\036\006\011\052\206\110\206\367\015\001\011\001\026\021  
\151\156\146\157\100\144\151\147\151\156\157\164\141\162\056\156  
\154

END

CKA\_SERIAL\_NUMBER MULTILINE\_OCTAL

\002\020\017\377\377\377\377\377\377\377\377\377\377\377\377\377  
\377\377

END

CKA\_TRUST\_SERVER\_AUTH CK\_TRUST

CKT\_NSS\_NOT\_TRUSTED

CKA\_TRUST\_EMAIL\_PROTECTION CK\_TRUST CKT\_NSS\_NOT\_TRUSTED

CKA\_TRUST\_CODE\_SIGNING CK\_TRUST CKT\_NSS\_NOT\_TRUSTED

CKA\_TRUST\_STEP\_UP\_APPROVED CK\_BBOOL CK\_FALSE

```

#
# Certificate "Security Communication RootCA2"
#
# Issuer: OU=Security Communication RootCA2,O="SECOM Trust Systems CO.,LTD.",C=JP
# Serial Number: 0 (0x0)
# Subject: OU=Security Communication RootCA2,O="SECOM Trust Systems CO.,LTD.",C=JP
# Not Valid Before: Fri May 29 05:00:39 2009
# Not Valid After : Tue May 29 05:00:39 2029
# Fingerprint (SHA-256):
51:3B:2C:EC:B8:10:D4:CD:E5:DD:85:39:1A:DF:C6:C2:DD:60:D8:7B:B7:36:D2:B5:21:48:4A:A4:7A:0E:BE:F6
# Fingerprint (SHA1): 5F:3B:8C:F2:F8:10:B3:7D:78:B4:CE:EC:19:19:C3:73:34:B9:C7:74
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Security Communication RootCA2"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\135\061\013\060\011\006\003\125\004\006\023\002\112\120\061
\045\060\043\006\003\125\004\012\023\034\123\105\103\117\115\040
\124\162\165\163\164\040\123\171\163\164\145\155\163\040\103\117
\056\054\114\124\104\056\061\047\060\045\006\003\125\004\013\023
\036\123\145\143\165\162\151\164\171\040\103\157\155\155\165\156
\151\143\141\164\151\157\156\040\122\157\157\164\103\101\062
END
CKA_ID
UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\135\061\013\060\011\006\003\125\004\006\023\002\112\120\061
\045\060\043\006\003\125\004\012\023\034\123\105\103\117\115\040
\124\162\165\163\164\040\123\171\163\164\145\155\163\040\103\117
\056\054\114\124\104\056\061\047\060\045\006\003\125\004\013\023
\036\123\145\143\165\162\151\164\171\040\103\157\155\155\165\156
\151\143\141\164\151\157\156\040\122\157\157\164\103\101\062
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\001\000
END
CKA_VALUE MULTILINE_OCTAL
\060\202\003\167\060\202\002\137\240\003\002\001\002\002\001\000
\060\015\006\011\052\206\110\206\367\015\001\001\013\005\000\060
\135\061\013\060\011\006\003\125\004\006\023\002\112\120\061\045
\060\043\006\003\125\004\012\023\034\123\105\103\117\115\040\124
\162\165\163\164\040\123\171\163\164\145\155\163\040\103\117\056
\054\114\124\104\056\061\047\060\045\006\003\125\004\013\023\036
\123\145\143\165\162\151\164\171\040\103\157\155\155\165\156\151
\143\141\164\151\157\156\040\122\157\157\164\103\101\062\060\036

```

\027\015\060\071\060\065\062\071\060\065\060\060\063\071\132\027  
\015\062\071\060\065\062\071\060\065\060\060\063\071\132\060\135  
\061\013\060\011\006\003\125\004\006\023\002\112\120\061\045\060  
\043\006\003\125\004\012\023\034\123\105\103\117\115\040\124\162  
\165\163\164\040\123\171\163\164\145\155\163\040\103\117\056\054  
\114\124\104\056\061\047\060\045\006\003\125\004\013\023\036\123  
\145\143\165\162\151\164\171\040\103\157\155\155\165\156\151\143  
\141\164\151\157\156\040\122\157\157\164\103\101\062\060\202\001  
\042\060\015\006\011\052\206\110\206\367\015\001\001\001\005\000  
\003\202\001\017\000\060\202\001\012\002\202\001\001\000\320\025  
\071\122\261\122\263\272\305\131\202\304\135\122\256\072\103\145  
\200\113\307\362\226\274\333\066\227\326\246\144\214\250\136\360  
\343\012\034\367\337\227\075\113\256\366\135\354\041\265\101\253  
\315\271\176\166\237\276\371\076\066\064\240\073\301\366\061\021  
\105\164\223\075\127\200\305\371\211\231\312\345\253\152\324\265  
\332\101\220\020\301\326\326\102\211\302\277\364\070\022\225\114  
\124\005\367\066\344\105\203\173\024\145\326\334\014\115\321\336  
\176\014\253\073\304\025\276\072\126\246\132\157\166\151\122\251  
\172\271\310\353\152\232\135\122\320\055\012\153\065\026\011\020  
\204\320\152\312\072\006\000\067\107\344\176\127\117\077\213\353  
\147\270\210\252\305\276\123\125\262\221\304\175\271\260\205\031  
\006\170\056\333\141\032\372\205\365\112\221\241\347\026\325\216  
\242\071\337\224\270\160\037\050\077\213\374\100\136\143\203\074  
\203\052\032\231\153\317\336\131\152\073\374\157\026\327\037\375  
\112\020\353\116\202\026\072\254\047\014\123\361\255\325\044\260  
\153\003\120\301\055\074\026\335\104\064\047\032\165\373\002\003  
\001\000\001\243\102\060\100\060\035\006\003\125\035\016\004\026  
\004\024\012\205\251\167\145\005\230\174\100\201\370\017\227\054  
\070\361\012\354\074\317\060\016\006\003\125\035\017\001\001\377  
\004\004\003\002\001\006\060\017\006\003\125\035\023\001\001\377  
\004\005\060\003\001\001\377\060\015\006\011\052\206\110\206\367  
\015\001\001\013\005\000\003\202\001\001\000\114\072\243\104\254  
\271\105\261\307\223\176\310\013\012\102\337\144\352\034\356\131  
\154\010\272\211\137\152\312\112\225\236\172\217\007\305\332\105  
\162\202\161\016\072\322\314\157\247\264\241\043\273\366\044\237  
\313\027\376\214\246\316\302\322\333\314\215\374\161\374\003\051  
\301\154\135\063\137\144\266\145\073\211\157\030\166\170\365\334  
\242\110\037\031\077\216\223\353\361\372\027\356\315\116\343\004  
\022\125\326\345\344\335\373\076\005\174\342\035\136\306\247\274  
\227\117\150\072\365\351\056\012\103\266\257\127\134\142\150\174  
\267\375\243\212\204\240\254\142\276\053\011\207\064\360\152\001  
\273\233\051\126\074\376\000\067\317\043\154\361\116\252\266\164  
\106\022\154\221\356\064\325\354\232\221\347\104\276\220\061\162  
\325\111\002\366\002\345\364\037\353\174\331\226\125\251\377\354  
\212\371\231\107\377\065\132\002\252\004\313\212\133\207\161\051  
\221\275\244\264\172\015\275\232\365\127\043\000\007\041\027\077  
\112\071\321\005\111\013\247\266\067\201\245\135\214\252\063\136  
\201\050\174\247\175\047\353\000\256\215\067



```

END
CKA_NSS_MOZILLA_CA_POLICY
CK_BBOOL CK_TRUE
CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE
CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

# Trust for "Security Communication RootCA2"
# Issuer: OU=Security Communication RootCA2,O="SECOM Trust Systems CO.,LTD.",C=JP
# Serial Number: 0 (0x0)
# Subject: OU=Security Communication RootCA2,O="SECOM Trust Systems CO.,LTD.",C=JP
# Not Valid Before: Fri May 29 05:00:39 2009
# Not Valid After : Tue May 29 05:00:39 2029
# Fingerprint (SHA-256):
51:3B:2C:EC:B8:10:D4:CD:E5:DD:85:39:1A:DF:C6:C2:DD:60:D8:7B:B7:36:D2:B5:21:48:4A:A4:7A:0E:BE:F6
#
Fingerprint (SHA1): 5F:3B:8C:F2:F8:10:B3:7D:78:B4:CE:EC:19:19:C3:73:34:B9:C7:74
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Security Communication RootCA2"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\137\073\214\362\370\020\263\175\170\264\316\354\031\031\303\163
\064\271\307\164
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\154\071\175\244\016\125\131\262\077\326\101\261\022\120\336\103
END
CKA_ISSUER MULTILINE_OCTAL
\060\135\061\013\060\011\006\003\125\004\006\023\002\112\120\061
\045\060\043\006\003\125\004\012\023\034\123\105\103\117\115\040
\124\162\165\163\164\040\123\171\163\164\145\155\163\040\103\117
\056\054\114\124\104\056\061\047\060\045\006\003\125\004\013\023
\036\123\145\143\165\162\151\164\171\040\103\157\155\155\165\156
\151\143\141\164\151\157\156\040\122\157\157\164\103\101\062
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\001\000
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "Actalis Authentication Root CA"
#

```

```
# Issuer: CN=Actalis Authentication Root CA,O=Actalis S.p.A./03358520967,L=Milan,C=IT
# Serial Number:57:0a:11:97:42:c4:e3:cc
# Subject: CN=Actalis Authentication Root CA,O=Actalis S.p.A./03358520967,L=Milan,C=IT
# Not Valid Before: Thu Sep 22 11:22:02 2011
# Not Valid After : Sun Sep 22 11:22:02 2030
# Fingerprint (SHA-256):
55:92:60:84:EC:96:3A:64:B9:6E:2A:BE:01:CE:0B:A8:6A:64:FB:FE:BC:C7:AA:B5:AF:C1:55:B3:7F:D7:60:66
# Fingerprint (SHA1): F3:73:B3:87:06:5A:28:84:8A:F2:F3:4A:CE:19:2B:DD:C7:8E:9C:AC
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Actalis Authentication Root CA"
CKA_CERTIFICATE_TYPE
CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\153\061\013\060\011\006\003\125\004\006\023\002\111\124\061
\016\060\014\006\003\125\004\007\014\005\115\151\154\141\156\061
\043\060\041\006\003\125\004\012\014\032\101\143\164\141\154\151
\163\040\123\056\160\056\101\056\057\060\063\063\065\070\065\062
\060\071\066\067\061\047\060\045\006\003\125\004\003\014\036\101
\143\164\141\154\151\163\040\101\165\164\150\145\156\164\151\143
\141\164\151\157\156\040\122\157\157\164\040\103\101
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\153\061\013\060\011\006\003\125\004\006\023\002\111\124\061
\016\060\014\006\003\125\004\007\014\005\115\151\154\141\156\061
\043\060\041\006\003\125\004\012\014\032\101\143\164\141\154\151
\163\040\123\056\160\056\101\056\057\060\063\063\065\070\065\062
\060\071\066\067\061\047\060\045\006\003\125\004\003\014\036\101
\143\164\141\154\151\163\040\101\165\164\150\145\156\164\151\143
\141\164\151\157\156\040\122\157\157\164\040\103\101
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\010\127\012\021\227\102\304\343\314
END
CKA_VALUE MULTILINE_OCTAL
\060\202\005\273\060\202\003\243\240\003\002\001\002\002\010\127
\012\021\227\102\304\343\314\060\015\006\011\052\206\110\206\367
\015\001\001\013\005\000\060\153\061\013\060\011\006\003\125\004
\006\023\002\111\124\061\016\060\014\006\003\125\004\007\014\005
\115\151\154\141\156\061\043\060\041\006\003\125\004\012\014\032
\101\143\164\141\154\151\163\040\123\056\160\056\101\056\057\060
\063\063\065\070\065\062\060\071\066\067\061\047\060\045\006\003
\125\004\003\014\036\101\143\164\141\154\151\163\040\101\165\164
\150\145\156\164\151\143\141\164\151\157\156\040\122\157\157\164
```

\040\103\101\060\036\027\015\061\061\060\071\062\062\061\061\062  
\062\060\062\132\027\015\063\060\060\071\062\062\061\061\062\062  
\060\062\132\060\153\061\013\060\011\006\003\125\004\006\023\002  
\111\124\061\016\060\014\006\003\125\004\007\014\005\115\151\154  
\141\156\061\043\060\041\006\003\125\004\012\014\032\101\143\164  
\141\154\151\163\040\123\056\160\056\101\056\057\060\063\063\065  
\070\065\062\060\071\066\067\061\047\060\045\006\003\125\004\003  
\014\036\101\143\164\141\154\151\163\040\101\165\164\150\145\156  
\164\151\143\141\164\151\157\156\040\122\157\157\164\040\103\101  
\060\202\002\042\060\015\006\011\052\206\110\206\367\015\001\001  
\001\005\000\003\202\002\017\000\060\202\002\012\002\202\002\001  
\000\247\306\304\245\051\244\054\357\345\030\305\260\120\243\157  
\121\073\237\012\132\311\302\110\070\012\302\034\240\030\177\221  
\265\207\271\100\077\335\035\150\037\010\203\325\055\036\210\240  
\370\217\126\217\155\231\002\222\220\026\325\137\010\154\211\327  
\341\254\274\040\302\261\340\203\121\212\151\115\000\226\132\157  
\057\300\104\176\243\016\344\221\315\130\356\334\373\307\036\105  
\107\335\047\271\010\001\237\246\041\035\365\101\055\057\114\375  
\050\255\340\212\255\042\264\126\145\216\206\124\217\223\103\051  
\336\071\106\170\243\060\043\272\315\360\175\023\127\300\135\322  
\203\153\110\114\304\253\237\200\132\133\072\275\311\247\042\077  
\200\047\063\133\016\267\212\014\135\007\067\010\313\154\322\172  
\107\042\104\065\305\314\314\056\216\335\052\355\267\175\146\015  
\137\141\121\042\125\033\343\106\343\343\075\320\065\142\232\333  
\257\024\310\133\241\314\211\033\341\060\046\374\240\233\037\201  
\247\107\037\004\353\243\071\222\006\237\231\323\277\323\352\117  
\120\234\031\376\226\207\036\074\145\366\243\030\044\203\206\020  
\347\124\076\250\072\166\044\117\201\041\305\343\017\002\370\223  
\224\107\040\273\376\324\016\323\150\271\335\304\172\204\202\343  
\123\124\171\335\333\234\322\362\007\233\056\266\274\076\355\205  
\155\357\045\021\362\227\032\102\141\367\112\227\350\213\261\020  
\007\372\145\201\262\242\071\317\367\074\377\030\373\306\361\132  
\213\131\342\002\254\173\222\320\116\024\117\131\105\366\014\136  
\050\137\260\350\077\105\317\317\257\233\157\373\204\323\167\132  
\225\157\254\224\204\236\356\274\300\112\217\112\223\370\104\041  
\342\061\105\141\120\116\020\330\343\065\174\114\031\264\336\005  
\277\243\006\237\310\265\315\344\037\327\027\006\015\172\225\164  
\125\015\150\032\374\020\033\142\144\235\155\340\225\240\303\224  
\007\127\015\024\346\275\005\373\270\237\346\337\213\342\306\347  
\176\226\366\123\305\200\064\120\050\130\360\022\120\161\027\060  
\272\346\170\143\274\364\262\255\233\053\262\376\341\071\214\136  
\272\013\040\224\336\173\203\270\377\343\126\215\267\021\351\073  
\214\362\261\301\135\235\244\013\114\053\331\262\030\365\265\237  
\113\002\003\001\000\001\243\143\060\141\060\035\006\003\125\035  
\016\004\026\004\024\122\330\210\072\310\237\170\146\355\211\363  
\173\070\160\224\311\002\002\066\320\060\017\006\003\125\035\023  
\001\001\377\004\005\060\003\001\001\377\060\037\006\003\125\035  
\043\004\030\060\026\200\024\122\330\210\072\310\237\170\146\355

\211\363\173\070\160\224\311\002\002\066\320\060\016\006\003\125  
\035\017\001\001\377\004\004\003\002\001\006\060\015\006\011\052  
\206\110\206\367\015\001\001\013\005\000\003\202\002\001\000\013  
\173\162\207\300\140\246\111\114\210\130\346\035\210\367\024\144  
\110\246\330\130\012\016\117\023\065\337\065\035\324\355\006\061  
\310\201\076\152\325\335\073\032\062\356\220\075\021\322\056\364  
\216\303\143\056\043\146\260\147\276\157\266\300\023\071\140\252  
\242\064\045\223\165\122\336\247\235\255\016\207\211\122\161\152  
\026\074\031\035\203\370\232\051\145\276\364\077\232\331\360\363  
\132\207\041\161\200\115\313\340\070\233\077\273\372\340\060\115  
\317\206\323\145\020\031\030\321\227\002\261\053\162\102\150\254  
\240\275\116\132\332\030\277\153\230\201\320\375\232\276\136\025  
\110\315\021\025\271\300\051\134\264\350\210\367\076\066\256\267  
\142\375\036\142\336\160\170\020\034\110\133\332\274\244\070\272  
\147\355\125\076\136\127\337\324\003\100\114\201\244\322\117\143  
\247\011\102\011\024\374\000\251\302\200\163\117\056\300\100\331  
\021\173\110\352\172\002\300\323\353\050\001\046\130\164\301\300  
\163\042\155\223\225\375\071\175\273\052\343\366\202\343\054\227  
\137\116\037\221\224\372\376\054\243\330\166\032\270\115\262\070  
\117\233\372\035\110\140\171\046\342\363\375\251\320\232\350\160  
\217\111\172\326\345\275\012\016\333\055\363\215\277\353\343\244  
\175\313\307\225\161\350\332\243\174\305\302\370\164\222\004\033  
\206\254\244\042\123\100\266\254\376\114\166\317\373\224\062\300  
\065\237\166\077\156\345\220\156\240\246\046\242\270\054\276\321  
\053\205\375\247\150\310\272\001\053\261\154\164\035\270\163\225  
\347\356\267\307\045\360\000\114\000\262\176\266\013\213\034\363  
\300\120\236\045\271\340\010\336\066\146\377\067\245\321\273\124  
\144\054\311\047\265\113\222\176\145\377\323\055\341\271\116\274  
\177\244\101\041\220\101\167\246\071\037\352\236\343\237\320\146  
\157\005\354\252\166\176\277\153\026\240\353\265\307\374\222\124  
\057\053\021\047\045\067\170\114\121\152\260\363\314\130\135\024  
\361\152\110\025\377\302\007\266\261\215\017\216\134\120\106\263  
\075\277\001\230\117\262\131\124\107\076\064\173\170\155\126\223  
\056\163\352\146\050\170\315\035\024\277\240\217\057\056\270\056  
\216\362\024\212\314\351\265\174\373\154\235\014\245\341\226

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "Actalis Authentication Root CA"

# Issuer: CN=Actalis Authentication Root CA,O=Actalis S.p.A./03358520967,L=Milan,C=IT

# Serial Number:57:0a:11:97:42:c4:e3:cc

# Subject: CN=Actalis Authentication Root CA,O=Actalis S.p.A./03358520967,L=Milan,C=IT

# Not Valid Before: Thu Sep 22 11:22:02 2011

# Not Valid After : Sun Sep 22 11:22:02 2030

# Fingerprint (SHA-256):

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55:92:60:84:EC:96:3A:64:B9:6E:2A:BE:01:CE:0B:A8:6A:64:FB:FE:BC:C7:AA:B5:AF:C1:55:B3:7F:D7:60:66
# Fingerprint (SHA1): F3:73:B3:87:06:5A:28:84:8A:F2:F3:4A:CE:19:2B:DD:C7:8E:9C:AC
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Actalis Authentication Root CA"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\363\163\263\207\006\132\050\204\212\362\363\112\316\031\053\335
\307\216\234\254
END
CKA_CERT_MD5_HASH
MULTILINE_OCTAL
\151\301\015\117\007\243\033\303\376\126\075\004\274\021\366\246
END
CKA_ISSUER MULTILINE_OCTAL
\060\153\061\013\060\011\006\003\125\004\006\023\002\111\124\061
\016\060\014\006\003\125\004\007\014\005\115\151\154\141\156\061
\043\060\041\006\003\125\004\012\014\032\101\143\164\141\154\151
\163\040\123\056\160\056\101\056\057\060\063\063\065\070\065\062
\060\071\066\067\061\047\060\045\006\003\125\004\003\014\036\101
\143\164\141\154\151\163\040\101\165\164\150\145\156\164\151\143
\141\164\151\157\156\040\122\157\157\164\040\103\101
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\010\127\012\021\227\102\304\343\314
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "Buypass Class 2 Root
CA"
#
# Issuer: CN=Buypass Class 2 Root CA,O=Buypass AS-983163327,C=NO
# Serial Number: 2 (0x2)
# Subject: CN=Buypass Class 2 Root CA,O=Buypass AS-983163327,C=NO
# Not Valid Before: Tue Oct 26 08:38:03 2010
# Not Valid After : Fri Oct 26 08:38:03 2040
# Fingerprint (SHA-256):
9A:11:40:25:19:7C:5B:B9:5D:94:E6:3D:55:CD:43:79:08:47:B6:46:B2:3C:DF:11:AD:A4:A0:0E:FF:15:FB:48
# Fingerprint (SHA1): 49:0A:75:74:DE:87:0A:47:FE:58:EE:F6:C7:6B:EB:C6:0B:12:40:99
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE

```

```
CKA_LABEL UTF8 "Bypass Class 2 Root CA"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\116\061\013\060\011\006\003\125\004\006\023\002\116\117\061
\035\060\033\006\003\125\004\012\014\024\102\165\171\160\141\163
\163\040\101\123\055\071\070\063\061\066\063\063\062\067\061\040
\060\036\006\003\125\004\003\014\027\102\165\171\160\141\163\163
\040\103\154\141\163\163\040\062\040\122\157\157\164\040\103\101
END
CKA_ID
UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\116\061\013\060\011\006\003\125\004\006\023\002\116\117\061
\035\060\033\006\003\125\004\012\014\024\102\165\171\160\141\163
\163\040\101\123\055\071\070\063\061\066\063\063\062\067\061\040
\060\036\006\003\125\004\003\014\027\102\165\171\160\141\163\163
\040\103\154\141\163\163\040\062\040\122\157\157\164\040\103\101
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\001\002
END
CKA_VALUE MULTILINE_OCTAL
\060\202\005\131\060\202\003\101\240\003\002\001\002\002\001\002
\060\015\006\011\052\206\110\206\367\015\001\001\013\005\000\060
\116\061\013\060\011\006\003\125\004\006\023\002\116\117\061\035
\060\033\006\003\125\004\012\014\024\102\165\171\160\141\163\163
\040\101\123\055\071\070\063\061\066\063\063\062\067\061\040\060
\036\006\003\125\004\003\014\027\102\165\171\160\141\163\163\040
\103\154\141\163\163\040\062\040\122\157\157\164\040\103\101\060
\036\027\015\061\060\061\060\062\066\060\070\063\070\060\063\132
\027\015\064\060\061\060\062\066\060\070\063\070\060\063\132\060
\116\061\013\060\011\006\003\125\004\006\023\002\116\117\061\035
\060\033\006\003\125\004\012\014\024\102\165\171\160\141\163\163
\040\101\123\055\071\070\063\061\066\063\063\062\067\061\040\060
\036\006\003\125\004\003\014\027\102\165\171\160\141\163\163\040
\103\154\141\163\163\040\062\040\122\157\157\164\040\103\101\060
\202\002\042\060\015\006\011\052\206\110\206\367\015\001\001\001
\005\000\003\202\002\017\000\060\202\002\012\002\202\002\001\000
\327\307\136\367\301\007\324\167\373\103\041\364\364\365\151\344
\356\062\001\333\243\206\037\344\131\015\272\347\165\203\122\353
\352\034\141\025\110\273\035\007\312\214\256\260\334\226\235\352
\303\140\222\206\202\050\163\234\126\006\377\113\144\360\014\052
\067\111\265\345\317\014\174\356\361\112\273\163\060\145\363\325
\057\203\266\176\343\347\365\236\253\140\371\323\361\235\222\164
\212\344\034\226\254\133\200\351\265\364\061\207\243\121\374\307
\176\241\157\216\123\167\324\227\301\125\063\222\076\030\057\165
\324\255\206\111\313\225\257\124\006\154\330\006\023\215\133\377
\341\046\031\131\300\044\272\201\161\171\220\104\120\150\044\224
```

\137\270\263\021\361\051\101\141\243\101\313\043\066\325\301\361  
\062\120\020\116\177\364\206\223\354\204\323\216\274\113\277\134  
\001\116\007\075\334\024\212\224\012\244\352\163\373\013\121\350  
\023\007\030\372\016\361\053\321\124\025\175\074\341\367\264\031  
\102\147\142\136\167\340\242\125\354\266\331\151\027\325\072\257  
\104\355\112\305\236\344\172\047\174\345\165\327\252\313\045\347  
\337\153\012\333\017\115\223\116\250\240\315\173\056\362\131\001  
\152\267\015\270\007\201\176\213\070\033\070\346\012\127\231\075  
\356\041\350\243\365\014\026\335\213\354\064\216\234\052\034\000  
\025\027\215\150\203\322\160\237\030\010\315\021\150\325\311\153  
\122\315\304\106\217\334\265\363\330\127\163\036\351\224\071\004  
\277\323\336\070\336\264\123\354\151\034\242\176\304\217\344\033  
\160\255\362\242\371\373\367\026\144\146\151\237\111\121\242\342  
\025\030\147\006\112\177\325\154\265\115\263\063\340\141\353\135  
\276\351\230\017\062\327\035\113\074\056\132\001\122\221\011\362  
\337\352\215\330\006\100\143\252\021\344\376\303\067\236\024\122  
\077\364\342\314\362\141\223\321\375\147\153\327\122\256\277\150  
\253\100\103\240\127\065\123\170\360\123\370\141\102\007\144\306  
\327\157\233\114\070\015\143\254\142\257\066\213\242\163\012\015  
\365\041\275\164\252\115\352\162\003\111\333\307\137\035\142\143  
\307\375\335\221\354\063\356\365\155\264\156\060\150\336\310\326  
\046\260\165\136\173\264\007\040\230\241\166\062\270\115\154\117  
\002\003\001\000\001\243\102\060\100\060\017\006\003\125\035\023  
\001\001\377\004\005\060\003\001\001\377\060\035\006\003\125\035  
\016\004\026\004\024\311\200\167\340\142\222\202\365\106\234\363  
\272\367\114\303\336\270\243\255\071\060\016\006\003\125\035\017  
\001\001\377\004\004\003\002\001\006\060\015\006\011\052\206\110  
\206\367\015\001\001\013\005\000\003\202\002\001\000\123\137\041  
\365\272\260\072\122\071\054\222\260\154\000\311\357\316\040\357  
\006\362\226\236\351\244\164\177\172\026\374\267\365\266\373\025  
\033\077\253\246\300\162\135\020\261\161\356\274\117\343\255\254  
\003\155\056\161\056\257\304\343\255\243\275\014\021\247\264\377  
\112\262\173\020\020\037\247\127\101\262\300\256\364\054\131\326  
\107\020\210\363\041\121\051\060\312\140\206\257\106\253\035\355  
\072\133\260\224\336\104\343\101\010\242\301\354\035\326\375\117  
\266\326\107\320\024\013\312\346\312\265\173\167\176\101\037\136  
\203\307\266\214\071\226\260\077\226\201\101\157\140\220\342\350  
\371\373\042\161\331\175\263\075\106\277\264\204\257\220\034\017  
\217\022\152\257\357\356\036\172\256\002\112\212\027\053\166\376  
\254\124\211\044\054\117\077\266\262\247\116\214\250\221\227\373  
\051\306\173\134\055\271\313\146\266\267\250\133\022\121\205\265  
\011\176\142\170\160\376\251\152\140\266\035\016\171\014\375\312  
\352\044\200\162\303\227\077\362\167\253\103\042\012\307\353\266  
\014\204\202\054\200\153\101\212\010\300\353\245\153\337\231\022  
\313\212\325\136\200\014\221\340\046\010\066\110\305\372\070\021  
\065\377\045\203\055\362\172\277\332\375\216\376\245\313\105\054  
\037\304\210\123\256\167\016\331\232\166\305\216\054\035\243\272  
\325\354\062\256\300\252\254\367\321\172\115\353\324\007\342\110

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\367\042\216\260\244\237\152\316\216\262\262\140\364\243\042\320
\043\353\224\132\172\151\335\017\277\100\127\254\153\131\120\331
\243\231\341\156\376\215\001\171\047\043\025\336\222\235\173\011
\115\132\347\113\110\060\132\030\346\012\155\346\217\340\322\273
\346\337\174\156\041\202\301\150\071\115\264\230\130\146\142\314
\112\220\136\303\372\047\004\261\171\025\164\231\314\276\255\040
\336\046\140\034\353\126\121\246\243\352\344\243\077\247\377\141
\334\361\132\115\154\062\043\103\356\254\250\356\356\112\022\011
\074\135\161\302\276\171\372\302\207\150\035\013\375\134\151\314
\006\320\232\175\124\231\052\311\071\032\031\257\113\052\103\363
\143\135\132\130\342\057\343\035\344\251\326\320\012\320\236\277
\327\201\011\361\311\307\046\015\254\230\026\126\240
```

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "Buypass Class 2 Root CA"

# Issuer: CN=Buypass Class 2 Root CA,O=Buypass AS-983163327,C=NO

# Serial Number: 2 (0x2)

# Subject: CN=Buypass Class 2 Root CA,O=Buypass AS-983163327,C=NO

# Not Valid Before: Tue Oct 26 08:38:03 2010

# Not Valid After : Fri Oct 26 08:38:03 2040

# Fingerprint (SHA-256):

9A:11:40:25:19:7C:5B:B9:5D:94:E6:3D:55:CD:43:79:08:47:B6:46:B2:3C:DF:11:AD:A4:A0:0E:FF:15:FB:48

# Fingerprint (SHA1): 49:0A:75:74:DE:87:0A:47:FE:58:EE:F6:C7:6B:EB:C6:0B:12:40:99

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "Buypass Class 2 Root CA"

CKA\_CERT\_SHA1\_HASH MULTILINE\_OCTAL

```
\111\012\165\164\336\207\012\107\376\130\356\366\307\153\353\306
\013\022\100\231
```

END

CKA\_CERT\_MD5\_HASH

MULTILINE\_OCTAL

```
\106\247\322\376\105\373\144\132\250\131\220\233\170\104\233\051
```

END

CKA\_ISSUER MULTILINE\_OCTAL

```
\060\116\061\013\060\011\006\003\125\004\006\023\002\116\117\061
\035\060\033\006\003\125\004\012\014\024\102\165\171\160\141\163
\163\040\101\123\055\071\070\063\061\066\063\063\062\067\061\040
\060\036\006\003\125\004\003\014\027\102\165\171\160\141\163\163
\040\103\154\141\163\163\040\062\040\122\157\157\164\040\103\101
```

END

CKA\_SERIAL\_NUMBER MULTILINE\_OCTAL



```

\002\001\002
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "Buypass Class 3 Root CA"
#
# Issuer: CN=Buypass Class 3 Root CA,O=Buypass AS-983163327,C=NO
# Serial Number: 2 (0x2)
# Subject: CN=Buypass Class 3 Root CA,O=Buypass AS-983163327,C=NO
# Not Valid Before: Tue Oct 26 08:28:58 2010
# Not Valid After : Fri Oct 26 08:28:58
2040
# Fingerprint (SHA-256):
ED:F7:EB:BC:A2:7A:2A:38:4D:38:7B:7D:40:10:C6:66:E2:ED:B4:84:3E:4C:29:B4:AE:1D:5B:93:32:E6:B2:4D
# Fingerprint (SHA1): DA:FA:F7:FA:66:84:EC:06:8F:14:50:BD:C7:C2:81:A5:BC:A9:64:57
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Buypass Class 3 Root CA"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\116\061\013\060\011\006\003\125\004\006\023\002\116\117\061
\035\060\033\006\003\125\004\012\014\024\102\165\171\160\141\163
\163\040\101\123\055\071\070\063\061\066\063\063\062\067\061\040
\060\036\006\003\125\004\003\014\027\102\165\171\160\141\163\163
\040\103\154\141\163\163\040\063\040\122\157\157\164\040\103\101
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\116\061\013\060\011\006\003\125\004\006\023\002\116\117\061
\035\060\033\006\003\125\004\012\014\024\102\165\171\160\141\163
\163\040\101\123\055\071\070\063\061\066\063\063\062\067\061\040
\060\036\006\003\125\004\003\014\027\102\165\171\160\141\163\163
\040\103\154\141\163\163\040\063\040\122\157\157\164\040\103\101
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\001\002
END
CKA_VALUE MULTILINE_OCTAL
\060\202\005\131\060\202\003\101\240\003\002\001\002\002\001\002
\060\015\006\011\052\206\110\206\367\015\001\001\013\005\000\060
\116\061\013\060\011\006\003\125\004\006\023\002\116\117\061\035

```

\060\033\006\003\125\004\012\014\024\102\165\171\160\141\163\163  
\040\101\123\055\071\070\063\061\066\063\063\062\067\061\040\060  
\036\006\003\125\004\003\014\027\102\165\171\160\141\163\163\040  
\103\154\141\163\163\040\063\040\122\157\157\164\040\103\101\060  
\036\027\015\061\060\061\060\062\066\060\070\062\070\065\070\132  
\027\015\064\060\061\060\062\066\060\070\062\070\065\070\132\060  
\116\061\013\060\011\006\003\125\004\006\023\002\116\117\061\035  
\060\033\006\003\125\004\012\014\024\102\165\171\160\141\163\163  
\040\101\123\055\071\070\063\061\066\063\063\062\067\061\040\060  
\036\006\003\125\004\003\014\027\102\165\171\160\141\163\163\040  
\103\154\141\163\163\040\063\040\122\157\157\164\040\103\101\060  
\202\002\042\060\015\006\011\052\206\110\206\367\015\001\001\001  
\005\000\003\202\002\017\000\060\202\002\012\002\202\002\001\000  
\245\332\012\225\026\120\343\225\362\136\235\166\061\006\062\172  
\233\361\020\166\270\000\232\265\122\066\315\044\107\260\237\030  
\144\274\232\366\372\325\171\330\220\142\114\042\057\336\070\075  
\326\340\250\351\034\054\333\170\021\351\216\150\121\025\162\307  
\363\063\207\344\240\135\013\134\340\127\007\052\060\365\315\304  
\067\167\050\115\030\221\346\277\325\122\375\161\055\160\076\347  
\306\304\212\343\360\050\013\364\166\230\241\213\207\125\262\072  
\023\374\267\076\047\067\216\042\343\250\117\052\357\140\273\075  
\267\071\303\016\001\107\231\135\022\117\333\103\372\127\241\355  
\371\235\276\021\107\046\133\023\230\253\135\026\212\260\067\034  
\127\235\105\377\210\226\066\277\273\312\007\173\157\207\143\327  
\320\062\152\326\135\154\014\361\263\156\071\342\153\061\056\071  
\000\047\024\336\070\300\354\031\146\206\022\350\235\162\026\023  
\144\122\307\251\067\034\375\202\060\355\204\030\035\364\256\134  
\377\160\023\000\353\261\365\063\172\113\326\125\370\005\215\113  
\151\260\365\263\050\066\134\024\304\121\163\115\153\013\361\064  
\007\333\027\071\327\334\050\173\153\365\237\363\056\301\117\027  
\052\020\363\314\312\350\353\375\153\253\056\232\237\055\202\156  
\004\324\122\001\223\055\075\206\374\176\374\337\357\102\035\246  
\153\357\271\040\306\367\275\240\247\225\375\247\346\211\044\330  
\314\214\064\154\342\043\057\331\022\032\041\271\125\221\157\013  
\221\171\031\014\255\100\210\013\160\342\172\322\016\330\150\110  
\273\202\023\071\020\130\351\330\052\007\306\022\333\130\333\322  
\073\125\020\107\005\025\147\142\176\030\143\246\106\077\011\016  
\124\062\136\277\015\142\172\047\357\200\350\333\331\113\006\132  
\067\132\045\320\010\022\167\324\157\011\120\227\075\310\035\303  
\337\214\105\060\126\306\323\144\253\146\363\300\136\226\234\303  
\304\357\303\174\153\213\072\171\177\263\111\317\075\342\211\237  
\240\060\113\205\271\234\224\044\171\217\175\153\251\105\150\017  
\053\320\361\332\034\313\151\270\312\111\142\155\310\320\143\142  
\335\140\017\130\252\217\241\274\005\245\146\242\317\033\166\262  
\204\144\261\114\071\122\300\060\272\360\214\113\002\260\266\267  
\002\003\001\000\001\243\102\060\100\060\017\006\003\125\035\023  
\001\001\377\004\005\060\003\001\001\377\060\035\006\003\125\035  
\016\004\026\004\024\107\270\315\377\345\157\356\370\262\354\057

\116\016\371\045\260\216\074\153\303\060\016\006\003\125\035\017  
\001\001\377\004\004\003\002\001\006\060\015\006\011\052\206\110  
\206\367\015\001\001\013\005\000\003\202\002\001\000\000\040\043  
\101\065\004\220\302\100\142\140\357\342\065\114\327\077\254\342  
\064\220\270\241\157\166\372\026\026\244\110\067\054\351\220\302  
\362\074\370\012\237\330\201\345\273\133\332\045\054\244\247\125  
\161\044\062\366\310\013\362\274\152\370\223\254\262\007\302\137  
\237\333\314\310\212\252\276\152\157\341\111\020\314\061\327\200  
\273\273\310\330\242\016\144\127\352\242\365\302\251\061\025\322  
\040\152\354\374\042\001\050\317\206\270\200\036\251\314\021\245  
\074\362\026\263\107\235\374\322\200\041\304\313\320\107\160\101  
\241\312\203\031\010\054\155\362\135\167\234\212\024\023\324\066  
\034\222\360\345\006\067\334\246\346\220\233\070\217\134\153\033  
\106\206\103\102\137\076\001\007\123\124\135\145\175\367\212\163  
\241\232\124\132\037\051\103\024\047\302\205\017\265\210\173\032  
\073\224\267\035\140\247\265\234\347\051\151\127\132\233\223\172  
\103\060\033\003\327\142\310\100\246\252\374\144\344\112\327\221  
\123\001\250\040\210\156\234\137\104\271\313\140\201\064\354\157  
\323\175\332\110\137\353\264\220\274\055\251\034\013\254\034\325  
\242\150\040\200\004\326\374\261\217\057\273\112\061\015\112\206  
\034\353\342\066\051\046\365\332\330\304\362\165\141\317\176\256  
\166\143\112\172\100\145\223\207\370\036\200\214\206\345\206\326  
\217\016\374\123\054\140\350\026\141\032\242\076\103\173\315\071  
\140\124\152\365\362\211\046\001\150\203\110\242\063\350\311\004  
\221\262\021\064\021\076\352\320\103\031\037\003\223\220\014\377  
\121\075\127\364\101\156\341\313\240\276\353\311\143\315\155\314  
\344\370\066\252\150\235\355\275\135\227\160\104\015\266\016\065  
\334\341\014\135\273\240\121\224\313\176\026\353\021\057\243\222  
\105\310\114\161\331\274\311\231\122\127\106\057\120\317\275\065  
\151\364\075\025\316\006\245\054\017\076\366\201\272\224\273\303  
\273\277\145\170\322\206\171\377\111\073\032\203\014\360\336\170  
\354\310\362\115\114\032\336\202\051\370\301\132\332\355\356\346  
\047\136\350\105\320\235\034\121\250\150\253\104\343\320\213\152  
\343\370\073\273\334\115\327\144\362\121\276\346\252\253\132\351  
\061\356\006\274\163\277\023\142\012\237\307\271\227

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "Buypass Class 3 Root CA"

#

Issuer: CN=Buypass Class 3 Root CA,O=Buypass AS-983163327,C=NO

# Serial Number: 2 (0x2)

# Subject: CN=Buypass Class 3 Root CA,O=Buypass AS-983163327,C=NO

# Not Valid Before: Tue Oct 26 08:28:58 2010

# Not Valid After : Fri Oct 26 08:28:58 2040

```

# Fingerprint (SHA-256):
ED:F7:EB:BC:A2:7A:2A:38:4D:38:7B:7D:40:10:C6:66:E2:ED:B4:84:3E:4C:29:B4:AE:1D:5B:93:32:E6:B2:4D
# Fingerprint (SHA1): DA:FA:F7:FA:66:84:EC:06:8F:14:50:BD:C7:C2:81:A5:BC:A9:64:57
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Bypass Class 3 Root CA"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\332\372\367\372\146\204\354\006\217\024\120\275\307\302\201\245
\274\251\144\127
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\075\073\030\236\054\144\132\350\325\210\316\016\371\067\302\354
END
CKA_ISSUER MULTILINE_OCTAL
\060\116\061\013\060\011\006\003\125\004\006\023\002\116\117\061
\035\060\033\006\003\125\004\012\014\024\102\165\171\160\141\163
\163\040\101\123\055\071\070\063\061\066\063\063\062\067\061\040
\060\036\006\003\125\004\003\014\027\102\165\171\160\141\163\163
\040\103\154\141\163\163\040\063\040\122\157\157\164\040\103\101
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\001\002
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "T-TeleSec GlobalRoot Class 3"
#
# Issuer: CN=T-TeleSec GlobalRoot Class 3,OU=T-Systems Trust Center,O=T-Systems Enterprise Services
GmbH,C=DE
# Serial Number: 1 (0x1)
# Subject: CN=T-TeleSec GlobalRoot Class 3,OU=T-Systems Trust Center,O=T-Systems Enterprise Services
GmbH,C=DE
# Not Valid Before: Wed Oct 01 10:29:56 2008
# Not Valid After : Sat Oct 01 23:59:59 2033
# Fingerprint (SHA-256):
FD:73:DA:D3:1C:64:4F:F1:B4:3B:EF:0C:CD:DA:96:71:0B:9C:D9:87:5E:CA:7E:31:70:7A:F3:E9:6D:52:2B:BD
# Fingerprint (SHA1):
55:A6:72:3E:CB:F2:EC:CD:C3:23:74:70:19:9D:2A:BE:11:E3:81:D1
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE

```

```
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "T-TeleSec GlobalRoot Class 3"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\201\202\061\013\060\011\006\003\125\004\006\023\002\104\105
\061\053\060\051\006\003\125\004\012\014\042\124\055\123\171\163
\164\145\155\163\040\105\156\164\145\162\160\162\151\163\145\040
\123\145\162\166\151\143\145\163\040\107\155\142\110\061\037\060
\035\006\003\125\004\013\014\026\124\055\123\171\163\164\145\155
\163\040\124\162\165\163\164\040\103\145\156\164\145\162\061\045
\060\043\006\003\125\004\003\014\034\124\055\124\145\154\145\123
\145\143\040\107\154\157\142\141\154\122\157\157\164\040\103\154
\141\163\163\040\063
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\201\202\061\013\060\011\006\003\125\004\006\023\002\104\105
\061\053\060\051\006\003\125\004\012\014\042\124\055\123\171\163
\164\145\155\163\040\105\156\164\145\162\160\162\151\163\145\040
\123\145\162\166\151\143\145\163\040\107\155\142\110\061\037\060
\035\006\003\125\004\013\014\026\124\055\123\171\163\164\145\155
\163\040\124\162\165\163\164\040\103\145\156\164\145\162\061\045
\060\043\006\003\125\004\003\014\034\124\055\124\145\154\145\123
\145\143\040\107\154\157\142\141\154\122\157\157\164\040\103\154
\141\163\163\040\063
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\001\001
END
CKA_VALUE MULTILINE_OCTAL
\060\202\003\303\060\202\002\253\240\003\002\001\002\002\001\001
\060\015\006\011\052\206\110\206\367\015\001\001\013\005\000\060
\201\202\061\013\060\011\006\003\125\004\006\023\002\104\105\061
\053\060\051\006\003\125\004\012\014\042\124\055\123\171\163\164
\145\155\163\040\105\156\164\145\162\160\162\151\163\145\040\123
\145\162\166\151\143\145\163\040\107\155\142\110\061\037\060\035
\006\003\125\004\013\014\026\124\055\123\171\163\164\145\155\163
\040\124\162\165\163\164\040\103\145\156\164\145\162\061\045\060
\043\006\003\125\004\003\014\034\124\055\124\145\154\145\123\145
\143\040\107\154\157\142\141\154\122\157\157\164\040\103\154\141
\163\163\040\063\060\036\027\015\060\070\061\060\060\061\061\060
\062\071\065\066\132\027\015\063\063\061\060\060\061\062\063\065
\071\065\071\132\060\201\202\061\013\060\011\006\003\125\004\006
\023\002\104\105\061\053\060\051\006\003\125\004\012\014\042\124
\055\123\171\163\164\145\155\163\040\105\156\164\145\162\160\162
\151\163\145\040\123\145\162\166\151\143\145\163\040\107\155\142
\110\061\037\060\035\006\003\125\004\013\014\026\124\055\123\171
```

\163\164\145\155\163\040\124\162\165\163\164\040\103\145\156\164  
\145\162\061\045\060\043\006\003\125\004\003\014\034\124\055\124  
\145\154\145\123\145\143\040\107\154\157\142\141\154\122\157\157  
\164\040\103\154\141\163\163\040\063\060\202\001\042\060\015\006  
\011\052\206\110\206\367\015\001\001\001\005\000\003\202\001\017  
\000\060\202\001\012\002\202\001\001\000\275\165\223\360\142\042  
\157\044\256\340\172\166\254\175\275\331\044\325\270\267\374\315  
\360\102\340\353\170\210\126\136\233\232\124\035\115\014\212\366  
\323\317\160\364\122\265\330\223\004\343\106\206\161\101\112\053  
\360\052\054\125\003\326\110\303\340\071\070\355\362\134\074\077  
\104\274\223\075\141\253\116\315\015\276\360\040\047\130\016\104  
\177\004\032\207\245\327\226\024\066\220\320\111\173\241\165\373  
\032\153\163\261\370\316\251\011\054\362\123\325\303\024\104\270  
\206\245\366\213\053\071\332\243\063\124\331\372\162\032\367\042  
\025\034\210\221\153\177\146\345\303\152\200\260\044\363\337\206  
\105\210\375\031\177\165\207\037\037\261\033\012\163\044\133\271  
\145\340\054\124\310\140\323\146\027\077\341\314\124\063\163\221  
\002\072\246\177\173\166\071\242\037\226\266\070\256\265\310\223  
\164\035\236\271\264\345\140\235\057\126\321\340\353\136\133\114  
\022\160\014\154\104\040\253\021\330\364\031\366\322\234\122\067  
\347\372\266\302\061\073\112\324\024\231\255\307\032\365\135\137  
\372\007\270\174\015\037\326\203\036\263\002\003\001\000\001\243  
\102\060\100\060\017\006\003\125\035\023\001\001\377\004\005\060  
\003\001\001\377\060\016\006\003\125\035\017\001\001\377\004\004  
\003\002\001\006\060\035\006\003\125\035\016\004\026\004\024\265  
\003\367\166\073\141\202\152\022\252\030\123\353\003\041\224\277  
\376\316\312\060\015\006\011\052\206\110\206\367\015\001\001\013  
\005\000\003\202\001\001\000\126\075\357\224\325\275\332\163\262  
\130\276\256\220\255\230\047\227\376\001\261\260\122\000\270\115  
\344\033\041\164\033\176\300\356\136\151\052\045\257\134\326\035  
\332\322\171\311\363\227\051\340\206\207\336\004\131\017\361\131  
\324\144\205\113\231\257\045\004\036\311\106\251\227\336\202\262  
\033\160\237\234\366\257\161\061\335\173\005\245\054\323\271\312  
\107\366\312\362\366\347\255\271\110\077\274\026\267\301\155\364  
\352\011\257\354\363\265\347\005\236\246\036\212\123\121\326\223  
\201\314\164\223\366\271\332\246\045\005\164\171\132\176\100\076  
\202\113\046\021\060\156\341\077\101\307\107\000\065\325\365\323  
\367\124\076\201\075\332\111\152\232\263\357\020\075\346\353\157  
\321\310\042\107\313\314\317\001\061\222\331\030\343\042\276\011  
\036\032\076\132\262\344\153\014\124\172\175\103\116\270\211\245  
\173\327\242\075\226\206\314\362\046\064\055\152\222\235\232\032  
\320\060\342\135\116\004\260\137\213\040\176\167\301\075\225\202  
\321\106\232\073\074\170\270\157\241\320\015\144\242\170\036\051  
\116\223\303\244\124\024\133

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "T-TeleSec GlobalRoot Class 3"

# Issuer: CN=T-TeleSec GlobalRoot Class 3,OU=T-Systems Trust Center,O=T-Systems Enterprise Services GmbH,C=DE

# Serial Number: 1 (0x1)

# Subject: CN=T-TeleSec GlobalRoot Class 3,OU=T-Systems Trust Center,O=T-Systems Enterprise Services GmbH,C=DE

# Not Valid Before: Wed Oct 01 10:29:56 2008

# Not Valid After : Sat Oct 01 23:59:59 2033

# Fingerprint (SHA-256):

FD:73:DA:D3:1C:64:4F:F1:B4:3B:EF:0C:CD:DA:96:71:0B:9C:D9:87:5E:CA:7E:31:70:7A:F3:E9:6D:52:2B:BD

# Fingerprint (SHA1): 55:A6:72:3E:CB:F2:EC:CD:C3:23:74:70:19:9D:2A:BE:11:E3:81:D1

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "T-TeleSec GlobalRoot Class 3"

CKA\_CERT\_SHA1\_HASH MULTILINE\_OCTAL

\125\246\162\076\313\362\354\315\303\043\164\160\031\235\052\276  
\021\343\201\321

END

CKA\_CERT\_MD5\_HASH MULTILINE\_OCTAL

\312\373\100\250\116\071\222\212\035\376\216\057\304\047\352\357

END

CKA\_ISSUER MULTILINE\_OCTAL

\060\201\202\061\013\060\011\006\003\125\004\006\023\002\104\105  
\061\053\060\051\006\003\125\004\012\014\042\124\055\123\171\163  
\164\145\155\163\040\105\156\164\145\162\160\162\151\163\145\040  
\123\145\162\166\151\143\145\163\040\107\155\142\110\061\037\060  
\035\006\003\125\004\013\014\026\124\055\123\171\163\164\145\155  
\163\040\124\162\165\163\164\040\103\145\156\164\145\162\061\045  
\060\043\006\003\125\004\003\014\034\124\055\124\145\154\145\123  
\145\143\040\107\154\157\142\141\154\122\157\157\164\040\103\154  
\141\163\163\040\063

END

CKA\_SERIAL\_NUMBER

MULTILINE\_OCTAL

\002\001\001

END

CKA\_TRUST\_SERVER\_AUTH CK\_TRUST CKT\_NSS\_TRUSTED\_DELEGATOR

CKA\_TRUST\_EMAIL\_PROTECTION CK\_TRUST CKT\_NSS\_MUST\_VERIFY\_TRUST

CKA\_TRUST\_CODE\_SIGNING CK\_TRUST CKT\_NSS\_MUST\_VERIFY\_TRUST

CKA\_TRUST\_STEP\_UP\_APPROVED CK\_BBOOL CK\_FALSE

#

# Certificate "D-TRUST Root Class 3 CA 2 2009"

#

```
# Issuer: CN=D-TRUST Root Class 3 CA 2 2009,O=D-Trust GmbH,C=DE
# Serial Number: 623603 (0x983f3)
# Subject: CN=D-TRUST Root Class 3 CA 2 2009,O=D-Trust GmbH,C=DE
# Not Valid Before: Thu Nov 05 08:35:58 2009
# Not Valid After : Mon Nov 05 08:35:58 2029
# Fingerprint (SHA-256):
49:E7:A4:42:AC:F0:EA:62:87:05:00:54:B5:25:64:B6:50:E4:F4:9E:42:E3:48:D6:AA:38:E0:39:E9:57:B1:C1
# Fingerprint (SHA1): 58:E8:AB:B0:36:15:33:FB:80:F7:9B:1B:6D:29:D3:FF:8D:5F:00:F0
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL
CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "D-TRUST Root Class 3 CA 2 2009"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\115\061\013\060\011\006\003\125\004\006\023\002\104\105\061
\025\060\023\006\003\125\004\012\014\014\104\055\124\162\165\163
\164\040\107\155\142\110\061\047\060\045\006\003\125\004\003\014
\036\104\055\124\122\125\123\124\040\122\157\157\164\040\103\154
\141\163\163\040\063\040\103\101\040\062\040\062\060\060\071
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\115\061\013\060\011\006\003\125\004\006\023\002\104\105\061
\025\060\023\006\003\125\004\012\014\014\104\055\124\162\165\163
\164\040\107\155\142\110\061\047\060\045\006\003\125\004\003\014
\036\104\055\124\122\125\123\124\040\122\157\157\164\040\103\154
\141\163\163\040\063\040\103\101\040\062\040\062\060\060\071
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\003\011\203\363
END
CKA_VALUE MULTILINE_OCTAL
\060\202\004\063\060\202\003\033\240\003\002\001\002\002\003\011
\203\363\060\015\006\011\052\206\110\206\367\015\001\001\013\005
\000\060\115\061\013\060\011\006\003\125\004\006\023\002\104\105
\061\025\060\023\006\003\125\004\012\014\014\104\055\124\162\165
\163\164\040\107\155\142\110\061\047\060\045\006\003\125\004\003
\014\036\104\055\124\122\125\123\124\040\122\157\157\164\040\103
\154\141\163\163\040\063\040\103\101\040\062\040\062\060\060\071
\060\036\027\015\060\071\061\061\060\065\060\070\063\065\065\070
\132\027\015\062\071\061\061\060\065\060\070\063\065\065\070\132
\060\115\061\013\060\011\006\003\125\004\006\023\002\104\105\061
\025\060\023\006\003\125\004\012\014\014\104\055\124\162\165\163
\164\040\107\155\142\110\061\047\060\045\006\003\125\004\003\014
\036\104\055\124\122\125\123\124\040\122\157\157\164\040\103\154
\141\163\163\040\063\040\103\101\040\062\040\062\060\060\071\060
```



\202\001\042\060\015\006\011\052\206\110\206\367\015\001\001\001  
\005\000\003\202\001\017\000\060\202\001\012\002\202\001\001\000  
\323\262\112\317\172\107\357\165\233\043\372\072\057\326\120\105  
\211\065\072\306\153\333\376\333\000\150\250\340\003\021\035\067  
\120\010\237\115\112\150\224\065\263\123\321\224\143\247\040\126  
\257\336\121\170\354\052\075\363\110\110\120\076\012\337\106\125  
\213\047\155\303\020\115\015\221\122\103\330\207\340\135\116\066  
\265\041\312\137\071\100\004\137\133\176\314\243\306\053\251\100  
\036\331\066\204\326\110\363\222\036\064\106\040\044\301\244\121  
\216\112\032\357\120\077\151\135\031\177\105\303\307\001\217\121  
\311\043\350\162\256\264\274\126\011\177\022\313\034\261\257\051  
\220\012\311\125\314\017\323\264\032\355\107\065\132\112\355\234  
\163\004\041\320\252\275\014\023\265\000\312\046\154\304\153\014  
\224\132\225\224\332\120\232\361\377\245\053\146\061\244\311\070  
\240\337\035\037\270\011\056\363\247\350\147\122\253\225\037\340  
\106\076\330\244\303\312\132\305\061\200\350\110\232\237\224\151  
\376\031\335\330\163\174\201\312\226\336\216\355\263\062\005\145  
\204\064\346\346\375\127\020\265\137\166\277\057\260\020\015\305  
\002\003\001\000\001\243\202\001\032\060\202\001\026\060\017\006  
\003\125\035\023\001\001\377\004\005\060\003\001\001\377\060\035  
\006\003\125\035\016\004\026\004\024\375\332\024\304\237\060\336  
\041\275\036\102\071\374\253\143\043\111\340\361\204\060\016\006  
\003\125\035\017\001\001\377\004\004\003\002\001\006\060\201\323  
\006\003\125\035\037\004\201\313\060\201\310\060\201\200\240\176  
\240\174\206\172\154\144\141\160\072\057\057\144\151\162\145\143  
\164\157\162\171\056\144\055\164\162\165\163\164\056\156\145\164  
\057\103\116\075\104\055\124\122\125\123\124\045\062\060\122\157  
\157\164\045\062\060\103\154\141\163\163\045\062\060\063\045\062  
\060\103\101\045\062\060\062\045\062\060\062\060\060\071\054\117  
\075\104\055\124\162\165\163\164\045\062\060\107\155\142\110\054  
\103\075\104\105\077\143\145\162\164\151\146\151\143\141\164\145  
\162\145\166\157\143\141\164\151\157\156\154\151\163\164\060\103  
\240\101\240\077\206\075\150\164\164\160\072\057\057\167\167\167  
\056\144\055\164\162\165\163\164\056\156\145\164\057\143\162\154  
\057\144\055\164\162\165\163\164\137\162\157\157\164\137\143\154  
\141\163\163\137\063\137\143\141\137\062\137\062\060\060\071\056  
\143\162\154\060\015\006\011\052\206\110\206\367\015\001\001\013  
\005\000\003\202\001\001\000\177\227\333\060\310\337\244\234\175  
\041\172\200\160\316\024\022\151\210\024\225\140\104\001\254\262  
\351\060\117\233\120\302\146\330\176\215\060\265\160\061\351\342  
\151\307\363\160\333\040\025\206\320\015\360\276\254\001\165\204  
\316\176\237\115\277\267\140\073\234\363\312\035\342\136\150\330  
\243\235\227\345\100\140\322\066\041\376\320\264\270\027\332\164  
\243\177\324\337\260\230\002\254\157\153\153\054\045\044\162\241  
\145\356\045\132\345\346\062\347\362\337\253\111\372\363\220\151  
\043\333\004\331\347\134\130\374\145\324\227\276\314\374\056\012  
\314\045\052\065\004\370\140\221\025\165\075\101\377\043\037\031  
\310\154\353\202\123\004\246\344\114\042\115\215\214\272\316\133

```
\163\354\144\124\120\155\321\234\125\373\151\303\066\303\214\274
\074\205\246\153\012\046\015\340\223\230\140\256\176\306\044\227
\212\141\137\221\216\146\222\011\207\066\315\213\233\055\076\366
\121\324\120\324\131\050\275\203\362\314\050\173\123\206\155\330
\046\210\160\327\352\221\315\076\271\312\300\220\156\132\306\136
\164\145\327\134\376\243\342
```

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "D-TRUST Root Class 3 CA 2 2009"

# Issuer: CN=D-TRUST Root Class 3 CA 2 2009,O=D-Trust GmbH,C=DE

# Serial Number: 623603 (0x983f3)

# Subject: CN=D-TRUST Root Class 3 CA 2 2009,O=D-Trust GmbH,C=DE

# Not Valid Before: Thu Nov 05 08:35:58 2009

# Not Valid After : Mon Nov 05 08:35:58 2029

# Fingerprint (SHA-256):

49:E7:A4:42:AC:F0:EA:62:87:05:00:54:B5:25:64:B6:50:E4:F4:9E:42:E3:48:D6:AA:38:E0:39:E9:57:B1:C1

# Fingerprint (SHA1): 58:E8:AB:B0:36:15:33:FB:80:F7:9B:1B:6D:29:D3:FF:8D:5F:00:F0

CKA\_CLASS

CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "D-TRUST Root Class 3 CA 2 2009"

CKA\_CERT\_SHA1\_HASH MULTILINE\_OCTAL

```
\130\350\253\260\066\025\063\373\200\367\233\033\155\051\323\377
\215\137\000\360
```

END

CKA\_CERT\_MD5\_HASH MULTILINE\_OCTAL

```
\315\340\045\151\215\107\254\234\211\065\220\367\375\121\075\057
```

END

CKA\_ISSUER MULTILINE\_OCTAL

```
\060\115\061\013\060\011\006\003\125\004\006\023\002\104\105\061
\025\060\023\006\003\125\004\012\014\014\104\055\124\162\165\163
\164\040\107\155\142\110\061\047\060\045\006\003\125\004\003\014
\036\104\055\124\122\125\123\124\040\122\157\157\164\040\103\154
\141\163\163\040\063\040\103\101\040\062\040\062\060\060\071
```

END

CKA\_SERIAL\_NUMBER MULTILINE\_OCTAL

```
\002\003\011\203\363
```

END

CKA\_TRUST\_SERVER\_AUTH CK\_TRUST CKT\_NSS\_TRUSTED\_DELEGATOR

CKA\_TRUST\_EMAIL\_PROTECTION CK\_TRUST CKT\_NSS\_MUST\_VERIFY\_TRUST

CKA\_TRUST\_CODE\_SIGNING CK\_TRUST CKT\_NSS\_MUST\_VERIFY\_TRUST

CKA\_TRUST\_STEP\_UP\_APPROVED

CK\_BBOOL CK\_FALSE

#

# Certificate "D-TRUST Root Class 3 CA 2 EV 2009"

#

# Issuer: CN=D-TRUST Root Class 3 CA 2 EV 2009,O=D-Trust GmbH,C=DE

# Serial Number: 623604 (0x983f4)

# Subject: CN=D-TRUST Root Class 3 CA 2 EV 2009,O=D-Trust GmbH,C=DE

# Not Valid Before: Thu Nov 05 08:50:46 2009

# Not Valid After : Mon Nov 05 08:50:46 2029

# Fingerprint (SHA-256):

EE:C5:49:6B:98:8C:E9:86:25:B9:34:09:2E:EC:29:08:BE:D0:B0:F3:16:C2:D4:73:0C:84:EA:F1:F3:D3:48:81

# Fingerprint (SHA1): 96:C9:1B:0B:95:B4:10:98:42:FA:D0:D8:22:79:FE:60:FA:B9:16:83

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_CERTIFICATE

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "D-TRUST Root Class 3 CA 2 EV 2009"

CKA\_CERTIFICATE\_TYPE CK\_CERTIFICATE\_TYPE CKC\_X\_509

CKA\_SUBJECT MULTILINE\_OCTAL

\060\120\061\013\060\011\006\003\125\004\006\023\002\104\105\061  
\025\060\023\006\003\125\004\012\014\014\104\055\124\162\165\163  
\164\040\107\155\142\110\061\052\060\050\006\003\125\004\003\014  
\041\104\055\124\122\125\123\124\040\122\157\157\164\040\103\154  
\141\163\163\040\063\040\103\101\040\062\040\105\126\040\062\060  
\060\071

END

CKA\_ID

UTF8 "0"

CKA\_ISSUER MULTILINE\_OCTAL

\060\120\061\013\060\011\006\003\125\004\006\023\002\104\105\061  
\025\060\023\006\003\125\004\012\014\014\104\055\124\162\165\163  
\164\040\107\155\142\110\061\052\060\050\006\003\125\004\003\014  
\041\104\055\124\122\125\123\124\040\122\157\157\164\040\103\154  
\141\163\163\040\063\040\103\101\040\062\040\105\126\040\062\060  
\060\071

END

CKA\_SERIAL\_NUMBER MULTILINE\_OCTAL

\002\003\011\203\364

END

CKA\_VALUE MULTILINE\_OCTAL

\060\202\004\103\060\202\003\053\240\003\002\001\002\002\003\011  
\203\364\060\015\006\011\052\206\110\206\367\015\001\001\013\005  
\000\060\120\061\013\060\011\006\003\125\004\006\023\002\104\105  
\061\025\060\023\006\003\125\004\012\014\014\104\055\124\162\165  
\163\164\040\107\155\142\110\061\052\060\050\006\003\125\004\003  
\014\041\104\055\124\122\125\123\124\040\122\157\157\164\040\103  
\154\141\163\163\040\063\040\103\101\040\062\040\105\126\040\062

\060\060\071\060\036\027\015\060\071\061\061\060\065\060\070\065  
\060\064\066\132\027\015\062\071\061\061\060\065\060\070\065\060  
\064\066\132\060\120\061\013\060\011\006\003\125\004\006\023\002  
\104\105\061\025\060\023\006\003\125\004\012\014\014\104\055\124  
\162\165\163\164\040\107\155\142\110\061\052\060\050\006\003\125  
\004\003\014\041\104\055\124\122\125\123\124\040\122\157\157\164  
\040\103\154\141\163\163\040\063\040\103\101\040\062\040\105\126  
\040\062\060\060\071\060\202\001\042\060\015\006\011\052\206\110  
\206\367\015\001\001\001\005\000\003\202\001\017\000\060\202\001  
\012\002\202\001\001\000\231\361\204\064\160\272\057\267\060\240  
\216\275\174\004\317\276\142\274\231\375\202\227\322\172\012\147  
\226\070\011\366\020\116\225\042\163\231\215\332\025\055\347\005  
\374\031\163\042\267\216\230\000\274\074\075\254\241\154\373\326  
\171\045\113\255\360\314\144\332\210\076\051\270\017\011\323\064  
\335\063\365\142\321\341\315\031\351\356\030\117\114\130\256\342  
\036\326\014\133\025\132\330\072\270\304\030\144\036\343\063\262  
\265\211\167\116\014\277\331\224\153\023\227\157\022\243\376\231  
\251\004\314\025\354\140\150\066\355\010\173\267\365\277\223\355  
\146\061\203\214\306\161\064\207\116\027\352\257\213\221\215\034  
\126\101\256\042\067\136\067\362\035\331\321\055\015\057\151\121  
\247\276\146\246\212\072\052\275\307\032\261\341\024\360\276\072  
\035\271\317\133\261\152\376\264\261\106\040\242\373\036\073\160  
\357\223\230\175\214\163\226\362\305\357\205\160\255\051\046\374  
\036\004\076\034\240\330\017\313\122\203\142\174\356\213\123\225  
\220\251\127\242\352\141\005\330\371\115\304\047\372\156\255\355  
\371\327\121\367\153\245\002\003\001\000\001\243\202\001\044\060  
\202\001\040\060\017\006\003\125\035\023\001\001\377\004\005\060  
\003\001\001\377\060\035\006\003\125\035\016\004\026\004\024\323  
\224\212\114\142\023\052\031\056\314\257\162\212\175\066\327\232  
\034\334\147\060\016\006\003\125\035\017\001\001\377\004\004\003  
\002\001\006\060\201\335\006\003\125\035\037\004\201\325\060\201  
\322\060\201\207\240\201\204\240\201\201\206\177\154\144\141\160  
\072\057\057\144\151\162\145\143\164\157\162\171\056\144\055\164  
\162\165\163\164\056\156\145\164\057\103\116\075\104\055\124\122  
\125\123\124\045\062\060\122\157\157\164\045\062\060\103\154\141  
\163\163\045\062\060\063\045\062\060\103\101\045\062\060\062\045  
\062\060\105\126\045\062\060\062\060\060\071\054\117\075\104\055  
\124\162\165\163\164\045\062\060\107\155\142\110\054\103\075\104  
\105\077\143\145\162\164\151\146\151\143\141\164\145\162\145\166  
\157\143\141\164\151\157\156\154\151\163\164\060\106\240\104\240  
\102\206\100\150\164\164\160\072\057\057\167\167\167\056\144\055  
\164\162\165\163\164\056\156\145\164\057\143\162\154\057\144\055  
\164\162\165\163\164\137\162\157\157\164\137\143\154\141\163\163  
\137\063\137\143\141\137\062\137\145\166\137\062\060\060\071\056  
\143\162\154\060\015\006\011\052\206\110\206\367\015\001\001\013  
\005\000\003\202\001\001\000\064\355\173\132\074\244\224\210\357  
\032\021\165\007\057\263\376\074\372\036\121\046\353\207\366\051  
\336\340\361\324\306\044\011\351\301\317\125\033\264\060\331\316

```
\032\376\006\121\246\025\244\055\357\262\113\277\040\050\045\111
\321\246\066\167\064\350\144\337\122\261\021\307\163\172\315\071
\236\302\255\214\161\041\362\132\153\257\337\074\116\125\257\262
\204\145\024\211\271\167\313\052\061\276\317\243\155\317\157\110
\224\062\106\157\347\161\214\240\246\204\031\067\007\362\003\105
\011\053\206\165\174\337\137\151\127\000\333\156\330\246\162\042
\113\120\324\165\230\126\337\267\030\377\103\103\120\256\172\104
\173\360\171\121\327\103\075\247\323\201\323\360\311\117\271\332
\306\227\206\320\202\303\344\102\155\376\260\342\144\116\016\046
\347\100\064\046\265\010\211\327\010\143\143\070\047\165\036\063
\352\156\250\335\237\231\117\164\115\201\211\200\113\335\232\227
\051\134\057\276\201\101\271\214\377\352\175\140\006\236\315\327
\075\323\056\243\025\274\250\346\046\345\157\303\334\270\003\041
\352\237\026\361\054\124\265
```

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "D-TRUST Root Class 3 CA 2 EV 2009"

# Issuer: CN=D-TRUST Root Class 3 CA 2 EV 2009,O=D-Trust GmbH,C=DE

# Serial Number: 623604 (0x983f4)

# Subject: CN=D-TRUST Root Class 3 CA 2 EV 2009,O=D-Trust GmbH,C=DE

# Not Valid Before: Thu Nov 05 08:50:46 2009

# Not Valid After : Mon Nov 05 08:50:46 2029

# Fingerprint (SHA-256):

EE:C5:49:6B:98:8C:E9:86:25:B9:34:09:2E:EC:29:08:BE:D0:B0:F3:16:C2:D4:73:0C:84:EA:F1:F3:D3:48:81

# Fingerprint (SHA1): 96:C9:1B:0B:95:B4:10:98:42:FA:D0:D8:22:79:FE:60:FA:B9:16:83

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "D-TRUST Root Class 3 CA 2 EV 2009"

CKA\_CERT\_SHA1\_HASH MULTILINE\_OCTAL

```
\226\311\033\013\225\264\020\230\102\372\320\330\042\171\376\140
\372\271\026\203
```

END

CKA\_CERT\_MD5\_HASH

MULTILINE\_OCTAL

```
\252\306\103\054\136\055\315\304\064\300\120\117\021\002\117\266
```

END

CKA\_ISSUER MULTILINE\_OCTAL

```
\060\120\061\013\060\011\006\003\125\004\006\023\002\104\105\061
\025\060\023\006\003\125\004\012\014\014\104\055\124\162\165\163
\164\040\107\155\142\110\061\052\060\050\006\003\125\004\003\014
\041\104\055\124\122\125\123\124\040\122\157\157\164\040\103\154
\141\163\163\040\063\040\103\101\040\062\040\105\126\040\062\060
```

```

\060\071
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\003\011\203\364
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "CA Disig Root R2"
#
# Issuer: CN=CA Disig Root R2,O=Disig a.s.,L=Bratislava,C=SK
# Serial Number:00:92:b8:88:db:b0:8a:c1:63
# Subject: CN=CA Disig Root R2,O=Disig a.s.,L=Bratislava,C=SK
# Not Valid Before: Thu
  Jul 19 09:15:30 2012
# Not Valid After : Sat Jul 19 09:15:30 2042
# Fingerprint (SHA-256):
E2:3D:4A:03:6D:7B:70:E9:F5:95:B1:42:20:79:D2:B9:1E:DF:BB:1F:B6:51:A0:63:3E:AA:8A:9D:C5:F8:07:03
# Fingerprint (SHA1): B5:61:EB:EA:A4:DE:E4:25:4B:69:1A:98:A5:57:47:C2:34:C7:D9:71
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "CA Disig Root R2"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\122\061\013\060\011\006\003\125\004\006\023\002\123\113\061
\023\060\021\006\003\125\004\007\023\012\102\162\141\164\151\163
\154\141\166\141\061\023\060\021\006\003\125\004\012\023\012\104
\151\163\151\147\040\141\056\163\056\061\031\060\027\006\003\125
\004\003\023\020\103\101\040\104\151\163\151\147\040\122\157\157
\164\040\122\062
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\122\061\013\060\011\006\003\125\004\006\023\002\123\113\061
\023\060\021\006\003\125\004\007\023\012\102\162\141\164\151\163
\154\141\166\141\061\023\060\021\006\003\125\004\012\023\012\104
\151\163\151\147\040\141\056\163\056\061\031\060\027\006\003\125
\004\003\023\020\103\101\040\104\151\163\151\147\040\122\157\157
\164\040\122\062
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\011\000\222\270\210\333\260\212\301\143

```

END

CKA\_VALUE MULTILINE\_OCTAL

\060\202\005\151\060\202\003\121\240\003\002\001\002\002\011\000  
\222\270\210\333\260\212\301\143\060\015\006\011\052\206\110\206  
\367\015\001\001\013\005\000\060\122\061\013\060\011\006\003\125  
\004\006\023\002\123\113\061\023\060\021\006\003\125\004\007\023  
\012\102\162\141\164\151\163\154\141\166\141\061\023\060\021\006  
\003\125\004\012\023\012\104\151\163\151\147\040\141\056\163\056  
\061\031\060\027\006\003\125\004\003\023\020\103\101\040\104\151  
\163\151\147\040\122\157\157\164\040\122\062\060\036\027\015\061  
\062\060\067\061\071\060\071\061\065\063\060\132\027\015\064\062  
\060\067\061\071\060\071\061\065\063\060\132\060\122\061\013\060  
\011\006\003\125\004\006\023\002\123\113\061\023\060\021\006\003  
\125\004\007\023\012\102\162\141\164\151\163\154\141\166\141\061  
\023\060\021\006\003\125\004\012\023\012\104\151\163\151\147\040  
\141\056\163\056\061\031\060\027\006\003\125\004\003\023\020\103  
\101\040\104\151\163\151\147\040\122\157\157\164\040\122\062\060  
\202\002\042\060\015\006\011\052\206\110\206\367\015\001\001\001  
\005\000\003\202\002\017\000\060\202\002\012\002\202\002\001\000  
\242\243\304\000\011\326\205\135\055\155\024\366\302\303\163\236  
\065\302\161\125\176\201\373\253\106\120\340\301\174\111\170\346  
\253\171\130\074\332\377\174\034\237\330\227\002\170\076\153\101  
\004\351\101\275\276\003\054\105\366\057\144\324\253\135\243\107  
\075\144\233\351\150\232\306\314\033\077\272\276\262\213\064\002  
\056\230\125\031\374\214\157\252\137\332\114\316\115\003\041\243  
\330\322\064\223\126\226\313\114\014\000\026\074\137\032\315\310  
\307\154\246\255\323\061\247\274\350\345\341\146\326\322\373\003  
\264\101\145\311\020\256\016\005\143\306\200\152\151\060\375\322  
\356\220\357\015\047\337\237\225\163\364\341\045\332\154\026\336  
\101\070\064\352\213\374\321\350\004\024\141\055\101\176\254\307  
\167\116\313\121\124\373\136\222\030\033\004\132\150\306\311\304  
\372\267\023\240\230\267\021\053\267\326\127\314\174\236\027\321  
\313\045\376\206\116\044\056\126\014\170\115\236\001\022\246\053  
\247\001\145\156\174\142\035\204\204\337\352\300\153\265\245\052  
\225\203\303\123\021\014\163\035\013\262\106\220\321\102\072\316  
\100\156\225\255\377\306\224\255\156\227\204\216\175\157\236\212  
\200\015\111\155\163\342\173\222\036\303\363\301\363\353\056\005  
\157\331\033\317\067\166\004\310\264\132\344\027\247\313\335\166  
\037\320\031\166\350\054\005\263\326\234\064\330\226\334\141\207  
\221\005\344\104\010\063\301\332\271\010\145\324\256\262\066\015  
\353\272\070\272\014\345\233\236\353\215\146\335\231\317\326\211  
\101\366\004\222\212\051\051\155\153\072\034\347\165\175\002\161  
\016\363\300\347\275\313\031\335\235\140\262\302\146\140\266\261  
\004\356\311\346\206\271\232\146\100\250\347\021\355\201\105\003  
\213\366\147\131\350\301\006\021\275\335\317\200\002\117\145\100  
\170\134\107\120\310\233\346\037\201\173\344\104\250\133\205\232  
\342\336\132\325\307\371\072\104\146\113\344\062\124\174\344\154  
\234\263\016\075\027\242\262\064\022\326\176\262\250\111\273\321

\172\050\100\276\242\026\037\337\344\067\037\021\163\373\220\012  
\145\103\242\015\174\370\006\001\125\063\175\260\015\270\364\365  
\256\245\102\127\174\066\021\214\173\136\304\003\235\214\171\235  
\002\003\001\000\001\243\102\060\100\060\017\006\003\125\035\023  
\001\001\377\004\005\060\003\001\001\377\060\016\006\003\125\035  
\017\001\001\377\004\004\003\002\001\006\060\035\006\003\125\035  
\016\004\026\004\024\265\231\370\257\260\224\365\343\040\326\012  
\255\316\116\126\244\056\156\102\355\060\015\006\011\052\206\110  
\206\367\015\001\001\013\005\000\003\202\002\001\000\046\006\136  
\160\347\145\063\310\202\156\331\234\027\072\033\172\146\262\001  
\366\170\073\151\136\057\352\377\116\371\050\303\230\052\141\114  
\264\044\022\212\175\155\021\024\367\234\265\312\346\274\236\047  
\216\114\031\310\251\275\172\300\327\066\016\155\205\162\156\250  
\306\242\155\366\372\163\143\177\274\156\171\010\034\235\212\237  
\032\212\123\246\330\273\331\065\125\261\021\305\251\003\263\126  
\073\271\204\223\042\136\176\301\366\022\122\213\352\054\147\274  
\376\066\114\365\270\317\321\263\111\222\073\323\051\016\231\033  
\226\367\141\270\073\304\053\266\170\154\264\043\157\360\375\323  
\262\136\165\037\231\225\250\254\366\332\341\305\061\173\373\321  
\106\263\322\274\147\264\142\124\272\011\367\143\260\223\242\232  
\371\351\122\056\213\140\022\253\374\365\140\126\357\020\134\213  
\304\032\102\334\203\133\144\016\313\265\274\326\117\301\174\074  
\156\215\023\155\373\173\353\060\320\334\115\257\305\325\266\245  
\114\133\161\311\350\061\276\350\070\006\110\241\032\342\352\322  
\336\022\071\130\032\377\200\016\202\165\346\267\311\007\154\016  
\357\377\070\361\230\161\304\267\177\016\025\320\045\151\275\042  
\235\053\355\005\366\106\107\254\355\300\360\324\073\342\354\356  
\226\133\220\023\116\036\126\072\353\260\357\226\273\226\043\021  
\272\362\103\206\164\144\225\310\050\165\337\035\065\272\322\067  
\203\070\123\070\066\073\317\154\351\371\153\016\320\373\004\350  
\117\167\327\145\001\170\206\014\172\076\041\142\361\177\143\161  
\014\311\237\104\333\250\047\242\165\276\156\201\076\327\300\353  
\033\230\017\160\134\064\262\212\314\300\205\030\353\156\172\263  
\367\132\241\007\277\251\102\222\363\140\042\227\344\024\241\007  
\233\116\166\300\216\175\375\244\045\307\107\355\377\037\163\254  
\314\303\245\351\157\012\216\233\145\302\120\205\265\243\240\123  
\022\314\125\207\141\363\201\256\020\106\141\275\104\041\270\302  
\075\164\317\176\044\065\372\034\007\016\233\075\042\312\357\061  
\057\214\254\022\275\357\100\050\374\051\147\237\262\023\117\146  
\044\304\123\031\351\036\051\025\357\346\155\260\177\055\147\375  
\363\154\033\165\106\243\345\112\027\351\244\327\013

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRUST\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRUST\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "CA Disig Root R2"



```
# Issuer: CN=CA Disig Root R2,O=Disig a.s.,L=Bratislava,C=SK
# Serial Number:00:92:b8:88:db:b0:8a:c1:63
# Subject: CN=CA Disig Root R2,O=Disig a.s.,L=Bratislava,C=SK
# Not Valid Before: Thu Jul 19 09:15:30 2012
# Not Valid After : Sat Jul 19 09:15:30 2042
# Fingerprint (SHA-256):
E2:3D:4A:03:6D:7B:70:E9:F5:95:B1:42:20:79:D2:B9:1E:DF:BB:1F:B6:51:A0:63:3E:AA:8A:9D:C5:F8:07:03
# Fingerprint (SHA1): B5:61:EB:EA:A4:DE:E4:25:4B:69:1A:98:A5:57:47:C2:34:C7:D9:71
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "CA Disig Root R2"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\265\141\353\352\244\336\344\045\113\151\032\230\245\127\107\302
\064\307\331\161
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\046\001\373\330\047\247\027\232\105\124\070\032\103\001\073\003
END
CKA_ISSUER
MULTILINE_OCTAL
\060\122\061\013\060\011\006\003\125\004\006\023\002\123\113\061
\023\060\021\006\003\125\004\007\023\012\102\162\141\164\151\163
\154\141\166\141\061\023\060\021\006\003\125\004\012\023\012\104
\151\163\151\147\040\141\056\163\056\061\031\060\027\006\003\125
\004\003\023\020\103\101\040\104\151\163\151\147\040\122\157\157
\164\040\122\062
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\011\000\222\270\210\333\260\212\301\143
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "ACCVRAIZ1"
#
# Issuer: C=ES,O=ACCV,OU=PKIACCV,CN=ACCVRAIZ1
# Serial Number:5e:c3:b7:a6:43:7f:a4:e0
# Subject: C=ES,O=ACCV,OU=PKIACCV,CN=ACCVRAIZ1
# Not Valid Before: Thu May 05 09:37:37 2011
# Not Valid After : Tue Dec 31 09:37:37 2030
# Fingerprint (SHA-256):
9A:6E:C0:12:E1:A7:DA:9D:BE:34:19:4D:47:8A:D7:C0:DB:18:22:FB:07:1D:F1:29:81:49:6E:D1:04:38:41:13
#
```

Fingerprint (SHA1): 93:05:7A:88:15:C6:4F:CE:88:2F:FA:91:16:52:28:78:BC:53:64:17

```
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "ACCVRAIZ1"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\102\061\022\060\020\006\003\125\004\003\014\011\101\103\103
\126\122\101\111\132\061\061\020\060\016\006\003\125\004\013\014
\007\120\113\111\101\103\103\126\061\015\060\013\006\003\125\004
\012\014\004\101\103\103\126\061\013\060\011\006\003\125\004\006
\023\002\105\123
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\102\061\022\060\020\006\003\125\004\003\014\011\101\103\103
\126\122\101\111\132\061\061\020\060\016\006\003\125\004\013\014
\007\120\113\111\101\103\103\126\061\015\060\013\006\003\125\004
\012\014\004\101\103\103\126\061\013\060\011\006\003\125\004\006
\023\002\105\123
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\010\136\303\267\246\103\177\244\340
END
CKA_VALUE MULTILINE_OCTAL
\060\202\007\323\060\202\005\273\240\003\002\001\002\002\010\136
\303\267\246\103\177\244\340\060\015\006\011\052\206\110\206\367
\015\001\001\005\005\000\060\102\061\022\060\020\006\003\125\004
\003\014\011\101\103\103\126\122\101\111\132\061\061\020\060\016
\006\003\125\004\013\014\007\120\113\111\101\103\103\126\061\015
\060\013\006\003\125\004\012\014\004\101\103\103\126\061\013\060
\011\006\003\125\004\006\023\002\105\123\060\036\027\015\061\061
\060\065\060\065\060\071\063\067\063\067\132\027\015\063\060\061
\062\063\061\060\071\063\067\063\067\132\060\102\061\022\060\020
\006\003\125\004\003\014\011\101\103\103\126\122\101\111\132\061
\061\020\060\016\006\003\125\004\013\014\007\120\113\111\101\103
\103\126\061\015\060\013\006\003\125\004\012\014\004\101\103\103
\126\061\013\060\011\006\003\125\004\006\023\002\105\123\060\202
\002\042\060\015\006\011\052\206\110\206\367\015\001\001\001\005
\000\003\202\002\017\000\060\202\002\012\002\202\002\001\000\233
\251\253\277\141\112\227\257\057\227\146\232\164\137\320\331\226
\375\317\342\344\146\357\037\037\107\063\302\104\243\337\232\336
\037\265\124\335\025\174\151\065\021\157\273\310\014\216\152\030
\036\330\217\331\026\274\020\110\066\134\360\143\263\220\132\134
\044\067\327\243\326\313\011\161\271\361\001\162\204\260\175\333
\115\200\315\374\323\157\311\370\332\266\016\202\322\105\205\250
```

\033\150\250\075\350\364\104\154\275\241\302\313\003\276\214\076  
\023\000\204\337\112\110\300\343\042\012\350\351\067\247\030\114  
\261\011\015\043\126\177\004\115\331\027\204\030\245\310\332\100  
\224\163\353\316\016\127\074\003\201\072\235\012\241\127\103\151  
\254\127\155\171\220\170\345\265\264\073\330\274\114\215\050\241  
\247\243\247\272\002\116\045\321\052\256\355\256\003\042\270\153  
\040\017\060\050\124\225\177\340\356\316\012\146\235\321\100\055  
\156\042\257\235\032\301\005\031\322\157\300\362\237\370\173\263  
\002\102\373\120\251\035\055\223\017\043\253\306\301\017\222\377  
\320\242\025\365\123\011\161\034\377\105\023\204\346\046\136\370  
\340\210\034\012\374\026\266\250\163\006\270\360\143\204\002\240  
\306\132\354\347\164\337\160\256\243\203\045\352\326\307\227\207  
\223\247\306\212\212\063\227\140\067\020\076\227\076\156\051\025  
\326\241\017\321\210\054\022\237\157\252\244\306\102\353\101\242  
\343\225\103\323\001\205\155\216\273\073\363\043\066\307\376\073  
\340\241\045\007\110\253\311\211\164\377\010\217\200\277\300\226  
\145\363\356\354\113\150\275\235\210\303\061\263\100\361\350\317  
\366\070\273\234\344\321\177\324\345\130\233\174\372\324\363\016  
\233\165\221\344\272\122\056\031\176\321\365\315\132\031\374\272  
\006\366\373\122\250\113\231\004\335\370\371\264\213\120\243\116  
\142\211\360\207\044\372\203\102\301\207\372\325\055\051\052\132  
\161\172\144\152\327\047\140\143\015\333\316\111\365\215\037\220  
\211\062\027\370\163\103\270\322\132\223\206\141\326\341\165\012  
\352\171\146\166\210\117\161\353\004\045\326\012\132\172\223\345  
\271\113\027\100\017\261\266\271\365\336\117\334\340\263\254\073  
\021\160\140\204\112\103\156\231\040\300\051\161\012\300\145\002  
\003\001\000\001\243\202\002\313\060\202\002\307\060\175\006\010  
\053\006\001\005\005\007\001\001\004\161\060\157\060\114\006\010  
\053\006\001\005\005\007\060\002\206\100\150\164\164\160\072\057  
\057\167\167\167\056\141\143\143\166\056\145\163\057\146\151\154  
\145\141\144\155\151\156\057\101\162\143\150\151\166\157\163\057  
\143\145\162\164\151\146\151\143\141\144\157\163\057\162\141\151  
\172\141\143\143\166\061\056\143\162\164\060\037\006\010\053\006  
\001\005\005\007\060\001\206\023\150\164\164\160\072\057\057\157  
\143\163\160\056\141\143\143\166\056\145\163\060\035\006\003\125  
\035\016\004\026\004\024\322\207\264\343\337\067\047\223\125\366  
\126\352\201\345\066\314\214\036\077\275\060\017\006\003\125\035  
\023\001\001\377\004\005\060\003\001\001\377\060\037\006\003\125  
\035\043\004\030\060\026\200\024\322\207\264\343\337\067\047\223  
\125\366\126\352\201\345\066\314\214\036\077\275\060\202\001\163  
\006\003\125\035\040\004\202\001\152\060\202\001\146\060\202\001  
\142\006\004\125\035\040\000\060\202\001\130\060\202\001\042\006  
\010\053\006\001\005\005\007\002\002\060\202\001\024\036\202\001  
\020\000\101\000\165\000\164\000\157\000\162\000\151\000\144\000  
\141\000\144\000\040\000\144\000\145\000\040\000\103\000\145\000  
\162\000\164\000\151\000\146\000\151\000\143\000\141\000\143\000  
\151\000\363\000\156\000\040\000\122\000\141\000\355\000\172\000  
\040\000\144\000\145\000\040\000\154\000\141\000\040\000\101\000

\103\000\103\000\126\000\040\000\050\000\101\000\147\000\145\000  
\156\000\143\000\151\000\141\000\040\000\144\000\145\000\040\000  
\124\000\145\000\143\000\156\000\157\000\154\000\157\000\147\000  
\355\000\141\000\040\000\171\000\040\000\103\000\145\000\162\000  
\164\000\151\000\146\000\151\000\143\000\141\000\143\000\151\000  
\363\000\156\000\040\000\105\000\154\000\145\000\143\000\164\000  
\162\000\363\000\156\000\151\000\143\000\141\000\054\000\040\000  
\103\000\111\000\106\000\040\000\121\000\064\000\066\000\060\000  
\061\000\061\000\065\000\066\000\105\000\051\000\056\000\040\000  
\103\000\120\000\123\000\040\000\145\000\156\000\040\000\150\000  
\164\000\164\000\160\000\072\000\057\000\057\000\167\000\167\000  
\167\000\056\000\141\000\143\000\143\000\166\000\056\000\145\000  
\163\060\060\006\010\053\006\001\005\005\007\002\001\026\044\150  
\164\164\160\072\057\057\167\167\167\056\141\143\143\166\056\145  
\163\057\154\145\147\151\163\154\141\143\151\157\156\137\143\056  
\150\164\155\060\125\006\003\125\035\037\004\116\060\114\060\112  
\240\110\240\106\206\104\150\164\164\160\072\057\057\167\167\167  
\056\141\143\143\166\056\145\163\057\146\151\154\145\141\144\155  
\151\156\057\101\162\143\150\151\166\157\163\057\143\145\162\164  
\151\146\151\143\141\144\157\163\057\162\141\151\172\141\143\143  
\166\061\137\144\145\162\056\143\162\154\060\016\006\003\125\035  
\017\001\001\377\004\004\003\002\001\006\060\027\006\003\125\035  
\021\004\020\060\016\201\014\141\143\143\166\100\141\143\143\166  
\056\145\163\060\015\006\011\052\206\110\206\367\015\001\001\005  
\005\000\003\202\002\001\000\227\061\002\237\347\375\103\147\110  
\104\024\344\051\207\355\114\050\146\320\217\065\332\115\141\267  
\112\227\115\265\333\220\340\005\056\016\306\171\320\362\227\151  
\017\275\004\107\331\276\333\265\051\332\233\331\256\251\231\325  
\323\074\060\223\365\215\241\250\374\006\215\104\364\312\026\225  
\174\063\334\142\213\250\067\370\047\330\011\055\033\357\310\024  
\047\040\251\144\104\377\056\326\165\252\154\115\140\100\031\111  
\103\124\143\332\342\314\272\146\345\117\104\172\133\331\152\201  
\053\100\325\177\371\001\047\130\054\310\355\110\221\174\077\246  
\000\317\304\051\163\021\066\336\206\031\076\235\356\031\212\033  
\325\260\355\216\075\234\052\300\015\330\075\146\343\074\015\275  
\325\224\134\342\342\247\065\033\004\000\366\077\132\215\352\103  
\275\137\211\035\251\301\260\314\231\342\115\000\012\332\311\047  
\133\347\023\220\134\344\365\063\242\125\155\334\340\011\115\057  
\261\046\133\047\165\000\011\304\142\167\051\010\137\236\131\254  
\266\176\255\237\124\060\042\003\301\036\161\144\376\371\070\012  
\226\030\335\002\024\254\043\313\006\034\036\244\175\215\015\336  
\047\101\350\255\332\025\267\260\043\335\053\250\323\332\045\207  
\355\350\125\104\115\210\364\066\176\204\232\170\254\367\016\126  
\111\016\326\063\045\326\204\120\102\154\040\022\035\052\325\276  
\274\362\160\201\244\160\140\276\005\265\233\236\004\104\276\141  
\043\254\351\245\044\214\021\200\224\132\242\242\271\111\322\301  
\334\321\247\355\061\021\054\236\031\246\356\341\125\341\300\352  
\317\015\204\344\027\267\242\174\245\336\125\045\006\356\314\300

\207\134\100\332\314\225\077\125\340\065\307\270\204\276\264\135  
\315\172\203\001\162\356\207\346\137\035\256\265\205\306\046\337  
\346\301\232\351\036\002\107\237\052\250\155\251\133\317\354\105  
\167\177\230\047\232\062\135\052\343\204\356\305\230\146\057\226  
\040\035\335\330\303\047\327\260\371\376\331\175\315\320\237\217  
\013\024\130\121\237\057\213\303\070\055\336\350\217\326\215\207  
\244\365\126\103\026\231\054\364\244\126\264\064\270\141\067\311  
\302\130\200\033\240\227\241\374\131\215\351\021\366\321\017\113  
\125\064\106\052\213\206\073

END

CKA\_NSS\_Mozilla\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "ACCVRAIZ1"

# Issuer: C=ES,O=ACCV,OU=PKIACCV,CN=ACCVRAIZ1

# Serial Number:5e:c3:b7:a6:43:7f:a4:e0

# Subject: C=ES,O=ACCV,OU=PKIACCV,CN=ACCVRAIZ1

# Not Valid Before: Thu May 05 09:37:37 2011

# Not Valid After : Tue Dec 31 09:37:37 2030

# Fingerprint (SHA-256):

9A:6E:C0:12:E1:A7:DA:9D:BE:34:19:4D:47:8A:D7:C0:DB:18:22:FB:07:1D:F1:29:81:49:6E:D1:04:38:41:13

# Fingerprint (SHA1): 93:05:7A:88:15:C6:4F:CE:88:2F:FA:91:16:52:28:78:BC:53:64:17

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8

"ACCVRAIZ1"

CKA\_CERT\_SHA1\_HASH MULTILINE\_OCTAL

\223\005\172\210\025\306\117\316\210\057\372\221\026\122\050\170  
\274\123\144\027

END

CKA\_CERT\_MD5\_HASH MULTILINE\_OCTAL

\320\240\132\356\005\266\011\224\041\241\175\361\262\051\202\002  
END

CKA\_ISSUER MULTILINE\_OCTAL

\060\102\061\022\060\020\006\003\125\004\003\014\011\101\103\103  
\126\122\101\111\132\061\061\020\060\016\006\003\125\004\013\014  
\007\120\113\111\101\103\103\126\061\015\060\013\006\003\125\004  
\012\014\004\101\103\103\126\061\013\060\011\006\003\125\004\006  
\023\002\105\123

END

CKA\_SERIAL\_NUMBER MULTILINE\_OCTAL

\002\010\136\303\267\246\103\177\244\340

END

CKA\_TRUST\_SERVER\_AUTH CK\_TRUST CKT\_NSS\_TRUSTED\_DELEGATOR

CKA\_TRUST\_EMAIL\_PROTECTION CK\_TRUST CKT\_NSS\_TRUSTED\_DELEGATOR  
CKA\_TRUST\_CODE\_SIGNING CK\_TRUST CKT\_NSS\_MUST\_VERIFY\_TRUST  
CKA\_TRUST\_STEP\_UP\_APPROVED CK\_BBOOL CK\_FALSE

#

# Certificate "TWCA Global Root CA"

#

# Issuer: CN=TWCA Global Root CA,OU=Root CA,O=TAIWAN-CA,C=TW

# Serial Number: 3262 (0xcbe)

# Subject: CN=TWCA Global

Root CA,OU=Root CA,O=TAIWAN-CA,C=TW

# Not Valid Before: Wed Jun 27 06:28:33 2012

# Not Valid After : Tue Dec 31 15:59:59 2030

# Fingerprint (SHA-256):

59:76:90:07:F7:68:5D:0F:CD:50:87:2F:9F:95:D5:75:5A:5B:2B:45:7D:81:F3:69:2B:61:0A:98:67:2F:0E:1B

# Fingerprint (SHA1): 9C:BB:48:53:F6:A4:F6:D3:52:A4:E8:32:52:55:60:13:F5:AD:AF:65

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_CERTIFICATE

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "TWCA Global Root CA"

CKA\_CERTIFICATE\_TYPE CK\_CERTIFICATE\_TYPE CKC\_X\_509

CKA\_SUBJECT MULTILINE\_OCTAL

\060\121\061\013\060\011\006\003\125\004\006\023\002\124\127\061  
\022\060\020\006\003\125\004\012\023\011\124\101\111\127\101\116  
\055\103\101\061\020\060\016\006\003\125\004\013\023\007\122\157  
\157\164\040\103\101\061\034\060\032\006\003\125\004\003\023\023  
\124\127\103\101\040\107\154\157\142\141\154\040\122\157\157\164  
\040\103\101

END

CKA\_ID UTF8 "0"

CKA\_ISSUER MULTILINE\_OCTAL

\060\121\061\013\060\011\006\003\125\004\006\023\002\124\127\061  
\022\060\020\006\003\125\004\012\023\011\124\101\111\127\101\116  
\055\103\101\061\020\060\016\006\003\125\004\013\023\007\122\157  
\157\164\040\103\101\061\034\060\032\006\003\125\004\003\023\023  
\124\127\103\101\040\107\154\157\142\141\154\040\122\157\157\164  
\040\103\101

END

CKA\_SERIAL\_NUMBER

MULTILINE\_OCTAL

\002\002\014\276

END

CKA\_VALUE MULTILINE\_OCTAL

\060\202\005\101\060\202\003\051\240\003\002\001\002\002\002\014  
\276\060\015\006\011\052\206\110\206\367\015\001\001\013\005\000  
\060\121\061\013\060\011\006\003\125\004\006\023\002\124\127\061  
\022\060\020\006\003\125\004\012\023\011\124\101\111\127\101\116

\055\103\101\061\020\060\016\006\003\125\004\013\023\007\122\157  
\157\164\040\103\101\061\034\060\032\006\003\125\004\003\023\023  
\124\127\103\101\040\107\154\157\142\141\154\040\122\157\157\164  
\040\103\101\060\036\027\015\061\062\060\066\062\067\060\066\062  
\070\063\063\132\027\015\063\060\061\062\063\061\061\065\065\071  
\065\071\132\060\121\061\013\060\011\006\003\125\004\006\023\002  
\124\127\061\022\060\020\006\003\125\004\012\023\011\124\101\111  
\127\101\116\055\103\101\061\020\060\016\006\003\125\004\013\023  
\007\122\157\157\164\040\103\101\061\034\060\032\006\003\125\004  
\003\023\023\124\127\103\101\040\107\154\157\142\141\154\040\122  
\157\157\164\040\103\101\060\202\002\042\060\015\006\011\052\206  
\110\206\367\015\001\001\001\005\000\003\202\002\017\000\060\202  
\002\012\002\202\002\001\000\260\005\333\310\353\214\304\156\212  
\041\357\216\115\234\161\012\037\122\160\355\155\202\234\227\305  
\327\114\116\105\111\313\100\102\265\022\064\154\031\302\164\244  
\061\137\205\002\227\354\103\063\012\123\322\234\214\216\267\270  
\171\333\053\325\152\362\216\146\304\356\053\001\007\222\324\263  
\320\002\337\120\366\125\257\146\016\313\340\107\140\057\053\062  
\071\065\122\072\050\203\370\173\026\306\030\270\142\326\107\045  
\221\316\360\031\022\115\255\143\365\323\077\165\137\051\360\241  
\060\034\052\240\230\246\025\275\356\375\031\066\360\342\221\103  
\217\372\312\326\020\047\111\114\357\335\301\361\205\160\233\312  
\352\250\132\103\374\155\206\157\163\351\067\105\251\360\066\307  
\314\210\165\036\273\154\006\377\233\153\076\027\354\141\252\161  
\174\306\035\242\367\111\351\025\265\074\326\241\141\365\021\367  
\005\157\035\375\021\276\320\060\007\302\051\260\011\116\046\334  
\343\242\250\221\152\037\302\221\105\210\134\345\230\270\161\245  
\025\031\311\174\165\021\314\160\164\117\055\233\035\221\104\375  
\126\050\240\376\273\206\152\310\372\134\013\130\334\306\113\166  
\310\253\042\331\163\017\245\364\132\002\211\077\117\236\042\202  
\356\242\164\123\052\075\123\047\151\035\154\216\062\054\144\000  
\046\143\141\066\116\243\106\267\077\175\263\055\254\155\220\242  
\225\242\316\317\332\202\347\007\064\031\226\351\270\041\252\051  
\176\246\070\276\216\051\112\041\146\171\037\263\303\265\011\147  
\336\326\324\007\106\363\052\332\346\042\067\140\313\201\266\017  
\240\017\351\310\225\177\277\125\221\005\172\317\075\025\300\157  
\336\011\224\001\203\327\064\033\314\100\245\360\270\233\147\325  
\230\221\073\247\204\170\225\046\244\132\010\370\053\164\264\000  
\004\074\337\270\024\216\350\337\251\215\154\147\222\063\035\300  
\267\322\354\222\310\276\011\277\054\051\005\157\002\153\236\357  
\274\277\052\274\133\300\120\217\101\160\161\207\262\115\267\004  
\251\204\243\062\257\256\356\153\027\213\262\261\376\154\341\220  
\214\210\250\227\110\316\310\115\313\363\006\317\137\152\012\102  
\261\036\036\167\057\216\240\346\222\016\006\374\005\042\322\046  
\341\061\121\175\062\334\017\002\003\001\000\001\243\043\060\041  
\060\016\006\003\125\035\017\001\001\377\004\004\003\002\001\006  
\060\017\006\003\125\035\023\001\001\377\004\005\060\003\001\001  
\377\060\015\006\011\052\206\110\206\367\015\001\001\013\005\000

\003\202\002\001\000\137\064\201\166\357\226\035\325\345\265\331  
\002\143\204\026\301\256\240\160\121\247\367\114\107\065\310\013  
\327\050\075\211\161\331\252\063\101\352\024\033\154\041\000\300  
\154\102\031\176\237\151\133\040\102\337\242\322\332\304\174\227  
\113\215\260\350\254\310\356\245\151\004\231\012\222\246\253\047  
\056\032\115\201\277\204\324\160\036\255\107\376\375\112\235\063  
\340\362\271\304\105\010\041\012\332\151\151\163\162\015\276\064  
\376\224\213\255\303\036\065\327\242\203\357\345\070\307\245\205  
\037\253\317\064\354\077\050\376\014\361\127\206\116\311\125\367  
\034\324\330\245\175\006\172\157\325\337\020\337\201\116\041\145  
\261\266\341\027\171\225\105\006\316\137\314\334\106\211\143\150  
\104\215\223\364\144\160\240\075\235\050\005\303\071\160\270\142  
\173\040\375\344\333\351\010\241\270\236\075\011\307\117\373\054  
\370\223\166\101\336\122\340\341\127\322\235\003\274\167\236\376  
\236\051\136\367\301\121\140\037\336\332\013\262\055\165\267\103  
\110\223\347\366\171\306\204\135\200\131\140\224\374\170\230\217  
\074\223\121\355\100\220\007\337\144\143\044\313\116\161\005\241  
\327\224\032\210\062\361\042\164\042\256\245\246\330\022\151\114  
\140\243\002\356\053\354\324\143\222\013\136\276\057\166\153\243  
\266\046\274\217\003\330\012\362\114\144\106\275\071\142\345\226  
\353\064\143\021\050\314\225\361\255\357\357\334\200\130\110\351  
\113\270\352\145\254\351\374\200\265\265\310\105\371\254\301\237  
\331\271\352\142\210\216\304\361\113\203\022\255\346\213\204\326  
\236\302\353\203\030\237\152\273\033\044\140\063\160\314\354\367  
\062\363\134\331\171\175\357\236\244\376\311\043\303\044\356\025  
\222\261\075\221\117\046\206\275\146\163\044\023\352\244\256\143  
\301\255\175\204\003\074\020\170\206\033\171\343\304\363\362\004  
\225\040\256\043\202\304\263\072\000\142\277\346\066\044\341\127  
\272\307\036\220\165\325\137\077\225\141\053\301\073\315\345\263  
\150\141\320\106\046\251\041\122\151\055\353\056\307\353\167\316  
\246\072\265\003\063\117\166\321\347\134\124\001\135\313\170\364  
\311\014\277\317\022\216\027\055\043\150\224\347\253\376\251\262  
\053\006\320\004\315

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL

CK\_FALSE

# Trust for "TWCA Global Root CA"

# Issuer: CN=TWCA Global Root CA,OU=Root CA,O=TAIWAN-CA,C=TW

# Serial Number: 3262 (0xcbe)

# Subject: CN=TWCA Global Root CA,OU=Root CA,O=TAIWAN-CA,C=TW

# Not Valid Before: Wed Jun 27 06:28:33 2012

# Not Valid After : Tue Dec 31 15:59:59 2030

# Fingerprint (SHA-256):

59:76:90:07:F7:68:5D:0F:CD:50:87:2F:9F:95:D5:75:5A:5B:2B:45:7D:81:F3:69:2B:61:0A:98:67:2F:0E:1B



```

# Fingerprint (SHA1): 9C:BB:48:53:F6:A4:F6:D3:52:A4:E8:32:52:55:60:13:F5:AD:AF:65
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "TWCA Global Root CA"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\234\273\110\123\366\244\366\323\122\244\350\062\122\125\140\023
\365\255\257\145
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\371\003\176\317\346\236\074\163\172\052\220\007\151\377\053\226
END
CKA_ISSUER MULTILINE_OCTAL
\060\121\061\013\060\011\006\003\125\004\006\023\002\124\127\061
\022\060\020\006\003\125\004\012\023\011\124\101\111\127\101\116
\055\103\101\061\020\060\016\006\003\125\004\013\023\007\122\157
\157\164\040\103\101\061\034\060\032\006\003\125\004\003\023\023
\124\127\103\101\040\107\154\157\142\141\154\040\122\157\157\164
\040\103\101
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\002\014\276
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "TeliaSonera Root CA v1"
#
# Issuer: CN=TeliaSonera Root CA v1,O=TeliaSonera
# Serial Number:00:95:be:16:a0:f7:2e:46:f1:7b:39:82:72:fa:8b:cd:96
# Subject: CN=TeliaSonera Root CA v1,O=TeliaSonera
# Not Valid Before: Thu Oct 18 12:00:50 2007
# Not Valid After : Mon Oct 18 12:00:50 2032
# Fingerprint (SHA-256):
DD:69:36:FE:21:F8:F0:77:C1:23:A1:A5:21:C1:22:24:F7:22:55:B7:3E:03:A7:26:06:93:E8:A2:4B:0F:A3:89
# Fingerprint (SHA1): 43:13:BB:96:F1:D5:86:9B:C1:4E:6A:92:F6:CF:F6:34:69:87:82:37
CKA_CLASS
CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "TeliaSonera Root CA v1"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509

```

CKA\_SUBJECT MULTILINE\_OCTAL

\060\067\061\024\060\022\006\003\125\004\012\014\013\124\145\154  
\151\141\123\157\156\145\162\141\061\037\060\035\006\003\125\004  
\003\014\026\124\145\154\151\141\123\157\156\145\162\141\040\122  
\157\157\164\040\103\101\040\166\061

END

CKA\_ID UTF8 "0"

CKA\_ISSUER MULTILINE\_OCTAL

\060\067\061\024\060\022\006\003\125\004\012\014\013\124\145\154  
\151\141\123\157\156\145\162\141\061\037\060\035\006\003\125\004  
\003\014\026\124\145\154\151\141\123\157\156\145\162\141\040\122  
\157\157\164\040\103\101\040\166\061

END

CKA\_SERIAL\_NUMBER MULTILINE\_OCTAL

\002\021\000\225\276\026\240\367\056\106\361\173\071\202\162\372  
\213\315\226

END

CKA\_VALUE MULTILINE\_OCTAL

\060\202\005\070\060\202\003\040\240\003\002\001\002\002\021\000  
\225\276\026\240\367\056\106\361\173\071\202\162\372\213\315\226  
\060\015\006\011\052\206\110\206\367\015\001\001\005\005\000\060  
\067\061\024\060\022\006\003\125\004\012\014\013\124\145\154\151  
\141\123\157\156\145\162\141\061\037\060\035\006\003\125\004\003  
\014\026\124\145\154\151\141\123\157\156\145\162\141\040\122\157  
\157\164\040\103\101\040\166\061\060\036\027\015\060\067\061\060  
\061\070\061\062\060\060\065\060\132\027\015\063\062\061\060\061  
\070\061\062\060\060\065\060\132\060\067\061\024\060\022\006\003  
\125\004\012\014\013\124\145\154\151\141\123\157\156\145\162\141  
\061\037\060\035\006\003\125\004\003\014\026\124\145\154\151\141  
\123\157\156\145\162\141\040\122\157\157\164\040\103\101\040\166  
\061\060\202\002\042\060\015\006\011\052\206\110\206\367\015\001  
\001\001\005\000\003\202\002\017\000\060\202\002\012\002\202\002  
\001\000\302\276\353\047\360\041\243\363\151\046\125\176\235\305  
\125\026\221\134\375\357\041\277\123\200\172\055\322\221\214\143  
\061\360\354\044\360\303\245\322\162\174\020\155\364\067\267\345  
\346\174\171\352\214\265\202\213\256\110\266\254\000\334\145\165  
\354\052\115\137\301\207\365\040\145\053\201\250\107\076\211\043  
\225\060\026\220\177\350\127\007\110\347\031\256\277\105\147\261  
\067\033\006\052\376\336\371\254\175\203\373\136\272\344\217\227  
\147\276\113\216\215\144\007\127\070\125\151\064\066\075\023\110  
\357\117\342\323\146\036\244\317\032\267\136\066\063\324\264\006  
\275\030\001\375\167\204\120\000\105\365\214\135\350\043\274\176  
\376\065\341\355\120\173\251\060\215\031\323\011\216\150\147\135  
\277\074\227\030\123\273\051\142\305\312\136\162\301\307\226\324  
\333\055\240\264\037\151\003\354\352\342\120\361\014\074\360\254  
\363\123\055\360\034\365\355\154\071\071\163\200\026\310\122\260  
\043\315\340\076\334\335\074\107\240\273\065\212\342\230\150\213  
\276\345\277\162\356\322\372\245\355\022\355\374\230\030\251\046

\166\334\050\113\020\040\034\323\177\026\167\055\355\157\200\367  
\111\273\123\005\273\135\150\307\324\310\165\026\077\211\132\213  
\367\027\107\324\114\361\322\211\171\076\115\075\230\250\141\336  
\072\036\322\370\136\003\340\301\311\034\214\323\215\115\323\225  
\066\263\067\137\143\143\233\063\024\360\055\046\153\123\174\211  
\214\062\302\156\354\075\041\000\071\311\241\150\342\120\203\056  
\260\072\053\363\066\240\254\057\344\157\141\302\121\011\071\076  
\213\123\271\273\147\332\334\123\271\166\131\066\235\103\345\040  
\340\075\062\140\205\042\121\267\307\063\273\335\025\057\244\170  
\246\007\173\201\106\066\004\206\335\171\065\307\225\054\073\260  
\243\027\065\345\163\037\264\134\131\357\332\352\020\145\173\172  
\320\177\237\263\264\052\067\073\160\213\233\133\271\053\267\354  
\262\121\022\227\123\051\132\324\360\022\020\334\117\002\273\022  
\222\057\142\324\077\151\103\174\015\326\374\130\165\001\210\235  
\130\026\113\336\272\220\377\107\001\211\006\152\366\137\262\220  
\152\263\002\246\002\210\277\263\107\176\052\331\325\372\150\170  
\065\115\002\003\001\000\001\243\077\060\075\060\017\006\003\125  
\035\023\001\001\377\004\005\060\003\001\001\377\060\013\006\003  
\125\035\017\004\004\003\002\001\006\060\035\006\003\125\035\016  
\004\026\004\024\360\217\131\070\000\263\365\217\232\226\014\325  
\353\372\173\252\027\350\023\022\060\015\006\011\052\206\110\206  
\367\015\001\001\005\005\000\003\202\002\001\000\276\344\134\142  
\116\044\364\014\010\377\360\323\014\150\344\223\111\042\077\104  
\047\157\273\155\336\203\146\316\250\314\015\374\365\232\006\345  
\167\024\221\353\235\101\173\231\052\204\345\377\374\041\301\135  
\360\344\037\127\267\165\251\241\137\002\046\377\327\307\367\116  
\336\117\370\367\034\106\300\172\117\100\054\042\065\360\031\261  
\320\153\147\054\260\250\340\300\100\067\065\366\204\134\134\343  
\257\102\170\376\247\311\015\120\352\015\204\166\366\121\357\203  
\123\306\172\377\016\126\111\056\217\172\326\014\346\047\124\343  
\115\012\140\162\142\315\221\007\326\245\277\310\231\153\355\304  
\031\346\253\114\021\070\305\157\061\342\156\111\310\077\166\200  
\046\003\046\051\340\066\366\366\040\123\343\027\160\064\027\235  
\143\150\036\153\354\303\115\206\270\023\060\057\135\106\015\107  
\103\325\033\252\131\016\271\134\215\006\110\255\164\207\137\307  
\374\061\124\101\023\342\307\041\016\236\340\036\015\341\300\173  
\103\205\220\305\212\130\306\145\012\170\127\362\306\043\017\001  
\331\040\113\336\017\373\222\205\165\052\134\163\215\155\173\045  
\221\312\356\105\256\006\113\000\314\323\261\131\120\332\072\210  
\073\051\103\106\136\227\053\124\316\123\157\215\112\347\226\372  
\277\161\016\102\213\174\375\050\240\320\110\312\332\304\201\114  
\273\242\163\223\046\310\353\014\326\046\210\266\300\044\317\273  
\275\133\353\165\175\351\010\216\206\063\054\171\167\011\151\245  
\211\374\263\160\220\207\166\217\323\042\273\102\316\275\163\013  
\040\046\052\320\233\075\160\036\044\154\315\207\166\251\027\226  
\267\317\015\222\373\216\030\251\230\111\321\236\376\140\104\162  
\041\271\031\355\302\365\061\361\071\110\210\220\044\165\124\026  
\255\316\364\370\151\024\144\071\373\243\270\272\160\100\307\047

```
\034\277\304\126\123\372\143\145\320\363\034\016\026\365\153\206
\130\115\030\324\344\015\216\245\235\133\221\334\166\044\120\077
\306\052\373\331\267\234\265\326\346\320\331\350\031\213\025\161
\110\255\267\352\330\131\210\324\220\277\026\263\331\351\254\131
\141\124\310\034\272\312\301\312\341\271\040\114\217\072\223\211
\245\240\314\277\323\366\165\244\165\226\155\126
```

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "TeliaSonera Root CA v1"

# Issuer: CN=TeliaSonera Root CA v1,O=TeliaSonera

# Serial Number:00:95:be:16:a0:f7:2e:46:f1:7b:39:82:72:fa:8b:cd:96

# Subject: CN=TeliaSonera Root CA v1,O=TeliaSonera

# Not Valid Before: Thu Oct 18 12:00:50 2007

# Not Valid After : Mon Oct 18 12:00:50 2032

# Fingerprint (SHA-256):

DD:69:36:FE:21:F8:F0:77:C1:23:A1:A5:21:C1:22:24:F7:22:55:B7:3E:03:A7:26:06:93:E8:A2:4B:0F:A3:89

# Fingerprint (SHA1): 43:13:BB:96:F1:D5:86:9B:C1:4E:6A:92:F6:CF:F6:34:69:87:82:37

CKA\_CLASS

CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "TeliaSonera Root CA v1"

CKA\_CERT\_SHA1\_HASH MULTILINE\_OCTAL

```
\103\023\273\226\361\325\206\233\301\116\152\222\366\317\366\064
\151\207\202\067
```

END

CKA\_CERT\_MD5\_HASH MULTILINE\_OCTAL

```
\067\101\111\033\030\126\232\046\365\255\302\146\373\100\245\114
```

END

CKA\_ISSUER MULTILINE\_OCTAL

```
\060\067\061\024\060\022\006\003\125\004\012\014\013\124\145\154
\151\141\123\157\156\145\162\141\061\037\060\035\006\003\125\004
\003\014\026\124\145\154\151\141\123\157\156\145\162\141\040\122
\157\157\164\040\103\101\040\166\061
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END

CKA\_SERIAL\_NUMBER MULTILINE\_OCTAL

```
\002\021\000\225\276\026\240\367\056\106\361\173\071\202\162\372
\213\315\226
```

END

CKA\_TRUST\_SERVER\_AUTH CK\_TRUST CKT\_NSS\_TRUSTED\_DELEGATOR

CKA\_TRUST\_EMAIL\_PROTECTION CK\_TRUST CKT\_NSS\_TRUSTED\_DELEGATOR

CKA\_TRUST\_CODE\_SIGNING CK\_TRUST CKT\_NSS\_MUST\_VERIFY\_TRUST

CKA\_TRUST\_STEP\_UP\_APPROVED

CK\_BBOOL CK\_FALSE

#

# Certificate "E-Tugra Certification Authority"

#

# Issuer: CN=E-Tugra Certification Authority,OU=E-Tugra Sertifikasyon Merkezi,O=E-Tu..ra EBG Bili..im  
Teknolojileri ve Hizmetleri A....,L=Ankara,C=TR

# Serial Number:6a:68:3e:9c:51:9b:cb:53

# Subject: CN=E-Tugra Certification Authority,OU=E-Tugra Sertifikasyon Merkezi,O=E-Tu..ra EBG Bili..im  
Teknolojileri ve Hizmetleri A....,L=Ankara,C=TR

# Not Valid Before: Tue Mar 05 12:09:48 2013

# Not Valid After : Fri Mar 03 12:09:48 2023

# Fingerprint (SHA-256):

B0:BF:D5:2B:B0:D7:D9:BD:92:BF:5D:4D:C1:3D:A2:55:C0:2C:54:2F:37:83:65:EA:89:39:11:F5:5E:55:F2:3C

# Fingerprint (SHA1): 51:C6:E7:08:49:06:6E:F3:92:D4:5C:A0:0D:6D:A3:62:8F:C3:52:39

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_CERTIFICATE

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "E-Tugra Certification Authority"

CKA\_CERTIFICATE\_TYPE CK\_CERTIFICATE\_TYPE CKC\_X\_509

CKA\_SUBJECT MULTILINE\_OCTAL

\060\201\262\061\013\060\011\006\003\125\004\006\023\002\124\122  
\061\017\060\015\006\003\125\004\007\014\006\101\156\153\141\162  
\141\061\100\060\076\006\003\125\004\012\014\067\105\055\124\165  
\304\237\162\141\040\105\102\107\040\102\151\154\151\305\237\151  
\155\040\124\145\153\156\157\154\157\152\151\154\145\162\151\040  
\166\145\040\110\151\172\155\145\164\154\145\162\151\040\101\056  
\305\236\056\061\046\060\044\006\003\125\004\013\014\035\105\055  
\124\165\147\162\141\040\123\145\162\164\151\146\151\153\141\163  
\171\157\156\040\115\145\162\153\145\172\151\061\050\060\046\006  
\003\125\004\003\014\037\105\055\124\165\147\162\141\040\103\145  
\162\164\151\146\151\143\141\164\151\157\156\040\101\165\164\150  
\157\162\151\164\171

END

CKA\_ID

UTF8 "0"

CKA\_ISSUER MULTILINE\_OCTAL

\060\201\262\061\013\060\011\006\003\125\004\006\023\002\124\122  
\061\017\060\015\006\003\125\004\007\014\006\101\156\153\141\162  
\141\061\100\060\076\006\003\125\004\012\014\067\105\055\124\165  
\304\237\162\141\040\105\102\107\040\102\151\154\151\305\237\151  
\155\040\124\145\153\156\157\154\157\152\151\154\145\162\151\040  
\166\145\040\110\151\172\155\145\164\154\145\162\151\040\101\056  
\305\236\056\061\046\060\044\006\003\125\004\013\014\035\105\055  
\124\165\147\162\141\040\123\145\162\164\151\146\151\153\141\163  
\171\157\156\040\115\145\162\153\145\172\151\061\050\060\046\006  
\003\125\004\003\014\037\105\055\124\165\147\162\141\040\103\145

\162\164\151\146\151\143\141\164\151\157\156\040\101\165\164\150  
\157\162\151\164\171  
END  
CKA\_SERIAL\_NUMBER  
MULTILINE\_OCTAL  
\002\010\152\150\076\234\121\233\313\123  
END  
CKA\_VALUE MULTILINE\_OCTAL  
\060\202\006\113\060\202\004\063\240\003\002\001\002\002\010\152  
\150\076\234\121\233\313\123\060\015\006\011\052\206\110\206\367  
\015\001\001\013\005\000\060\201\262\061\013\060\011\006\003\125  
\004\006\023\002\124\122\061\017\060\015\006\003\125\004\007\014  
\006\101\156\153\141\162\141\061\100\060\076\006\003\125\004\012  
\014\067\105\055\124\165\304\237\162\141\040\105\102\107\040\102  
\151\154\151\305\237\151\155\040\124\145\153\156\157\154\157\152  
\151\154\145\162\151\040\166\145\040\110\151\172\155\145\164\154  
\145\162\151\040\101\056\305\236\056\061\046\060\044\006\003\125  
\004\013\014\035\105\055\124\165\147\162\141\040\123\145\162\164  
\151\146\151\153\141\163\171\157\156\040\115\145\162\153\145\172  
\151\061\050\060\046\006\003\125\004\003\014\037\105\055\124\165  
\147\162\141\040\103\145\162\164\151\146\151\143\141\164\151\157  
\156\040\101\165\164\150\157\162\151\164\171\060\036\027\015\061  
\063\060\063\060\065\061\062\060\071\064\070\132\027\015\062\063  
\060\063\060\063\061\062\060\071\064\070\132\060\201\262\061\013  
\060\011\006\003\125\004\006\023\002\124\122\061\017\060\015\006  
\003\125\004\007\014\006\101\156\153\141\162\141\061\100\060\076  
\006\003\125\004\012\014\067\105\055\124\165\304\237\162\141\040  
\105\102\107\040\102\151\154\151\305\237\151\155\040\124\145\153  
\156\157\154\157\152\151\154\145\162\151\040\166\145\040\110\151  
\172\155\145\164\154\145\162\151\040\101\056\305\236\056\061\046  
\060\044\006\003\125\004\013\014\035\105\055\124\165\147\162\141  
\040\123\145\162\164\151\146\151\153\141\163\171\157\156\040\115  
\145\162\153\145\172\151\061\050\060\046\006\003\125\004\003\014  
\037\105\055\124\165\147\162\141\040\103\145\162\164\151\146\151  
\143\141\164\151\157\156\040\101\165\164\150\157\162\151\164\171  
\060\202\002\042\060\015\006\011\052\206\110\206\367\015\001\001  
\001\005\000\003\202\002\017\000\060\202\002\012\002\202\002\001  
\000\342\365\077\223\005\121\036\205\142\124\136\172\013\365\030  
\007\203\256\176\257\174\367\324\212\153\245\143\103\071\271\113  
\367\303\306\144\211\075\224\056\124\200\122\071\071\007\113\113  
\335\205\007\166\207\314\277\057\225\114\314\175\247\075\274\107  
\017\230\160\370\214\205\036\164\216\222\155\033\100\321\231\015  
\273\165\156\310\251\153\232\300\204\061\257\312\103\313\353\053  
\064\350\217\227\153\001\233\325\016\112\010\252\133\222\164\205  
\103\323\200\256\241\210\133\256\263\352\136\313\026\232\167\104  
\310\241\366\124\150\316\336\217\227\053\272\133\100\002\014\144  
\027\300\265\223\315\341\361\023\146\316\014\171\357\321\221\050  
\253\137\240\022\122\060\163\031\216\217\341\214\007\242\303\273

\112\360\352\037\025\250\356\045\314\244\106\370\033\042\357\263  
\016\103\272\054\044\270\305\054\134\324\034\370\135\144\275\303  
\223\136\050\247\077\047\361\216\036\323\052\120\005\243\125\331  
\313\347\071\123\300\230\236\214\124\142\213\046\260\367\175\215  
\174\344\306\236\146\102\125\202\107\347\262\130\215\146\367\007  
\174\056\066\346\120\034\077\333\103\044\305\277\206\107\171\263  
\171\034\367\132\364\023\354\154\370\077\342\131\037\225\356\102  
\076\271\255\250\062\205\111\227\106\376\113\061\217\132\313\255  
\164\107\037\351\221\267\337\050\004\042\240\324\017\135\342\171  
\117\352\154\205\206\275\250\246\316\344\372\303\341\263\256\336  
\074\121\356\313\023\174\001\177\204\016\135\121\224\236\023\014  
\266\056\245\114\371\071\160\066\157\226\312\056\014\104\125\305  
\312\372\135\002\243\337\326\144\214\132\263\001\012\251\265\012  
\107\027\377\357\221\100\052\216\241\106\072\061\230\345\021\374  
\314\273\111\126\212\374\271\320\141\232\157\145\154\346\303\313  
\076\165\111\376\217\247\342\211\305\147\327\235\106\023\116\061  
\166\073\044\263\236\021\145\206\253\177\357\035\324\370\274\347  
\254\132\134\267\132\107\134\125\316\125\264\042\161\133\133\013  
\360\317\334\240\141\144\352\251\327\150\012\143\247\340\015\077  
\240\257\323\252\322\176\357\121\240\346\121\053\125\222\025\027  
\123\313\267\146\016\146\114\370\371\165\114\220\347\022\160\307  
\105\002\003\001\000\001\243\143\060\141\060\035\006\003\125\035  
\016\004\026\004\024\056\343\333\262\111\320\234\124\171\134\372  
\047\052\376\314\116\322\350\116\124\060\017\006\003\125\035\023  
\001\001\377\004\005\060\003\001\001\377\060\037\006\003\125\035  
\043\004\030\060\026\200\024\056\343\333\262\111\320\234\124\171  
\134\372\047\052\376\314\116\322\350\116\124\060\016\006\003\125  
\035\017\001\001\377\004\004\003\002\001\006\060\015\006\011\052  
\206\110\206\367\015\001\001\013\005\000\003\202\002\001\000\005  
\067\072\364\115\267\105\342\105\165\044\217\266\167\122\350\034  
\330\020\223\145\363\362\131\006\244\076\036\051\354\135\321\320  
\253\174\340\012\220\110\170\355\116\230\003\231\376\050\140\221  
\035\060\035\270\143\174\250\346\065\265\372\323\141\166\346\326  
\007\113\312\151\232\262\204\172\167\223\105\027\025\237\044\320  
\230\023\022\377\273\240\056\375\116\114\207\370\316\134\252\230  
\033\005\340\000\106\112\202\200\245\063\213\050\334\355\070\323  
\337\345\076\351\376\373\131\335\141\204\117\322\124\226\023\141  
\023\076\217\200\151\276\223\107\265\065\103\322\132\273\075\134  
\357\263\102\107\315\073\125\023\006\260\011\333\375\143\366\072  
\210\012\231\157\176\341\316\033\123\152\104\146\043\121\010\173  
\274\133\122\242\375\006\067\070\100\141\217\112\226\270\220\067  
\370\146\307\170\220\000\025\056\213\255\121\065\123\007\250\153  
\150\256\371\116\074\007\046\315\010\005\160\314\071\077\166\275  
\245\323\147\046\001\206\246\123\322\140\073\174\103\177\125\212  
\274\225\032\301\050\071\114\037\103\322\221\364\162\131\212\271  
\126\374\077\264\235\332\160\234\166\132\214\103\120\356\216\060  
\162\115\337\377\111\367\306\251\147\331\155\254\002\021\342\072  
\026\045\247\130\010\313\157\123\101\234\110\070\107\150\063\321

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\327\307\217\324\164\041\324\303\005\220\172\377\316\226\210\261
\025\051\135\043\253\320\140\241\022\117\336\364\027\315\062\345
\311\277\310\103\255\375\056\216\361\257\342\364\230\372\022\037
\040\330\300\247\014\205\305\220\364\073\055\226\046\261\054\276
\114\253\353\261\322\212\311\333\170\023\017\036\011\235\155\217
\000\237\002\332\301\372\037\172\172\011\304\112\346\210\052\227
\237\211\213\375\067\137\137\072\316\070\131\206\113\257\161\013
\264\330\362\160\117\237\062\023\343\260\247\127\345\332\332\103
\313\204\064\362\050\304\352\155\364\052\357\301\153\166\332\373
\176\273\205\074\322\123\302\115\276\161\341\105\321\375\043\147
\015\023\165\373\317\145\147\042\235\256\260\011\321\011\377\035
\064\277\376\043\227\067\322\071\372\075\015\006\013\264\333\073
\243\253\157\134\035\266\176\350\263\202\064\355\006\134\044
```

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRUST\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRUST\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "E-Tugra Certification Authority"

# Issuer: CN=E-Tugra Certification Authority,OU=E-Tugra Sertifikasyon Merkezi,O=E-Tu..ra EBG Bili..im  
Teknolojileri ve Hizmetleri A....,L=Ankara,C=TR

# Serial Number:6a:68:3e:9c:51:9b:cb:53

# Subject: CN=E-Tugra Certification Authority,OU=E-Tugra Sertifikasyon Merkezi,O=E-Tu..ra EBG Bili..im  
Teknolojileri ve Hizmetleri A....,L=Ankara,C=TR

# Not Valid Before: Tue Mar 05 12:09:48 2013

# Not Valid After : Fri Mar 03 12:09:48 2023

# Fingerprint (SHA-256):

B0:BF:D5:2B:B0:D7:D9:BD:92:BF:5D:4D:C1:3D:A2:55:C0:2C:54:2F:37:83:65:EA:89:39:11:F5:5E:55:F2:3C

# Fingerprint (SHA1): 51:C6:E7:08:49:06:6E:F3:92:D4:5C:A0:0D:6D:A3:62:8F:C3:52:39

CKA\_CLASS CK\_OBJECT\_CLASS

CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "E-Tugra Certification Authority"

CKA\_CERT\_SHA1\_HASH MULTILINE\_OCTAL

```
\121\306\347\010\111\006\156\363\222\324\134\240\015\155\243\142
\217\303\122\071
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END

CKA\_CERT\_MD5\_HASH MULTILINE\_OCTAL

```
\270\241\003\143\260\275\041\161\160\212\157\023\072\273\171\111
```

END

CKA\_ISSUER MULTILINE\_OCTAL

```
\060\201\262\061\013\060\011\006\003\125\004\006\023\002\124\122
\061\017\060\015\006\003\125\004\007\014\006\101\156\153\141\162
\141\061\100\060\076\006\003\125\004\012\014\067\105\055\124\165
\304\237\162\141\040\105\102\107\040\102\151\154\151\305\237\151
```



```
\155\040\124\145\153\156\157\154\157\152\151\154\145\162\151\040
\166\145\040\110\151\172\155\145\164\154\145\162\151\040\101\056
\305\236\056\061\046\060\044\006\003\125\004\013\014\035\105\055
\124\165\147\162\141\040\123\145\162\164\151\146\151\153\141\163
\171\157\156\040\115\145\162\153\145\172\151\061\050\060\046\006
\003\125\004\003\014\037\105\055\124\165\147\162\141\040\103\145
\162\164\151\146\151\143\141\164\151\157\156\040\101\165\164\150
\157\162\151\164\171
```

END

CKA\_SERIAL\_NUMBER

MULTILINE\_OCTAL

```
\002\010\152\150\076\234\121\233\313\123
```

END

CKA\_TRUST\_SERVER\_AUTH CK\_TRUST CKT\_NSS\_TRUSTED\_DELEGATOR

CKA\_TRUST\_EMAIL\_PROTECTION CK\_TRUST CKT\_NSS\_MUST\_VERIFY\_TRUST

CKA\_TRUST\_CODE\_SIGNING CK\_TRUST CKT\_NSS\_MUST\_VERIFY\_TRUST

CKA\_TRUST\_STEP\_UP\_APPROVED CK\_BBOOL CK\_FALSE

#

# Certificate "T-TeleSec GlobalRoot Class 2"

#

# Issuer: CN=T-TeleSec GlobalRoot Class 2,OU=T-Systems Trust Center,O=T-Systems Enterprise Services GmbH,C=DE

# Serial Number: 1 (0x1)

# Subject: CN=T-TeleSec GlobalRoot Class 2,OU=T-Systems Trust Center,O=T-Systems Enterprise Services GmbH,C=DE

# Not Valid Before: Wed Oct 01 10:40:14 2008

# Not Valid After : Sat Oct 01 23:59:59 2033

# Fingerprint (SHA-256):

91:E2:F5:78:8D:58:10:EB:A7:BA:58:73:7D:E1:54:8A:8E:CA:CD:01:45:98:BC:0B:14:3E:04:1B:17:05:25:52

# Fingerprint (SHA1): 59:0D:2D:7D:88:4F:40:2E:61:7E:A5:62:32:17:65:CF:17:D8:94:E9

CKA\_CLASS

CK\_OBJECT\_CLASS CKO\_CERTIFICATE

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "T-TeleSec GlobalRoot Class 2"

CKA\_CERTIFICATE\_TYPE CK\_CERTIFICATE\_TYPE CKC\_X\_509

CKA\_SUBJECT MULTILINE\_OCTAL

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\060\201\202\061\013\060\011\006\003\125\004\006\023\002\104\105
\061\053\060\051\006\003\125\004\012\014\042\124\055\123\171\163
\164\145\155\163\040\105\156\164\145\162\160\162\151\163\145\040
\123\145\162\166\151\143\145\163\040\107\155\142\110\061\037\060
\035\006\003\125\004\013\014\026\124\055\123\171\163\164\145\155
\163\040\124\162\165\163\164\040\103\145\156\164\145\162\061\045
\060\043\006\003\125\004\003\014\034\124\055\124\145\154\145\123
\145\143\040\107\154\157\142\141\154\122\157\157\164\040\103\154
\141\163\163\040\062
```

END

CKA\_ID UTF8 "0"

CKA\_ISSUER MULTILINE\_OCTAL

\060\201\202\061\013\060\011\006\003\125\004\006\023\002\104\105  
\061\053\060\051\006\003\125\004\012\014\042\124\055\123\171\163  
\164\145\155\163\040\105\156\164\145\162\160\162\151\163\145\040  
\123\145\162\166\151\143\145\163\040\107\155\142\110\061\037\060  
\035\006\003\125\004\013\014\026\124\055\123\171\163\164\145\155  
\163\040\124\162\165\163\164\040\103\145\156\164\145\162\061\045  
\060\043\006\003\125\004\003\014\034\124\055\124\145\154\145\123  
\145\143\040\107\154\157\142\141\154\122\157\157\164\040\103\154  
\141\163\163\040\062

END

CKA\_SERIAL\_NUMBER

MULTILINE\_OCTAL

\002\001\001

END

CKA\_VALUE MULTILINE\_OCTAL

\060\202\003\303\060\202\002\253\240\003\002\001\002\002\001\001  
\060\015\006\011\052\206\110\206\367\015\001\001\013\005\000\060  
\201\202\061\013\060\011\006\003\125\004\006\023\002\104\105\061  
\053\060\051\006\003\125\004\012\014\042\124\055\123\171\163\164  
\145\155\163\040\105\156\164\145\162\160\162\151\163\145\040\123  
\145\162\166\151\143\145\163\040\107\155\142\110\061\037\060\035  
\006\003\125\004\013\014\026\124\055\123\171\163\164\145\155\163  
\040\124\162\165\163\164\040\103\145\156\164\145\162\061\045\060  
\043\006\003\125\004\003\014\034\124\055\124\145\154\145\123\145  
\143\040\107\154\157\142\141\154\122\157\157\164\040\103\154\141  
\163\163\040\062\060\036\027\015\060\070\061\060\060\061\061\060  
\064\060\061\064\132\027\015\063\063\061\060\060\061\062\063\065  
\071\065\071\132\060\201\202\061\013\060\011\006\003\125\004\006  
\023\002\104\105\061\053\060\051\006\003\125\004\012\014\042\124  
\055\123\171\163\164\145\155\163\040\105\156\164\145\162\160\162  
\151\163\145\040\123\145\162\166\151\143\145\163\040\107\155\142  
\110\061\037\060\035\006\003\125\004\013\014\026\124\055\123\171  
\163\164\145\155\163\040\124\162\165\163\164\040\103\145\156\164  
\145\162\061\045\060\043\006\003\125\004\003\014\034\124\055\124  
\145\154\145\123\145\143\040\107\154\157\142\141\154\122\157\157  
\164\040\103\154\141\163\163\040\062\060\202\001\042\060\015\006  
\011\052\206\110\206\367\015\001\001\001\005\000\003\202\001\017  
\000\060\202\001\012\002\202\001\001\000\252\137\332\033\137\350  
\163\221\345\332\134\364\242\346\107\345\363\150\125\140\005\035  
\002\244\263\233\131\363\036\212\257\064\255\374\015\302\331\110  
\031\356\151\217\311\040\374\041\252\007\031\355\260\134\254\145  
\307\137\355\002\174\173\174\055\033\326\272\271\200\302\030\202  
\026\204\372\146\260\010\306\124\043\201\344\315\271\111\077\366  
\117\156\067\110\050\070\017\305\276\347\150\160\375\071\227\115  
\322\307\230\221\120\252\304\104\263\043\175\071\107\351\122\142

\326\022\223\136\267\061\226\102\005\373\166\247\036\243\365\302  
\374\351\172\305\154\251\161\117\352\313\170\274\140\257\307\336  
\364\331\313\276\176\063\245\156\224\203\360\064\372\041\253\352  
\216\162\240\077\244\336\060\133\357\206\115\152\225\133\103\104  
\250\020\025\034\345\001\127\305\230\361\346\006\050\221\252\040  
\305\267\123\046\121\103\262\013\021\225\130\341\300\017\166\331  
\300\215\174\201\363\162\160\236\157\376\032\216\331\137\065\306  
\262\157\064\174\276\110\117\342\132\071\327\330\235\170\236\237  
\206\076\003\136\031\213\104\242\325\307\002\003\001\000\001\243  
\102\060\100\060\017\006\003\125\035\023\001\001\377\004\005\060  
\003\001\001\377\060\016\006\003\125\035\017\001\001\377\004\004  
\003\002\001\006\060\035\006\003\125\035\016\004\026\004\024\277  
\131\040\066\000\171\240\240\042\153\214\325\362\141\322\270\054  
\313\202\112\060\015\006\011\052\206\110\206\367\015\001\001\013  
\005\000\003\202\001\001\000\061\003\242\141\013\037\164\350\162  
\066\306\155\371\115\236\372\042\250\341\201\126\317\315\273\237  
\352\253\221\031\070\257\252\174\025\115\363\266\243\215\245\364  
\216\366\104\251\247\350\041\225\255\076\000\142\026\210\360\002  
\272\374\141\043\346\063\233\060\172\153\066\142\173\255\004\043  
\204\130\145\342\333\053\212\347\045\123\067\142\123\137\274\332  
\001\142\051\242\246\047\161\346\072\042\176\301\157\035\225\160  
\040\112\007\064\337\352\377\025\200\345\272\327\172\330\133\165  
\174\005\172\051\107\176\100\250\061\023\167\315\100\073\264\121  
\107\172\056\021\343\107\021\336\235\146\320\213\325\124\146\372  
\203\125\352\174\302\051\211\033\351\157\263\316\342\005\204\311  
\057\076\170\205\142\156\311\137\301\170\143\164\130\300\110\030  
\014\231\071\353\244\314\032\265\171\132\215\025\234\330\024\015  
\366\172\007\127\307\042\203\005\055\074\233\045\046\075\030\263  
\251\103\174\310\310\253\144\217\016\243\277\234\033\235\060\333  
\332\320\031\056\252\074\361\373\063\200\166\344\315\255\031\117  
\005\047\216\023\241\156\302

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "T-TeleSec GlobalRoot Class 2"

# Issuer: CN=T-TeleSec GlobalRoot Class 2,OU=T-Systems Trust Center,O=T-Systems Enterprise Services GmbH,C=DE

# Serial Number: 1 (0x1)

# Subject: CN=T-TeleSec GlobalRoot Class 2,OU=T-Systems Trust Center,O=T-Systems Enterprise Services GmbH,C=DE

# Not Valid Before: Wed Oct 01 10:40:14 2008

# Not Valid After : Sat Oct 01 23:59:59 2033

# Fingerprint (SHA-256):

91:E2:F5:78:8D:58:10:EB:A7:BA:58:73:7D:E1:54:8A:8E:CA:CD:01:45:98:BC:0B:14:3E:04:1B:17:05:25:52

#

```

Fingerprint (SHA1): 59:0D:2D:7D:88:4F:40:2E:61:7E:A5:62:32:17:65:CF:17:D8:94:E9
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "T-TeleSec GlobalRoot Class 2"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\131\015\055\175\210\117\100\056\141\176\245\142\062\027\145\317
\027\330\224\351
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\053\233\236\344\173\154\037\000\162\032\314\301\167\171\337\152
END
CKA_ISSUER MULTILINE_OCTAL
\060\201\202\061\013\060\011\006\003\125\004\006\023\002\104\105
\061\053\060\051\006\003\125\004\012\014\042\124\055\123\171\163
\164\145\155\163\040\105\156\164\145\162\160\162\151\163\145\040
\123\145\162\166\151\143\145\163\040\107\155\142\110\061\037\060
\035\006\003\125\004\013\014\026\124\055\123\171\163\164\145\155
\163\040\124\162\165\163\164\040\103\145\156\164\145\162\061\045
\060\043\006\003\125\004\003\014\034\124\055\124\145\154\145\123
\145\143\040\107\154\157\142\141\154\122\157\157\164\040\103\154
\141\163\163\040\062
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\001\001
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "Atos TrustedRoot 2011"
#
# Issuer: C=DE,O=Atos,CN=Atos TrustedRoot 2011
# Serial Number:5c:33:cb:62:2c:5f:b3:32
# Subject: C=DE,O=Atos,CN=Atos TrustedRoot 2011
# Not Valid Before: Thu Jul 07 14:58:30 2011
# Not Valid After : Tue Dec 31 23:59:59 2030
# Fingerprint (SHA-256):
F3:56:BE:A2:44:B7:A9:1E:B3:5D:53:CA:9A:D7:86:4A:CE:01:8E:2D:35:D5:F8:F9:6D:DF:68:A6:F4:1A:A4:74
# Fingerprint (SHA1): 2B:B1:F5:3E:55:0C:1D:C5:F1:D4:E6:B7:6A:46:4B:55:06:02:AC:21
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL

```

CK\_FALSE

CKA\_LABEL UTF8 "Atos TrustedRoot 2011"

CKA\_CERTIFICATE\_TYPE CK\_CERTIFICATE\_TYPE CKC\_X\_509

CKA\_SUBJECT MULTILINE\_OCTAL

\060\074\061\036\060\034\006\003\125\004\003\014\025\101\164\157  
\163\040\124\162\165\163\164\145\144\122\157\157\164\040\062\060  
\061\061\061\015\060\013\006\003\125\004\012\014\004\101\164\157  
\163\061\013\060\011\006\003\125\004\006\023\002\104\105

END

CKA\_ID UTF8 "0"

CKA\_ISSUER MULTILINE\_OCTAL

\060\074\061\036\060\034\006\003\125\004\003\014\025\101\164\157  
\163\040\124\162\165\163\164\145\144\122\157\157\164\040\062\060  
\061\061\061\015\060\013\006\003\125\004\012\014\004\101\164\157  
\163\061\013\060\011\006\003\125\004\006\023\002\104\105

END

CKA\_SERIAL\_NUMBER MULTILINE\_OCTAL

\002\010\134\063\313\142\054\137\263\062

END

CKA\_VALUE MULTILINE\_OCTAL

\060\202\003\167\060\202\002\137\240\003\002\001\002\002\010\134  
\063\313\142\054\137\263\062\060\015\006\011\052\206\110\206\367  
\015\001\001\013\005\000\060\074\061\036\060\034\006\003\125\004  
\003\014\025\101\164\157\163\040\124\162\165\163\164\145\144\122  
\157\157\164\040\062\060\061\061\061\015\060\013\006\003\125\004  
\012\014\004\101\164\157\163\061\013\060\011\006\003\125\004\006  
\023\002\104\105\060\036\027\015\061\061\060\067\060\067\061\064  
\065\070\063\060\132\027\015\063\060\061\062\063\061\062\063\065  
\071\065\071\132\060\074\061\036\060\034\006\003\125\004\003\014  
\025\101\164\157\163\040\124\162\165\163\164\145\144\122\157\157  
\164\040\062\060\061\061\061\015\060\013\006\003\125\004\012\014  
\004\101\164\157\163\061\013\060\011\006\003\125\004\006\023\002  
\104\105\060\202\001\042\060\015\006\011\052\206\110\206\367\015  
\001\001\001\005\000\003\202\001\017\000\060\202\001\012\002\202  
\001\001\000\225\205\073\227\157\052\073\056\073\317\246\363\051  
\065\276\317\030\254\076\252\331\370\115\240\076\032\107\271\274  
\232\337\362\376\314\076\107\350\172\226\302\044\216\065\364\251  
\014\374\202\375\155\301\162\142\047\275\352\153\353\347\212\314  
\124\076\220\120\317\200\324\225\373\350\265\202\324\024\305\266  
\251\125\045\127\333\261\120\366\260\140\144\131\172\151\317\003  
\267\157\015\276\312\076\157\164\162\352\252\060\052\163\142\276  
\111\221\141\310\021\376\016\003\052\367\152\040\334\002\025\015  
\136\025\152\374\343\202\301\265\305\235\144\011\154\243\131\230  
\007\047\307\033\226\053\141\164\161\154\103\361\367\065\211\020  
\340\236\354\125\241\067\042\242\207\004\005\054\107\175\264\034  
\271\142\051\146\050\312\267\341\223\365\244\224\003\231\271\160  
\205\265\346\110\352\215\120\374\331\336\314\157\007\016\335\013  
\162\235\200\060\026\007\225\077\050\016\375\305\165\117\123\326

\164\232\264\044\056\216\002\221\317\166\305\233\036\125\164\234  
\170\041\261\360\055\361\013\237\302\325\226\030\037\360\124\042  
\172\214\007\002\003\001\000\001\243\175\060\173\060\035\006\003  
\125\035\016\004\026\004\024\247\245\006\261\054\246\011\140\356  
\321\227\351\160\256\274\073\031\154\333\041\060\017\006\003\125  
\035\023\001\001\377\004\005\060\003\001\001\377\060\037\006\003  
\125\035\043\004\030\060\026\200\024\247\245\006\261\054\246\011  
\140\356\321\227\351\160\256\274\073\031\154\333\041\060\030\006  
\003\125\035\040\004\021\060\017\060\015\006\013\053\006\001\004  
\001\260\055\003\004\001\001\060\016\006\003\125\035\017\001\001  
\377\004\004\003\002\001\206\060\015\006\011\052\206\110\206\367  
\015\001\001\013\005\000\003\202\001\001\000\046\167\064\333\224  
\110\206\052\101\235\054\076\006\220\140\304\214\254\013\124\270  
\037\271\173\323\007\071\344\372\076\173\262\075\116\355\237\043  
\275\227\363\153\134\357\356\375\100\246\337\241\223\241\012\206  
\254\357\040\320\171\001\275\170\367\031\330\044\061\064\004\001  
\246\272\025\232\303\047\334\330\117\017\314\030\143\377\231\017  
\016\221\153\165\026\341\041\374\330\046\307\107\267\246\317\130  
\162\161\176\272\341\115\225\107\073\311\257\155\241\264\301\354  
\211\366\264\017\070\265\342\144\334\045\317\246\333\353\232\134  
\231\241\305\010\336\375\346\332\325\326\132\105\014\304\267\302  
\265\024\357\264\021\377\016\025\265\365\365\333\306\275\353\132  
\247\360\126\042\251\074\145\124\306\025\250\275\206\236\315\203  
\226\150\172\161\201\211\341\013\341\352\021\033\150\010\314\151  
\236\354\236\101\236\104\062\046\172\342\207\012\161\075\353\344  
\132\244\322\333\305\315\306\336\140\177\271\363\117\104\222\357  
\052\267\030\076\247\031\331\013\175\261\067\101\102\260\272\140  
\035\362\376\011\021\260\360\207\173\247\235

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "Atos TrustedRoot 2011"

# Issuer: C=DE,O=Atos,CN=Atos TrustedRoot 2011

# Serial Number:5c:33:cb:62:2c:5f:b3:32

# Subject: C=DE,O=Atos,CN=Atos TrustedRoot 2011

# Not Valid Before: Thu Jul 07 14:58:30 2011

# Not Valid After : Tue Dec 31 23:59:59 2030

# Fingerprint (SHA-256):

F3:56:BE:A2:44:B7:A9:1E:B3:5D:53:CA:9A:D7:86:4A:CE:01:8E:2D:35:D5:F8:F9:6D:DF:68:A6:F4:1A:A4:74

# Fingerprint (SHA1): 2B:B1:F5:3E:55:0C:1D:C5:F1:D4:E6:B7:6A:46:4B:55:06:02:AC:21

CKA\_CLASS

CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

```

CKA_LABEL UTF8 "Atos TrustedRoot 2011"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\053\261\365\076\125\014\035\305\361\324\346\267\152\106\113\125
\006\002\254\041
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\256\271\304\062\113\254\177\135\146\314\167\224\273\052\167\126
END
CKA_ISSUER MULTILINE_OCTAL
\060\074\061\036\060\034\006\003\125\004\003\014\025\101\164\157
\163\040\124\162\165\163\164\145\144\122\157\157\164\040\062\060
\061\061\061\015\060\013\006\003\125\004\012\014\004\101\164\157
\163\061\013\060\011\006\003\125\004\006\023\002\104\105
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\010\134\063\313\142\054\137\263\062
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate
# "QuoVadis Root CA 1 G3"
#
# Issuer: CN=QuoVadis Root CA 1 G3,O=QuoVadis Limited,C=BM
# Serial Number:78:58:5f:2e:ad:2c:19:4b:e3:37:07:35:34:13:28:b5:96:d4:65:93
# Subject: CN=QuoVadis Root CA 1 G3,O=QuoVadis Limited,C=BM
# Not Valid Before: Thu Jan 12 17:27:44 2012
# Not Valid After : Sun Jan 12 17:27:44 2042
# Fingerprint (SHA-256):
8A:86:6F:D1:B2:76:B5:7E:57:8E:92:1C:65:82:8A:2B:ED:58:E9:F2:F2:88:05:41:34:B7:F1:F4:BF:C9:CC:74
# Fingerprint (SHA1): 1B:8E:EA:57:96:29:1A:C9:39:EA:B8:0A:81:1A:73:73:C0:93:79:67
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "QuoVadis Root CA 1 G3"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\110\061\013\060\011\006\003\125\004\006\023\002\102\115\061
\031\060\027\006\003\125\004\012\023\020\121\165\157\126\141\144
\151\163\040\114\151\155\151\164\145\144\061\036\060\034\006\003
\125\004\003\023\025\121\165\157\126\141\144\151\163\040\122\157
\157\164\040\103\101\040\061\040\107\063
END
CKA_ID

```

UTF8 "0"

CKA\_ISSUER MULTILINE\_OCTAL

\060\110\061\013\060\011\006\003\125\004\006\023\002\102\115\061  
\031\060\027\006\003\125\004\012\023\020\121\165\157\126\141\144  
\151\163\040\114\151\155\151\164\145\144\061\036\060\034\006\003  
\125\004\003\023\025\121\165\157\126\141\144\151\163\040\122\157  
\157\164\040\103\101\040\061\040\107\063

END

CKA\_SERIAL\_NUMBER MULTILINE\_OCTAL

\002\024\170\130\137\056\255\054\031\113\343\067\007\065\064\023  
\050\265\226\324\145\223

END

CKA\_VALUE MULTILINE\_OCTAL

\060\202\005\140\060\202\003\110\240\003\002\001\002\002\024\170  
\130\137\056\255\054\031\113\343\067\007\065\064\023\050\265\226  
\324\145\223\060\015\006\011\052\206\110\206\367\015\001\001\013  
\005\000\060\110\061\013\060\011\006\003\125\004\006\023\002\102  
\115\061\031\060\027\006\003\125\004\012\023\020\121\165\157\126  
\141\144\151\163\040\114\151\155\151\164\145\144\061\036\060\034  
\006\003\125\004\003\023\025\121\165\157\126\141\144\151\163\040  
\122\157\157\164\040\103\101\040\061\040\107\063\060\036\027\015  
\061\062\060\061\061\062\061\067\062\067\064\064\132\027\015\064  
\062\060\061\061\062\061\067\062\067\064\064\132\060\110\061\013  
\060\011\006\003\125\004\006\023\002\102\115\061\031\060\027\006  
\003\125\004\012\023\020\121\165\157\126\141\144\151\163\040\114  
\151\155\151\164\145\144\061\036\060\034\006\003\125\004\003\023  
\025\121\165\157\126\141\144\151\163\040\122\157\157\164\040\103  
\101\040\061\040\107\063\060\202\002\042\060\015\006\011\052\206  
\110\206\367\015\001\001\001\005\000\003\202\002\017\000\060\202  
\002\012\002\202\002\001\000\240\276\120\020\216\351\362\154\100  
\264\004\234\205\271\061\312\334\055\344\021\251\004\074\033\125  
\301\347\130\060\035\044\264\303\357\205\336\214\054\341\301\075  
\337\202\346\117\255\107\207\154\354\133\111\301\112\325\273\217  
\354\207\254\177\202\232\206\354\075\003\231\122\001\322\065\236  
\254\332\360\123\311\146\074\324\254\002\001\332\044\323\073\250  
\002\106\257\244\034\343\370\163\130\166\267\366\016\220\015\265  
\360\317\314\372\371\306\114\345\303\206\060\012\215\027\176\065  
\353\305\337\273\016\234\300\215\207\343\210\070\205\147\372\076  
\307\253\340\023\234\005\030\230\317\223\365\261\222\264\374\043  
\323\317\325\304\047\111\340\236\074\233\010\243\213\135\052\041  
\340\374\071\252\123\332\175\176\317\032\011\123\274\135\005\004  
\317\241\112\217\213\166\202\015\241\370\322\307\024\167\133\220  
\066\007\201\233\076\006\372\122\136\143\305\246\000\376\245\351  
\122\033\122\265\222\071\162\003\011\142\275\260\140\026\156\246  
\335\045\302\003\146\335\363\004\321\100\342\116\213\206\364\157  
\345\203\240\047\204\136\004\301\365\220\275\060\075\304\357\250  
\151\274\070\233\244\244\226\321\142\332\151\300\001\226\256\313  
\304\121\064\352\014\252\377\041\216\131\217\112\134\344\141\232



\247\322\351\052\170\215\121\075\072\025\356\242\131\216\251\134  
\336\305\371\220\042\345\210\105\161\335\221\231\154\172\237\075  
\075\230\174\136\366\276\026\150\240\136\256\013\043\374\132\017  
\252\042\166\055\311\241\020\035\344\323\104\043\220\210\237\306  
\052\346\327\365\232\263\130\036\057\060\211\010\033\124\242\265  
\230\043\354\010\167\034\225\135\141\321\313\211\234\137\242\112  
\221\232\357\041\252\111\026\010\250\275\141\050\061\311\164\255  
\205\366\331\305\261\213\321\345\020\062\115\137\213\040\072\074  
\111\037\063\205\131\015\333\313\011\165\103\151\163\373\153\161  
\175\360\337\304\114\175\306\243\056\310\225\171\313\163\242\216  
\116\115\044\373\136\344\004\276\162\033\246\047\055\111\132\231  
\172\327\134\011\040\267\177\224\271\117\361\015\034\136\210\102  
\033\021\267\347\221\333\236\154\364\152\337\214\006\230\003\255  
\314\050\357\245\107\363\123\002\003\001\000\001\243\102\060\100  
\060\017\006\003\125\035\023\001\001\377\004\005\060\003\001\001  
\377\060\016\006\003\125\035\017\001\001\377\004\004\003\002\001  
\006\060\035\006\003\125\035\016\004\026\004\024\243\227\326\363  
\136\242\020\341\253\105\237\074\027\144\074\356\001\160\234\314  
\060\015\006\011\052\206\110\206\367\015\001\001\013\005\000\003  
\202\002\001\000\030\372\133\165\374\076\172\307\137\167\307\312  
\337\317\137\303\022\304\100\135\324\062\252\270\152\327\325\025  
\025\106\230\043\245\346\220\133\030\231\114\343\255\102\243\202  
\061\066\210\315\351\373\304\004\226\110\213\001\307\215\001\317  
\133\063\006\226\106\146\164\035\117\355\301\266\271\264\015\141  
\314\143\176\327\056\167\214\226\034\052\043\150\153\205\127\166  
\160\063\023\376\341\117\246\043\167\030\372\032\214\350\275\145  
\311\317\077\364\311\027\334\353\307\274\300\004\056\055\106\057  
\151\146\303\033\217\376\354\076\323\312\224\277\166\012\045\015  
\251\173\002\034\251\320\073\137\013\300\201\072\075\144\341\277  
\247\055\116\275\115\304\330\051\306\042\030\320\305\254\162\002  
\202\077\252\072\242\072\042\227\061\335\010\143\303\165\024\271  
\140\050\055\133\150\340\026\251\146\202\043\121\365\353\123\330  
\061\233\173\351\267\235\113\353\210\026\317\371\135\070\212\111  
\060\217\355\361\353\031\364\167\032\061\030\115\147\124\154\057  
\157\145\371\333\075\354\041\354\136\364\364\213\312\140\145\124  
\321\161\144\364\371\246\243\201\063\066\063\161\360\244\170\137  
\116\255\203\041\336\064\111\215\350\131\254\235\362\166\132\066  
\362\023\364\257\340\011\307\141\052\154\367\340\235\256\273\206  
\112\050\157\056\356\264\171\315\220\063\303\263\166\372\365\360  
\154\235\001\220\372\236\220\366\234\162\317\107\332\303\037\344  
\065\040\123\362\124\321\337\141\203\246\002\342\045\070\336\205  
\062\055\136\163\220\122\135\102\304\316\075\113\341\371\031\204  
\035\325\242\120\314\101\373\101\024\303\275\326\311\132\243\143  
\146\002\200\275\005\072\073\107\234\354\000\046\114\365\210\121  
\277\250\043\177\030\007\260\013\355\213\046\241\144\323\141\112  
\353\134\237\336\263\257\147\003\263\037\335\155\135\151\150\151  
\253\136\072\354\174\151\274\307\073\205\116\236\025\271\264\025  
\117\303\225\172\130\327\311\154\351\154\271\363\051\143\136\264

```
\054\360\055\075\355\132\145\340\251\133\100\302\110\231\201\155
\236\037\006\052\074\022\264\213\017\233\242\044\360\246\215\326
\172\340\113\266\144\226\143\225\204\302\112\315\034\056\044\207
\063\140\345\303
```

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "QuoVadis Root CA 1 G3"

# Issuer: CN=QuoVadis Root CA 1 G3,O=QuoVadis Limited,C=BM

# Serial Number:78:58:5f:2e:ad:2c:19:4b:e3:37:07:35:34:13:28:b5:96:d4:65:93

# Subject: CN=QuoVadis Root CA 1 G3,O=QuoVadis Limited,C=BM

# Not Valid Before: Thu Jan 12 17:27:44 2012

# Not Valid After : Sun Jan 12 17:27:44 2042

# Fingerprint (SHA-256):

8A:86:6F:D1:B2:76:B5:7E:57:8E:92:1C:65:82:8A:2B:ED:58:E9:F2:F2:88:05:41:34:B7:F1:F4:BF:C9:CC:74

# Fingerprint (SHA1): 1B:8E:EA:57:96:29:1A:C9:39:EA:B8:0A:81:1A:73:73:C0:93:79:67

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "QuoVadis

Root CA 1 G3"

CKA\_CERT\_SHA1\_HASH MULTILINE\_OCTAL

```
\033\216\352\127\226\051\032\311\071\352\270\012\201\032\163\163
\300\223\171\147
```

END

CKA\_CERT\_MD5\_HASH MULTILINE\_OCTAL

```
\244\274\133\077\376\067\232\372\144\360\342\372\005\075\013\253
```

END

CKA\_ISSUER MULTILINE\_OCTAL

```
\060\110\061\013\060\011\006\003\125\004\006\023\002\102\115\061
\031\060\027\006\003\125\004\012\023\020\121\165\157\126\141\144
\151\163\040\114\151\155\151\164\145\144\061\036\060\034\006\003
\125\004\003\023\025\121\165\157\126\141\144\151\163\040\122\157
\157\164\040\103\101\040\061\040\107\063
```

END

CKA\_SERIAL\_NUMBER MULTILINE\_OCTAL

```
\002\024\170\130\137\056\255\054\031\113\343\067\007\065\064\023
\050\265\226\324\145\223
```

END

CKA\_TRUST\_SERVER\_AUTH CK\_TRUST CKT\_NSS\_TRUSTED\_DELEGATOR

CKA\_TRUST\_EMAIL\_PROTECTION CK\_TRUST CKT\_NSS\_TRUSTED\_DELEGATOR

CKA\_TRUST\_CODE\_SIGNING CK\_TRUST CKT\_NSS\_MUST\_VERIFY\_TRUST

CKA\_TRUST\_STEP\_UP\_APPROVED CK\_BBOOL CK\_FALSE

```
#
# Certificate "QuoVadis Root CA 2 G3"
#
# Issuer: CN=QuoVadis Root CA
2 G3,O=QuoVadis Limited,C=BM
# Serial Number:44:57:34:24:5b:81:89:9b:35:f2:ce:b8:2b:3b:5b:a7:26:f0:75:28
# Subject: CN=QuoVadis Root CA 2 G3,O=QuoVadis Limited,C=BM
# Not Valid Before: Thu Jan 12 18:59:32 2012
# Not Valid After : Sun Jan 12 18:59:32 2042
# Fingerprint (SHA-256):
8F:E4:FB:0A:F9:3A:4D:0D:67:DB:0B:EB:B2:3E:37:C7:1B:F3:25:DC:BC:DD:24:0E:A0:4D:AF:58:B4:7E:18:40
# Fingerprint (SHA1): 09:3C:61:F3:8B:8B:DC:7D:55:DF:75:38:02:05:00:E1:25:F5:C8:36
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "QuoVadis Root CA 2 G3"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\110\061\013\060\011\006\003\125\004\006\023\002\102\115\061
\031\060\027\006\003\125\004\012\023\020\121\165\157\126\141\144
\151\163\040\114\151\155\151\164\145\144\061\036\060\034\006\003
\125\004\003\023\025\121\165\157\126\141\144\151\163\040\122\157
\157\164\040\103\101\040\062\040\107\063
END
CKA_ID
UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\110\061\013\060\011\006\003\125\004\006\023\002\102\115\061
\031\060\027\006\003\125\004\012\023\020\121\165\157\126\141\144
\151\163\040\114\151\155\151\164\145\144\061\036\060\034\006\003
\125\004\003\023\025\121\165\157\126\141\144\151\163\040\122\157
\157\164\040\103\101\040\062\040\107\063
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\024\104\127\064\044\133\201\211\233\065\362\316\270\053\073
\133\247\046\360\165\050
END
CKA_VALUE MULTILINE_OCTAL
\060\202\005\140\060\202\003\110\240\003\002\001\002\002\024\104
\127\064\044\133\201\211\233\065\362\316\270\053\073\133\247\046
\360\165\050\060\015\006\011\052\206\110\206\367\015\001\001\013
\005\000\060\110\061\013\060\011\006\003\125\004\006\023\002\102
\115\061\031\060\027\006\003\125\004\012\023\020\121\165\157\126
\141\144\151\163\040\114\151\155\151\164\145\144\061\036\060\034
\006\003\125\004\003\023\025\121\165\157\126\141\144\151\163\040
\122\157\157\164\040\103\101\040\062\040\107\063\060\036\027\015
\061\062\060\061\061\062\061\070\065\071\063\062\132\027\015\064
```

\062\060\061\061\062\061\070\065\071\063\062\132\060\110\061\013  
\060\011\006\003\125\004\006\023\002\102\115\061\031\060\027\006  
\003\125\004\012\023\020\121\165\157\126\141\144\151\163\040\114  
\151\155\151\164\145\144\061\036\060\034\006\003\125\004\003\023  
\025\121\165\157\126\141\144\151\163\040\122\157\157\164\040\103  
\101\040\062\040\107\063\060\202\002\042\060\015\006\011\052\206  
\110\206\367\015\001\001\001\005\000\003\202\002\017\000\060\202  
\002\012\002\202\002\001\000\241\256\045\262\001\030\334\127\210  
\077\106\353\371\257\342\353\043\161\342\232\321\141\146\041\137  
\252\257\047\121\345\156\033\026\324\055\175\120\260\123\167\275  
\170\072\140\342\144\002\233\174\206\233\326\032\216\255\377\037  
\025\177\325\225\036\022\313\346\024\204\004\301\337\066\263\026  
\237\212\343\311\333\230\064\316\330\063\027\050\106\374\247\311  
\360\322\264\325\115\011\162\111\371\362\207\343\251\332\175\241  
\175\153\262\072\045\251\155\122\104\254\370\276\156\373\334\246  
\163\221\220\141\246\003\024\040\362\347\207\243\210\255\255\240  
\214\377\246\013\045\122\045\347\026\001\325\313\270\065\201\014  
\243\073\360\341\341\374\132\135\316\200\161\155\370\111\253\076  
\073\272\270\327\200\001\373\245\353\133\263\305\136\140\052\061  
\240\257\067\350\040\072\237\250\062\054\014\314\011\035\323\236  
\216\135\274\114\230\356\305\032\150\173\354\123\246\351\024\065  
\243\337\315\200\237\014\110\373\034\364\361\277\112\270\372\325  
\214\161\112\307\037\255\376\101\232\263\203\135\362\204\126\357  
\245\127\103\316\051\255\214\253\125\277\304\373\133\001\335\043  
\041\241\130\000\216\303\320\152\023\355\023\343\022\053\200\334  
\147\346\225\262\315\036\042\156\052\370\101\324\362\312\024\007  
\215\212\125\022\306\151\365\270\206\150\057\123\136\260\322\252  
\041\301\230\346\060\343\147\125\307\233\156\254\031\250\125\246  
\105\006\320\043\072\333\353\145\135\052\021\021\360\073\117\312  
\155\364\064\304\161\344\377\000\132\366\134\256\043\140\205\163  
\361\344\020\261\045\256\325\222\273\023\301\014\340\071\332\264  
\071\127\265\253\065\252\162\041\073\203\065\347\061\337\172\041  
\156\270\062\010\175\035\062\221\025\112\142\162\317\343\167\241  
\274\325\021\033\166\001\147\010\340\101\013\303\353\025\156\370  
\244\031\331\242\253\257\342\047\122\126\053\002\212\054\024\044  
\371\277\102\002\277\046\310\306\217\340\156\070\175\123\055\345  
\355\230\263\225\143\150\177\371\065\364\337\210\305\140\065\222  
\300\174\151\034\141\225\026\320\353\336\013\257\076\004\020\105  
\145\130\120\070\257\110\362\131\266\026\362\074\015\220\002\306  
\160\056\001\255\074\025\327\002\003\001\000\001\243\102\060\100  
\060\017\006\003\125\035\023\001\001\377\004\005\060\003\001\001  
\377\060\016\006\003\125\035\017\001\001\377\004\004\003\002\001  
\006\060\035\006\003\125\035\016\004\026\004\024\355\347\157\166  
\132\277\140\354\111\133\306\245\167\273\162\026\161\233\304\075  
\060\015\006\011\052\206\110\206\367\015\001\001\013\005\000\003  
\202\002\001\000\221\337\200\077\103\011\176\161\302\367\353\263  
\210\217\341\121\262\274\075\165\371\050\135\310\274\231\233\173  
\135\252\345\312\341\012\367\350\262\323\237\335\147\061\176\272

\001\252\307\152\101\073\220\324\010\134\262\140\152\220\360\310  
\316\003\142\371\213\355\373\156\052\334\006\115\074\051\017\211  
\026\212\130\114\110\017\350\204\141\352\074\162\246\167\344\102  
\256\210\243\103\130\171\176\256\312\245\123\015\251\075\160\275  
\040\031\141\244\154\070\374\103\062\341\301\107\377\370\354\361  
\021\042\062\226\234\302\366\133\151\226\173\040\014\103\101\232  
\133\366\131\031\210\336\125\210\067\121\013\170\134\012\036\243  
\102\375\307\235\210\017\300\362\170\002\044\124\223\257\211\207  
\210\311\112\200\035\352\320\156\076\141\056\066\273\065\016\047  
\226\375\146\064\073\141\162\163\361\026\134\107\006\124\111\000  
\172\130\022\260\012\357\205\375\261\270\063\165\152\223\034\022  
\346\140\136\157\035\177\311\037\043\313\204\141\237\036\202\104  
\371\137\255\142\125\044\232\122\230\355\121\347\241\176\227\072  
\346\057\037\021\332\123\200\054\205\236\253\065\020\333\042\137  
\152\305\136\227\123\362\062\002\011\060\243\130\360\015\001\325  
\162\306\261\174\151\173\303\365\066\105\314\141\156\136\114\224  
\305\136\256\350\016\136\213\277\367\315\340\355\241\016\033\063  
\356\124\030\376\017\276\357\176\204\153\103\343\160\230\333\135  
\165\262\015\131\007\205\025\043\071\326\361\337\251\046\017\326  
\110\307\263\246\042\365\063\067\132\225\107\237\173\272\030\025  
\157\377\326\024\144\203\111\322\012\147\041\333\017\065\143\140  
\050\042\343\261\225\203\315\205\246\335\057\017\347\147\122\156  
\273\057\205\174\365\112\163\347\305\076\300\275\041\022\005\077  
\374\267\003\111\002\133\310\045\346\342\124\070\365\171\207\214  
\035\123\262\116\205\173\006\070\307\054\370\370\260\162\215\045  
\345\167\122\364\003\034\110\246\120\137\210\040\060\156\362\202  
\103\253\075\227\204\347\123\373\041\301\117\017\042\232\206\270  
\131\052\366\107\075\031\210\055\350\205\341\236\354\205\010\152  
\261\154\064\311\035\354\110\053\073\170\355\146\304\216\171\151  
\203\336\177\214

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "QuoVadis Root CA 2 G3"

# Issuer: CN=QuoVadis Root CA 2 G3,O=QuoVadis Limited,C=BM

# Serial Number:44:57:34:24:5b:81:89:9b:35:f2:ce:b8:2b:3b:5b:a7:26:f0:75:28

# Subject: CN=QuoVadis Root CA 2 G3,O=QuoVadis Limited,C=BM

# Not Valid Before: Thu Jan 12 18:59:32 2012

# Not Valid After : Sun Jan 12 18:59:32 2042

# Fingerprint (SHA-256):

8F:E4:FB:0A:F9:3A:4D:0D:67:DB:0B:EB:B2:3E:37:C7:1B:F3:25:DC:BC:DD:24:0E:A0:4D:AF:58:B4:7E:18:40

# Fingerprint (SHA1): 09:3C:61:F3:8B:8B:DC:7D:55:DF:75:38:02:05:00:E1:25:F5:C8:36

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

```

CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "QuoVadis Root CA 2 G3"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\011\074\141\363\213\213\334\175\125\337\165\070\002\005\000\341
\045\365\310\066
END
CKA_CERT_MD5_HASH
MULTILINE_OCTAL
\257\014\206\156\277\100\055\177\013\076\022\120\272\022\075\006
END
CKA_ISSUER MULTILINE_OCTAL
\060\110\061\013\060\011\006\003\125\004\006\023\002\102\115\061
\031\060\027\006\003\125\004\012\023\020\121\165\157\126\141\144
\151\163\040\114\151\155\151\164\145\144\061\036\060\034\006\003
\125\004\003\023\025\121\165\157\126\141\144\151\163\040\122\157
\157\164\040\103\101\040\062\040\107\063
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\024\104\127\064\044\133\201\211\233\065\362\316\270\053\073
\133\247\046\360\165\050
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "QuoVadis Root CA 3 G3"
#
# Issuer: CN=QuoVadis Root CA 3 G3,O=QuoVadis Limited,C=BM
# Serial Number:2e:f5:9b:02:28:a7:db:7a:ff:d5:a3:a9:ee:bd:03:a0:cf:12:6a:1d
#
# Subject: CN=QuoVadis Root CA 3 G3,O=QuoVadis Limited,C=BM
# Not Valid Before: Thu Jan 12 20:26:32 2012
# Not Valid After : Sun Jan 12 20:26:32 2042
# Fingerprint (SHA-256):
88:EF:81:DE:20:2E:B0:18:45:2E:43:F8:64:72:5C:EA:5F:BD:1F:C2:D9:D2:05:73:07:09:C5:D8:B8:69:0F:46
# Fingerprint (SHA1): 48:12:BD:92:3C:A8:C4:39:06:E7:30:6D:27:96:E6:A4:CF:22:2E:7D
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "QuoVadis Root CA 3 G3"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\110\061\013\060\011\006\003\125\004\006\023\002\102\115\061
\031\060\027\006\003\125\004\012\023\020\121\165\157\126\141\144
\151\163\040\114\151\155\151\164\145\144\061\036\060\034\006\003

```

\125\004\003\023\025\121\165\157\126\141\144\151\163\040\122\157  
\157\164\040\103\101\040\063\040\107\063  
END  
CKA\_ID UTF8 "0"  
CKA\_ISSUER MULTILINE\_OCTAL  
\060\110\061\013\060\011\006\003\125\004\006\023\002\102\115\061  
\031\060\027\006\003\125\004\012\023\020\121\165\157\126\141\144  
\151\163\040\114\151\155\151\164\145\144\061\036\060\034\006\003  
\125\004\003\023\025\121\165\157\126\141\144\151\163\040\122\157  
\157\164\040\103\101\040\063\040\107\063  
END  
CKA\_SERIAL\_NUMBER  
MULTILINE\_OCTAL  
\002\024\056\365\233\002\050\247\333\172\377\325\243\251\356\275  
\003\240\317\022\152\035  
END  
CKA\_VALUE MULTILINE\_OCTAL  
\060\202\005\140\060\202\003\110\240\003\002\001\002\002\024\056  
\365\233\002\050\247\333\172\377\325\243\251\356\275\003\240\317  
\022\152\035\060\015\006\011\052\206\110\206\367\015\001\001\013  
\005\000\060\110\061\013\060\011\006\003\125\004\006\023\002\102  
\115\061\031\060\027\006\003\125\004\012\023\020\121\165\157\126  
\141\144\151\163\040\114\151\155\151\164\145\144\061\036\060\034  
\006\003\125\004\003\023\025\121\165\157\126\141\144\151\163\040  
\122\157\157\164\040\103\101\040\063\040\107\063\060\036\027\015  
\061\062\060\061\061\062\062\060\062\066\063\062\132\027\015\064  
\062\060\061\061\062\062\060\062\066\063\062\132\060\110\061\013  
\060\011\006\003\125\004\006\023\002\102\115\061\031\060\027\006  
\003\125\004\012\023\020\121\165\157\126\141\144\151\163\040\114  
\151\155\151\164\145\144\061\036\060\034\006\003\125\004\003\023  
\025\121\165\157\126\141\144\151\163\040\122\157\157\164\040\103  
\101\040\063\040\107\063\060\202\002\042\060\015\006\011\052\206  
\110\206\367\015\001\001\001\005\000\003\202\002\017\000\060\202  
\002\012\002\202\002\001\000\263\313\016\020\147\216\352\024\227  
\247\062\052\012\126\066\177\150\114\307\263\157\072\043\024\221  
\377\031\177\245\312\254\356\263\166\235\172\351\213\033\253\153  
\061\333\372\013\123\114\257\305\245\032\171\074\212\114\377\254  
\337\045\336\116\331\202\062\013\104\336\312\333\214\254\243\156  
\026\203\073\246\144\113\062\211\373\026\026\070\176\353\103\342  
\323\164\112\302\142\012\163\012\335\111\263\127\322\260\012\205  
\235\161\074\336\243\313\300\062\363\001\071\040\103\033\065\321  
\123\263\261\356\305\223\151\202\076\026\265\050\106\241\336\352  
\211\011\355\103\270\005\106\212\206\365\131\107\276\033\157\001  
\041\020\271\375\251\322\050\312\020\071\011\312\023\066\317\234  
\255\255\100\164\171\053\002\077\064\377\372\040\151\175\323\356  
\141\365\272\263\347\060\320\067\043\206\162\141\105\051\110\131  
\150\157\167\246\056\201\276\007\115\157\257\316\304\105\023\221  
\024\160\006\217\037\237\370\207\151\261\016\357\303\211\031\353

\352\034\141\374\172\154\212\334\326\003\013\236\046\272\022\335  
\324\124\071\253\046\243\063\352\165\201\332\055\315\017\117\344  
\003\321\357\025\227\033\153\220\305\002\220\223\146\002\041\261  
\107\336\213\232\112\200\271\125\217\265\242\057\300\326\063\147  
\332\176\304\247\264\004\104\353\107\373\346\130\271\367\014\360  
\173\053\261\300\160\051\303\100\142\055\073\110\151\334\043\074  
\110\353\173\011\171\251\155\332\250\060\230\317\200\162\003\210  
\246\133\106\256\162\171\174\010\003\041\145\256\267\341\034\245  
\261\052\242\061\336\146\004\367\300\164\350\161\336\377\075\131  
\314\226\046\022\213\205\225\127\032\253\153\165\013\104\075\021  
\050\074\173\141\267\342\217\147\117\345\354\074\114\140\200\151  
\127\070\036\001\133\215\125\350\307\337\300\314\167\043\064\111  
\165\174\366\230\021\353\055\336\355\101\056\024\005\002\177\340  
\376\040\353\065\347\021\254\042\316\127\075\336\311\060\155\020  
\003\205\315\361\377\214\026\265\301\262\076\210\154\140\177\220  
\117\225\367\366\055\255\001\071\007\004\372\165\200\175\277\111  
\120\355\357\311\304\174\034\353\200\176\333\266\320\335\023\376  
\311\323\234\327\262\227\251\002\003\001\000\001\243\102\060\100  
\060\017\006\003\125\035\023\001\001\377\004\005\060\003\001\001  
\377\060\016\006\003\125\035\017\001\001\377\004\004\003\002\001  
\006\060\035\006\003\125\035\016\004\026\004\024\306\027\320\274  
\250\352\002\103\362\033\006\231\135\053\220\040\271\327\234\344  
\060\015\006\011\052\206\110\206\367\015\001\001\013\005\000\003  
\202\002\001\000\064\141\331\126\265\022\207\125\115\335\243\065  
\061\106\273\244\007\162\274\137\141\142\350\245\373\013\067\261  
\074\266\263\372\051\235\177\002\365\244\311\250\223\267\172\161  
\050\151\217\163\341\122\220\332\325\276\072\345\267\166\152\126  
\200\041\337\135\346\351\072\236\345\076\366\242\151\307\052\012  
\260\030\107\334\040\160\175\122\243\076\131\174\301\272\311\310  
\025\100\141\312\162\326\160\254\322\267\360\034\344\206\051\360  
\316\357\150\143\320\265\040\212\025\141\232\176\206\230\264\311  
\302\166\373\314\272\060\026\314\243\141\306\164\023\345\153\357  
\243\025\352\003\376\023\213\144\344\323\301\322\350\204\373\111  
\321\020\115\171\146\353\252\375\364\215\061\036\160\024\255\334  
\336\147\023\114\201\025\141\274\267\331\221\167\161\031\201\140  
\273\360\130\245\265\234\013\367\217\042\125\047\300\113\001\155  
\073\231\015\324\035\233\143\147\057\320\356\015\312\146\274\224  
\117\246\255\355\374\356\143\254\127\077\145\045\317\262\206\217  
\320\010\377\270\166\024\156\336\345\047\354\253\170\265\123\271  
\266\077\350\040\371\322\250\276\141\106\312\207\214\204\363\371  
\361\240\150\233\042\036\201\046\233\020\004\221\161\300\006\037  
\334\240\323\271\126\247\343\230\055\177\203\235\337\214\053\234  
\062\216\062\224\360\001\074\042\052\237\103\302\056\303\230\071  
\007\070\173\374\136\000\102\037\363\062\046\171\203\204\366\345  
\360\301\121\022\300\013\036\004\043\014\124\245\114\057\111\305  
\112\321\266\156\140\015\153\374\153\213\205\044\144\267\211\016  
\253\045\107\133\074\317\176\111\275\307\351\012\306\332\367\176  
\016\027\010\323\110\227\320\161\222\360\017\071\076\064\152\034



```
\175\330\362\042\256\273\151\364\063\264\246\110\125\321\017\016
\046\350\354\266\013\055\247\205\065\315\375\131\310\237\321\315
\076\132\051\064\271\075\204\316\261\145\324\131\221\221\126\165
\041\301\167\236\371\172\341\140\235\323\255\004\030\364\174\353
\136\223\217\123\112\042\051\370\110\053\076\115\206\254\133\177
\313\006\231\131\140\330\130\145\225\215\104\321\367\177\176\047
\177\175\256\200\365\007\114\266\076\234\161\124\231\004\113\375
\130\371\230\364
```

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "QuoVadis Root CA 3 G3"

# Issuer: CN=QuoVadis Root CA 3 G3,O=QuoVadis Limited,C=BM

# Serial Number:2e:f5:9b:02:28:a7:db:7a:ff:d5:a3:a9:ee:bd:03:a0:cf:12:6a:1d

# Subject: CN=QuoVadis Root CA 3 G3,O=QuoVadis Limited,C=BM

# Not Valid Before: Thu Jan 12 20:26:32 2012

# Not Valid After : Sun Jan 12 20:26:32 2042

# Fingerprint (SHA-256):

88:EF:81:DE:20:2E:B0:18:45:2E:43:F8:64:72:5C:EA:5F:BD:1F:C2:D9:D2:05:73:07:09:C5:D8:B8:69:0F:46

# Fingerprint (SHA1): 48:12:BD:92:3C:A8:C4:39:06:E7:30:6D:27:96:E6:A4:CF:22:2E:7D

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "QuoVadis Root CA 3 G3"

CKA\_CERT\_SHA1\_HASH MULTILINE\_OCTAL

```
\110\022\275\222\074\250\304\071\006\347\060\155\047\226\346\244
\317\042\056\175
```

END

CKA\_CERT\_MD5\_HASH

MULTILINE\_OCTAL

```
\337\175\271\255\124\157\150\241\337\211\127\003\227\103\260\327
END
```

CKA\_ISSUER MULTILINE\_OCTAL

```
\060\110\061\013\060\011\006\003\125\004\006\023\002\102\115\061
\031\060\027\006\003\125\004\012\023\020\121\165\157\126\141\144
\151\163\040\114\151\155\151\164\145\144\061\036\060\034\006\003
\125\004\003\023\025\121\165\157\126\141\144\151\163\040\122\157
\157\164\040\103\101\040\063\040\107\063
```

END

CKA\_SERIAL\_NUMBER MULTILINE\_OCTAL

```
\002\024\056\365\233\002\050\247\333\172\377\325\243\251\356\275
\003\240\317\022\152\035
```

END

CKA\_TRUST\_SERVER\_AUTH CK\_TRUST CKT\_NSS\_TRUSTED\_DELEGATOR

CKA\_TRUST\_EMAIL\_PROTECTION CK\_TRUST CKT\_NSS\_TRUSTED\_DELEGATOR  
CKA\_TRUST\_CODE\_SIGNING CK\_TRUST CKT\_NSS\_MUST\_VERIFY\_TRUST  
CKA\_TRUST\_STEP\_UP\_APPROVED CK\_BBOOL CK\_FALSE

#

# Certificate "DigiCert Assured ID Root G2"

#

# Issuer: CN=DigiCert Assured ID Root G2,OU=www.digicert.com,O=DigiCert Inc,C=US

# Serial Number:0b:93:1c:3a:d6:39:67:ea:67:23:bf:c3:af:9a:f4:4b

# Subject:

CN=DigiCert Assured ID Root G2,OU=www.digicert.com,O=DigiCert Inc,C=US

# Not Valid Before: Thu Aug 01 12:00:00 2013

# Not Valid After : Fri Jan 15 12:00:00 2038

# Fingerprint (SHA-256):

7D:05:EB:B6:82:33:9F:8C:94:51:EE:09:4E:EB:FE:FA:79:53:A1:14:ED:B2:F4:49:49:45:2F:AB:7D:2F:C1:85

# Fingerprint (SHA1): A1:4B:48:D9:43:EE:0A:0E:40:90:4F:3C:E0:A4:C0:91:93:51:5D:3F

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_CERTIFICATE

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "DigiCert Assured ID Root G2"

CKA\_CERTIFICATE\_TYPE CK\_CERTIFICATE\_TYPE CKC\_X\_509

CKA\_SUBJECT MULTILINE\_OCTAL

\060\145\061\013\060\011\006\003\125\004\006\023\002\125\123\061  
\025\060\023\006\003\125\004\012\023\014\104\151\147\151\103\145  
\162\164\040\111\156\143\061\031\060\027\006\003\125\004\013\023  
\020\167\167\167\056\144\151\147\151\143\145\162\164\056\143\157  
\155\061\044\060\042\006\003\125\004\003\023\033\104\151\147\151  
\103\145\162\164\040\101\163\163\165\162\145\144\040\111\104\040  
\122\157\157\164\040\107\062

END

CKA\_ID

UTF8 "0"

CKA\_ISSUER MULTILINE\_OCTAL

\060\145\061\013\060\011\006\003\125\004\006\023\002\125\123\061  
\025\060\023\006\003\125\004\012\023\014\104\151\147\151\103\145  
\162\164\040\111\156\143\061\031\060\027\006\003\125\004\013\023  
\020\167\167\167\056\144\151\147\151\143\145\162\164\056\143\157  
\155\061\044\060\042\006\003\125\004\003\023\033\104\151\147\151  
\103\145\162\164\040\101\163\163\165\162\145\144\040\111\104\040  
\122\157\157\164\040\107\062

END

CKA\_SERIAL\_NUMBER MULTILINE\_OCTAL

\002\020\013\223\034\072\326\071\147\352\147\043\277\303\257\232  
\364\113

END

CKA\_VALUE MULTILINE\_OCTAL

\060\202\003\226\060\202\002\176\240\003\002\001\002\002\020\013

\223\034\072\326\071\147\352\147\043\277\303\257\232\364\113\060  
\015\006\011\052\206\110\206\367\015\001\001\013\005\000\060\145  
\061\013\060\011\006\003\125\004\006\023\002\125\123\061\025\060  
\023\006\003\125\004\012\023\014\104\151\147\151\103\145\162\164  
\040\111\156\143\061\031\060\027\006\003\125\004\013\023\020\167  
\167\167\056\144\151\147\151\143\145\162\164\056\143\157\155\061  
\044\060\042\006\003\125\004\003\023\033\104\151\147\151\103\145  
\162\164\040\101\163\163\165\162\145\144\040\111\104\040\122\157  
\157\164\040\107\062\060\036\027\015\061\063\060\070\060\061\061  
\062\060\060\060\060\132\027\015\063\070\060\061\061\065\061\062  
\060\060\060\060\132\060\145\061\013\060\011\006\003\125\004\006  
\023\002\125\123\061\025\060\023\006\003\125\004\012\023\014\104  
\151\147\151\103\145\162\164\040\111\156\143\061\031\060\027\006  
\003\125\004\013\023\020\167\167\167\056\144\151\147\151\143\145  
\162\164\056\143\157\155\061\044\060\042\006\003\125\004\003\023  
\033\104\151\147\151\103\145\162\164\040\101\163\163\165\162\145  
\144\040\111\104\040\122\157\157\164\040\107\062\060\202\001\042  
\060\015\006\011\052\206\110\206\367\015\001\001\001\005\000\003  
\202\001\017\000\060\202\001\012\002\202\001\001\000\331\347\050  
\057\122\077\066\162\111\210\223\064\363\370\152\036\061\124\200  
\237\255\124\101\265\107\337\226\250\324\257\200\055\271\012\317  
\165\375\211\245\175\044\372\343\042\014\053\274\225\027\013\063  
\277\031\115\101\006\220\000\275\014\115\020\376\007\265\347\034  
\156\042\125\061\145\227\275\323\027\322\036\142\363\333\352\154  
\120\214\077\204\014\226\317\267\313\003\340\312\155\241\024\114  
\033\211\335\355\000\260\122\174\257\221\154\261\070\023\321\351  
\022\010\300\000\260\034\053\021\332\167\160\066\233\256\316\171  
\207\334\202\160\346\011\164\160\125\151\257\243\150\237\277\335  
\266\171\263\362\235\160\051\125\364\253\377\225\141\363\311\100  
\157\035\321\276\223\273\323\210\052\273\235\277\162\132\126\161  
\073\077\324\363\321\012\376\050\357\243\356\331\231\257\003\323  
\217\140\267\362\222\241\261\275\211\211\037\060\315\303\246\056  
\142\063\256\026\002\167\104\132\347\201\012\074\247\104\056\171  
\270\077\004\274\134\240\207\341\033\257\121\216\315\354\054\372  
\370\376\155\360\072\174\252\213\344\147\225\061\215\002\003\001  
\000\001\243\102\060\100\060\017\006\003\125\035\023\001\001\377  
\004\005\060\003\001\001\377\060\016\006\003\125\035\017\001\001  
\377\004\004\003\002\001\206\060\035\006\003\125\035\016\004\026  
\004\024\316\303\112\271\231\125\362\270\333\140\277\251\176\275  
\126\265\227\066\247\326\060\015\006\011\052\206\110\206\367\015  
\001\001\013\005\000\003\202\001\001\000\312\245\125\214\343\310  
\101\156\151\047\247\165\021\357\074\206\066\157\322\235\306\170  
\070\035\151\226\242\222\151\056\070\154\233\175\004\324\211\245  
\261\061\067\212\311\041\314\253\154\315\213\034\232\326\277\110  
\322\062\146\301\212\300\363\057\072\357\300\343\324\221\206\321  
\120\343\003\333\163\167\157\112\071\123\355\336\046\307\265\175  
\257\053\102\321\165\142\343\112\053\002\307\120\113\340\151\342  
\226\154\016\104\146\020\104\217\255\005\353\370\171\254\246\033

```
\350\067\064\235\123\311\141\252\242\122\257\112\160\026\206\302
\072\310\261\023\160\066\330\317\356\364\012\064\325\133\114\375
\007\234\242\272\331\001\162\134\363\115\301\335\016\261\034\015
\304\143\276\255\364\024\373\211\354\242\101\016\114\314\310\127
\100\320\156\003\252\315\014\216\211\231\231\154\360\074\060\257
\070\337\157\274\243\276\051\040\047\253\164\377\023\042\170\336
\227\122\125\036\203\265\124\040\003\356\256\300\117\126\336\067
\314\303\177\252\004\047\273\323\167\270\142\333\027\174\234\050
\042\023\163\154\317\046\365\212\051\347
```

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRUST\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRUST\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "DigiCert Assured ID Root G2"

# Issuer: CN=DigiCert Assured ID Root G2,OU=www.digicert.com,O=DigiCert Inc,C=US

# Serial Number:0b:93:1c:3a:d6:39:67:ea:67:23:bf:c3:af:9a:f4:4b

# Subject: CN=DigiCert Assured ID Root G2,OU=www.digicert.com,O=DigiCert Inc,C=US

# Not Valid Before: Thu Aug 01 12:00:00 2013

# Not Valid After : Fri Jan 15 12:00:00 2038

# Fingerprint (SHA-256):

7D:05:EB:B6:82:33:9F:8C:94:51:EE:09:4E:EB:FE:FA:79:53:A1:14:ED:B2:F4:49:49:45:2F:AB:7D:2F:C1:85

#

Fingerprint (SHA1): A1:4B:48:D9:43:EE:0A:0E:40:90:4F:3C:E0:A4:C0:91:93:51:5D:3F

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "DigiCert Assured ID Root G2"

CKA\_CERT\_SHA1\_HASH MULTILINE\_OCTAL

```
\241\113\110\331\103\356\012\016\100\220\117\074\340\244\300\221
\223\121\135\077
```

END

CKA\_CERT\_MD5\_HASH MULTILINE\_OCTAL

```
\222\070\271\370\143\044\202\145\054\127\063\346\376\201\217\235
```

END

CKA\_ISSUER MULTILINE\_OCTAL

```
\060\145\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\025\060\023\006\003\125\004\012\023\014\104\151\147\151\103\145
\162\164\040\111\156\143\061\031\060\027\006\003\125\004\013\023
\020\167\167\167\056\144\151\147\151\143\145\162\164\056\143\157
\155\061\044\060\042\006\003\125\004\003\023\033\104\151\147\151
\103\145\162\164\040\101\163\163\165\162\145\144\040\111\104\040
\122\157\157\164\040\107\062
```

END

CKA\_SERIAL\_NUMBER MULTILINE\_OCTAL

```
\002\020\013\223\034\072\326\071\147\352\147\043\277\303\257\232
```

```

\364\113
END
CKA_TRUST_SERVER_AUTH
CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "DigiCert Assured ID Root G3"
#
# Issuer: CN=DigiCert Assured ID Root G3,OU=www.digicert.com,O=DigiCert Inc,C=US
# Serial Number:0b:a1:5a:fa:1d:df:a0:b5:49:44:af:cd:24:a0:6c:ec
# Subject: CN=DigiCert Assured ID Root G3,OU=www.digicert.com,O=DigiCert Inc,C=US
# Not Valid Before: Thu Aug 01 12:00:00 2013
# Not Valid After : Fri Jan 15 12:00:00 2038
# Fingerprint (SHA-256):
7E:37:CB:8B:4C:47:09:0C:AB:36:55:1B:A6:F4:5D:B8:40:68:0F:BA:16:6A:95:2D:B1:00:71:7F:43:05:3F:C2
# Fingerprint (SHA1): F5:17:A2:4F:9A:48:C6:C9:F8:A2:00:26:9F:DC:0F:48:2C:AB:30:89
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL
UTF8 "DigiCert Assured ID Root G3"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\145\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\025\060\023\006\003\125\004\012\023\014\104\151\147\151\103\145
\162\164\040\111\156\143\061\031\060\027\006\003\125\004\013\023
\020\167\167\167\056\144\151\147\151\143\145\162\164\056\143\157
\155\061\044\060\042\006\003\125\004\003\023\033\104\151\147\151
\103\145\162\164\040\101\163\163\165\162\145\144\040\111\104\040
\122\157\157\164\040\107\063
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\145\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\025\060\023\006\003\125\004\012\023\014\104\151\147\151\103\145
\162\164\040\111\156\143\061\031\060\027\006\003\125\004\013\023
\020\167\167\167\056\144\151\147\151\143\145\162\164\056\143\157
\155\061\044\060\042\006\003\125\004\003\023\033\104\151\147\151
\103\145\162\164\040\101\163\163\165\162\145\144\040\111\104\040
\122\157\157\164\040\107\063
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\020\013\241\132\372\035\337\240\265\111\104\257\315\044\240

```

\154\354

END

CKA\_VALUE MULTILINE\_OCTAL

\060\202\002\106\060\202\001\315\240\003\002\001\002\002\020\013  
\241\132\372\035\337\240\265\111\104\257\315\044\240\154\354\060  
\012\006\010\052\206\110\316\075\004\003\003\060\145\061\013\060  
\011\006\003\125\004\006\023\002\125\123\061\025\060\023\006\003  
\125\004\012\023\014\104\151\147\151\103\145\162\164\040\111\156  
\143\061\031\060\027\006\003\125\004\013\023\020\167\167\167\056  
\144\151\147\151\143\145\162\164\056\143\157\155\061\044\060\042  
\006\003\125\004\003\023\033\104\151\147\151\103\145\162\164\040  
\101\163\163\165\162\145\144\040\111\104\040\122\157\157\164\040  
\107\063\060\036\027\015\061\063\060\070\060\061\061\062\060\060  
\060\060\132\027\015\063\070\060\061\061\065\061\062\060\060\060  
\060\132\060\145\061\013\060\011\006\003\125\004\006\023\002\125  
\123\061\025\060\023\006\003\125\004\012\023\014\104\151\147\151  
\103\145\162\164\040\111\156\143\061\031\060\027\006\003\125\004  
\013\023\020\167\167\167\056\144\151\147\151\143\145\162\164\056  
\143\157\155\061\044\060\042\006\003\125\004\003\023\033\104\151  
\147\151\103\145\162\164\040\101\163\163\165\162\145\144\040\111  
\104\040\122\157\157\164\040\107\063\060\166\060\020\006\007\052  
\206\110\316\075\002\001\006\005\053\201\004\000\042\003\142\000  
\004\031\347\274\254\104\145\355\315\270\077\130\373\215\261\127  
\251\104\055\005\025\362\357\013\377\020\164\237\265\142\122\137  
\146\176\037\345\334\033\105\171\013\314\306\123\012\235\215\135  
\002\331\251\131\336\002\132\366\225\052\016\215\070\112\212\111  
\306\274\306\003\070\007\137\125\332\176\011\156\342\177\136\320  
\105\040\017\131\166\020\326\240\044\360\055\336\066\362\154\051  
\071\243\102\060\100\060\017\006\003\125\035\023\001\001\377\004  
\005\060\003\001\001\377\060\016\006\003\125\035\017\001\001\377  
\004\004\003\002\001\206\060\035\006\003\125\035\016\004\026\004  
\024\313\320\275\251\341\230\005\121\241\115\067\242\203\171\316  
\215\035\052\344\204\060\012\006\010\052\206\110\316\075\004\003  
\003\003\147\000\060\144\002\060\045\244\201\105\002\153\022\113  
\165\164\117\310\043\343\160\362\165\162\336\174\211\360\317\221  
\162\141\236\136\020\222\131\126\271\203\307\020\347\070\351\130  
\046\066\175\325\344\064\206\071\002\060\174\066\123\360\060\345  
\142\143\072\231\342\266\243\073\233\064\372\036\332\020\222\161  
\136\221\023\247\335\244\156\222\314\062\326\365\041\146\307\057  
\352\226\143\152\145\105\222\225\001\264

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "DigiCert Assured ID Root G3"

# Issuer: CN=DigiCert Assured ID Root G3,OU=www.digicert.com,O=DigiCert Inc,C=US

```
# Serial Number:0b:a1:5a:fa:1d:df:a0:b5:49:44:af:cd:24:a0:6c:ec
# Subject: CN=DigiCert Assured ID Root G3,OU=www.digicert.com,O=DigiCert Inc,C=US
# Not Valid Before: Thu Aug 01 12:00:00 2013
# Not Valid After : Fri
Jan 15 12:00:00 2038
# Fingerprint (SHA-256):
7E:37:CB:8B:4C:47:09:0C:AB:36:55:1B:A6:F4:5D:B8:40:68:0F:BA:16:6A:95:2D:B1:00:71:7F:43:05:3F:C2
# Fingerprint (SHA1): F5:17:A2:4F:9A:48:C6:C9:F8:A2:00:26:9F:DC:0F:48:2C:AB:30:89
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "DigiCert Assured ID Root G3"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\365\027\242\117\232\110\306\311\370\242\000\046\237\334\017\110
\054\253\060\211
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\174\177\145\061\014\201\337\215\272\076\231\342\134\255\156\373
END
CKA_ISSUER MULTILINE_OCTAL
\060\145\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\025\060\023\006\003\125\004\012\023\014\104\151\147\151\103\145
\162\164\040\111\156\143\061\031\060\027\006\003\125\004\013\023
\020\167\167\167\056\144\151\147\151\143\145\162\164\056\143\157
\155\061\044\060\042\006\003\125\004\003\023\033\104\151\147\151
\103\145\162\164\040\101\163\163\165\162\145\144\040\111\104\040
\122\157\157\164\040\107\063
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\020\013\241\132\372\035\337\240\265\111\104\257\315\044\240
\154\354
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "DigiCert Global Root G2"
#
# Issuer: CN=DigiCert Global Root G2,OU=www.digicert.com,O=DigiCert Inc,C=US
# Serial Number:03:3a:f1:e6:a7:11:a9:a0:bb:28:64:b1:1d:09:fa:e5
# Subject: CN=DigiCert Global Root G2,OU=www.digicert.com,O=DigiCert Inc,C=US
# Not Valid Before: Thu Aug 01 12:00:00 2013
# Not Valid After : Fri Jan 15 12:00:00 2038
# Fingerprint (SHA-256):
```

```
CB:3C:CB:B7:60:31:E5:E0:13:8F:8D:D3:9A:23:F9:DE:47:FF:C3:5E:43:C1:14:4C:EA:27:D4:6A:5A:B1:CB:5F
# Fingerprint (SHA1): DF:3C:24:F9:BF:D6:66:76:1B:26:80:73:FE:06:D1:CC:8D:4F:82:A4
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN
CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "DigiCert Global Root G2"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\141\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\025\060\023\006\003\125\004\012\023\014\104\151\147\151\103\145
\162\164\040\111\156\143\061\031\060\027\006\003\125\004\013\023
\020\167\167\167\056\144\151\147\151\143\145\162\164\056\143\157
\155\061\040\060\036\006\003\125\004\003\023\027\104\151\147\151
\103\145\162\164\040\107\154\157\142\141\154\040\122\157\157\164
\040\107\062
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\141\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\025\060\023\006\003\125\004\012\023\014\104\151\147\151\103\145
\162\164\040\111\156\143\061\031\060\027\006\003\125\004\013\023
\020\167\167\167\056\144\151\147\151\143\145\162\164\056\143\157
\155\061\040\060\036\006\003\125\004\003\023\027\104\151\147\151
\103\145\162\164\040\107\154\157\142\141\154\040\122\157\157\164
\040\107\062
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\020\003\072\361\346\247\021\251\240\273\050\144\261\035\011
\372\345
END
CKA_VALUE MULTILINE_OCTAL
\060\202\003\216\060\202\002\166\240\003\002\001\002\002\020\003
\072\361\346\247\021\251\240\273\050\144\261\035\011\372\345\060
\015\006\011\052\206\110\206\367\015\001\001\013\005\000\060\141
\061\013\060\011\006\003\125\004\006\023\002\125\123\061\025\060
\023\006\003\125\004\012\023\014\104\151\147\151\103\145\162\164
\040\111\156\143\061\031\060\027\006\003\125\004\013\023\020\167
\167\167\056\144\151\147\151\143\145\162\164\056\143\157\155\061
\040\060\036\006\003\125\004\003\023\027\104\151\147\151\103\145
\162\164\040\107\154\157\142\141\154\040\122\157\157\164\040\107
\062\060\036\027\015\061\063\060\070\060\061\061\062\060\060\060
\060\132\027\015\063\070\060\061\061\065\061\062\060\060\060\060
\132\060\141\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\025\060\023\006\003\125\004\012\023\014\104\151\147\151\103
\145\162\164\040\111\156\143\061\031\060\027\006\003\125\004\013
```



\023\020\167\167\167\056\144\151\147\151\143\145\162\164\056\143  
\157\155\061\040\060\036\006\003\125\004\003\023\027\104\151\147  
\151\103\145\162\164\040\107\154\157\142\141\154\040\122\157\157  
\164\040\107\062\060\202\001\042\060\015\006\011\052\206\110\206  
\367\015\001\001\001\005\000\003\202\001\017\000\060\202\001\012  
\002\202\001\001\000\273\067\315\064\334\173\153\311\262\150\220  
\255\112\165\377\106\272\041\012\010\215\365\031\124\311\373\210  
\333\363\256\362\072\211\221\074\172\346\253\006\032\153\317\254  
\055\350\136\011\044\104\272\142\232\176\326\243\250\176\340\124  
\165\040\005\254\120\267\234\143\032\154\060\334\332\037\031\261  
\327\036\336\375\327\340\313\224\203\067\256\354\037\103\116\335  
\173\054\322\275\056\245\057\344\251\270\255\072\324\231\244\266  
\045\351\233\153\000\140\222\140\377\117\041\111\030\367\147\220  
\253\141\006\234\217\362\272\351\264\351\222\062\153\265\363\127  
\350\135\033\315\214\035\253\225\004\225\111\363\065\055\226\343  
\111\155\335\167\343\373\111\113\264\254\125\007\251\217\225\263  
\264\043\273\114\155\105\360\366\251\262\225\060\264\375\114\125  
\214\047\112\127\024\174\202\235\315\163\222\323\026\112\006\014  
\214\120\321\217\036\011\276\027\241\346\041\312\375\203\345\020  
\274\203\245\012\304\147\050\366\163\024\024\075\106\166\303\207  
\024\211\041\064\115\257\017\105\014\246\111\241\272\273\234\305  
\261\063\203\051\205\002\003\001\000\001\243\102\060\100\060\017  
\006\003\125\035\023\001\001\377\004\005\060\003\001\001\377\060  
\016\006\003\125\035\017\001\001\377\004\004\003\002\001\206\060  
\035\006\003\125\035\016\004\026\004\024\116\042\124\040\030\225  
\346\343\156\346\017\372\372\271\022\355\006\027\217\071\060\015  
\006\011\052\206\110\206\367\015\001\001\013\005\000\003\202\001  
\001\000\140\147\050\224\157\016\110\143\353\061\335\352\147\030  
\325\211\175\074\305\213\112\177\351\276\333\053\027\337\260\137  
\163\167\052\062\023\071\201\147\102\204\043\362\105\147\065\354  
\210\277\370\217\260\141\014\064\244\256\040\114\204\306\333\370  
\065\341\166\331\337\246\102\273\307\104\010\206\177\066\164\044  
\132\332\154\015\024\131\065\275\362\111\335\266\037\311\263\015  
\107\052\075\231\057\273\134\273\265\324\040\341\231\137\123\106  
\025\333\150\233\360\363\060\325\076\061\342\215\204\236\343\212  
\332\332\226\076\065\023\245\137\360\371\160\120\160\107\101\021  
\127\031\116\300\217\256\006\304\225\023\027\057\033\045\237\165  
\362\261\216\231\241\157\023\261\101\161\376\210\052\310\117\020  
\040\125\327\363\024\105\345\340\104\364\352\207\225\062\223\016  
\376\123\106\372\054\235\377\213\042\271\113\331\011\105\244\336  
\244\270\232\130\335\033\175\122\237\216\131\103\210\201\244\236  
\046\325\157\255\335\015\306\067\175\355\003\222\033\345\167\137  
\166\356\074\215\304\135\126\133\242\331\146\156\263\065\067\345  
\062\266

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRUST\_AFTER

```

CK_BBOOL CK_FALSE
CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

# Trust for "DigiCert Global Root G2"
# Issuer: CN=DigiCert Global Root G2,OU=www.digicert.com,O=DigiCert Inc,C=US
# Serial Number:03:3a:f1:e6:a7:11:a9:a0:bb:28:64:b1:1d:09:fa:e5
# Subject: CN=DigiCert Global Root G2,OU=www.digicert.com,O=DigiCert Inc,C=US
# Not Valid Before: Thu Aug 01 12:00:00 2013
# Not Valid After : Fri Jan 15 12:00:00 2038
# Fingerprint (SHA-256):
CB:3C:CB:B7:60:31:E5:E0:13:8F:8D:D3:9A:23:F9:DE:47:FF:C3:5E:43:C1:14:4C:EA:27:D4:6A:5A:B1:CB:5F
# Fingerprint (SHA1): DF:3C:24:F9:BF:D6:66:76:1B:26:80:73:FE:06:D1:CC:8D:4F:82:A4
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "DigiCert Global Root G2"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\337\074\044\371\277\326\146\166\033\046\200\163\376\006\321\314
\215\117\202\244
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\344\246\212\310\124\254\122\102\106\012\375\162\110\033\052\104
END
CKA_ISSUER
MULTILINE_OCTAL
\060\141\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\025\060\023\006\003\125\004\012\023\014\104\151\147\151\103\145
\162\164\040\111\156\143\061\031\060\027\006\003\125\004\013\023
\020\167\167\167\056\144\151\147\151\143\145\162\164\056\143\157
\155\061\040\060\036\006\003\125\004\003\023\027\104\151\147\151
\103\145\162\164\040\107\154\157\142\141\154\040\122\157\157\164
\040\107\062
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\020\003\072\361\346\247\021\251\240\273\050\144\261\035\011
\372\345
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "DigiCert Global Root G3"
#
# Issuer: CN=DigiCert Global Root G3,OU=www.digicert.com,O=DigiCert Inc,C=US
# Serial Number:05:55:56:bc:f2:5e:a4:35:35:c3:a4:0f:d5:ab:45:72

```

```
# Subject: CN=DigiCert Global
Root G3,OU=www.digicert.com,O=DigiCert Inc,C=US
# Not Valid Before: Thu Aug 01 12:00:00 2013
# Not Valid After : Fri Jan 15 12:00:00 2038
# Fingerprint (SHA-256):
31:AD:66:48:F8:10:41:38:C7:38:F3:9E:A4:32:01:33:39:3E:3A:18:CC:02:29:6E:F9:7C:2A:C9:EF:67:31:D0
# Fingerprint (SHA1): 7E:04:DE:89:6A:3E:66:6D:00:E6:87:D3:3F:FA:D9:3B:E8:3D:34:9E
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "DigiCert Global Root G3"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\141\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\025\060\023\006\003\125\004\012\023\014\104\151\147\151\103\145
\162\164\040\111\156\143\061\031\060\027\006\003\125\004\013\023
\020\167\167\167\056\144\151\147\151\143\145\162\164\056\143\157
\155\061\040\060\036\006\003\125\004\003\023\027\104\151\147\151
\103\145\162\164\040\107\154\157\142\141\154\040\122\157\157\164
\040\107\063
END
CKA_ID
UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\141\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\025\060\023\006\003\125\004\012\023\014\104\151\147\151\103\145
\162\164\040\111\156\143\061\031\060\027\006\003\125\004\013\023
\020\167\167\167\056\144\151\147\151\143\145\162\164\056\143\157
\155\061\040\060\036\006\003\125\004\003\023\027\104\151\147\151
\103\145\162\164\040\107\154\157\142\141\154\040\122\157\157\164
\040\107\063
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\020\005\125\126\274\362\136\244\065\065\303\244\017\325\253
\105\162
END
CKA_VALUE MULTILINE_OCTAL
\060\202\002\077\060\202\001\305\240\003\002\001\002\002\020\005
\125\126\274\362\136\244\065\065\303\244\017\325\253\105\162\060
\012\006\010\052\206\110\316\075\004\003\003\060\141\061\013\060
\011\006\003\125\004\006\023\002\125\123\061\025\060\023\006\003
\125\004\012\023\014\104\151\147\151\103\145\162\164\040\111\156
\143\061\031\060\027\006\003\125\004\013\023\020\167\167\167\056
\144\151\147\151\143\145\162\164\056\143\157\155\061\040\060\036
\006\003\125\004\003\023\027\104\151\147\151\103\145\162\164\040
\107\154\157\142\141\154\040\122\157\157\164\040\107\063\060\036
\027\015\061\063\060\070\060\061\061\062\060\060\060\060\132\027
```

\015\063\070\060\061\061\065\061\062\060\060\060\060\132\060\141  
\061\013\060\011\006\003\125\004\006\023\002\125\123\061\025\060  
\023\006\003\125\004\012\023\014\104\151\147\151\103\145\162\164  
\040\111\156\143\061\031\060\027\006\003\125\004\013\023\020\167  
\167\167\056\144\151\147\151\143\145\162\164\056\143\157\155\061  
\040\060\036\006\003\125\004\003\023\027\104\151\147\151\103\145  
\162\164\040\107\154\157\142\141\154\040\122\157\157\164\040\107  
\063\060\166\060\020\006\007\052\206\110\316\075\002\001\006\005  
\053\201\004\000\042\003\142\000\004\335\247\331\273\212\270\013  
\373\013\177\041\322\360\276\276\163\363\063\135\032\274\064\352  
\336\306\233\274\320\225\366\360\314\320\013\272\141\133\121\106  
\176\236\055\237\356\216\143\014\027\354\007\160\365\317\204\056  
\100\203\234\350\077\101\155\073\255\323\244\024\131\066\170\235  
\003\103\356\020\023\154\162\336\256\210\247\241\153\265\103\316  
\147\334\043\377\003\034\243\342\076\243\102\060\100\060\017\006  
\003\125\035\023\001\001\377\004\005\060\003\001\001\377\060\016  
\006\003\125\035\017\001\001\377\004\004\003\002\001\206\060\035  
\006\003\125\035\016\004\026\004\024\263\333\110\244\371\241\305  
\330\256\066\101\314\021\143\151\142\051\274\113\306\060\012\006  
\010\052\206\110\316\075\004\003\003\003\150\000\060\145\002\061  
\000\255\274\362\154\077\022\112\321\055\071\303\012\011\227\163  
\364\210\066\214\210\047\273\346\210\215\120\205\247\143\371\236  
\062\336\146\223\017\361\314\261\011\217\335\154\253\372\153\177  
\240\002\060\071\146\133\302\144\215\270\236\120\334\250\325\111  
\242\355\307\334\321\111\177\027\001\270\310\206\217\116\214\210  
\053\250\232\251\212\305\321\000\275\370\124\342\232\345\133\174  
\263\047\027

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER

CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "DigiCert Global Root G3"

# Issuer: CN=DigiCert Global Root G3,OU=www.digicert.com,O=DigiCert Inc,C=US

# Serial Number:05:55:56:bc:f2:5e:a4:35:35:c3:a4:0f:d5:ab:45:72

# Subject: CN=DigiCert Global Root G3,OU=www.digicert.com,O=DigiCert Inc,C=US

# Not Valid Before: Thu Aug 01 12:00:00 2013

# Not Valid After : Fri Jan 15 12:00:00 2038

# Fingerprint (SHA-256):

31:AD:66:48:F8:10:41:38:C7:38:F3:9E:A4:32:01:33:39:3E:3A:18:CC:02:29:6E:F9:7C:2A:C9:EF:67:31:D0

# Fingerprint (SHA1): 7E:04:DE:89:6A:3E:66:6D:00:E6:87:D3:3F:FA:D9:3B:E8:3D:34:9E

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "DigiCert Global Root G3"

```

CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\176\004\336\211\152\076\146\155\000\346\207\323\077\372\331\073
\350\075\064\236
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\365\135\244\120\245\373\050\176\036\017\015\314\226\127\126\312
END
CKA_ISSUER
MULTILINE_OCTAL
\060\141\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\025\060\023\006\003\125\004\012\023\014\104\151\147\151\103\145
\162\164\040\111\156\143\061\031\060\027\006\003\125\004\013\023
\020\167\167\167\056\144\151\147\151\143\145\162\164\056\143\157
\155\061\040\060\036\006\003\125\004\003\023\027\104\151\147\151
\103\145\162\164\040\107\154\157\142\141\154\040\122\157\157\164
\040\107\063
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\020\005\125\126\274\362\136\244\065\065\303\244\017\325\253
\105\162
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "DigiCert Trusted Root G4"
#
# Issuer: CN=DigiCert Trusted Root G4,OU=www.digicert.com,O=DigiCert Inc,C=US
# Serial Number:05:9b:1b:57:9e:8e:21:32:e2:39:07:bd:a7:77:75:5c
# Subject: CN=DigiCert
Trusted Root G4,OU=www.digicert.com,O=DigiCert Inc,C=US
# Not Valid Before: Thu Aug 01 12:00:00 2013
# Not Valid After : Fri Jan 15 12:00:00 2038
# Fingerprint (SHA-256):
55:2F:7B:DC:F1:A7:AF:9E:6C:E6:72:01:7F:4F:12:AB:F7:72:40:C7:8E:76:1A:C2:03:D1:D9:D2:0A:C8:99:88
# Fingerprint (SHA1): DD:FB:16:CD:49:31:C9:73:A2:03:7D:3F:C8:3A:4D:7D:77:5D:05:E4
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "DigiCert Trusted Root G4"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\142\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\025\060\023\006\003\125\004\012\023\014\104\151\147\151\103\145
\162\164\040\111\156\143\061\031\060\027\006\003\125\004\013\023

```

\020\167\167\167\056\144\151\147\151\143\145\162\164\056\143\157  
\155\061\041\060\037\006\003\125\004\003\023\030\104\151\147\151  
\103\145\162\164\040\124\162\165\163\164\145\144\040\122\157\157  
\164\040\107\064

END

CKA\_ID

UTF8 "0"

CKA\_ISSUER MULTILINE\_OCTAL

\060\142\061\013\060\011\006\003\125\004\006\023\002\125\123\061  
\025\060\023\006\003\125\004\012\023\014\104\151\147\151\103\145  
\162\164\040\111\156\143\061\031\060\027\006\003\125\004\013\023  
\020\167\167\167\056\144\151\147\151\143\145\162\164\056\143\157  
\155\061\041\060\037\006\003\125\004\003\023\030\104\151\147\151  
\103\145\162\164\040\124\162\165\163\164\145\144\040\122\157\157  
\164\040\107\064

END

CKA\_SERIAL\_NUMBER MULTILINE\_OCTAL

\002\020\005\233\033\127\236\216\041\062\342\071\007\275\247\167  
\165\134

END

CKA\_VALUE MULTILINE\_OCTAL

\060\202\005\220\060\202\003\170\240\003\002\001\002\002\020\005  
\233\033\127\236\216\041\062\342\071\007\275\247\167\165\134\060  
\015\006\011\052\206\110\206\367\015\001\001\014\005\000\060\142  
\061\013\060\011\006\003\125\004\006\023\002\125\123\061\025\060  
\023\006\003\125\004\012\023\014\104\151\147\151\103\145\162\164  
\040\111\156\143\061\031\060\027\006\003\125\004\013\023\020\167  
\167\167\056\144\151\147\151\143\145\162\164\056\143\157\155\061  
\041\060\037\006\003\125\004\003\023\030\104\151\147\151\103\145  
\162\164\040\124\162\165\163\164\145\144\040\122\157\157\164\040  
\107\064\060\036\027\015\061\063\060\070\060\061\061\065\061\062\060\060\060  
\060\060\132\027\015\063\070\060\061\061\065\061\062\060\060\060  
\060\132\060\142\061\013\060\011\006\003\125\004\006\023\002\125  
\123\061\025\060\023\006\003\125\004\012\023\014\104\151\147\151  
\103\145\162\164\040\111\156\143\061\031\060\027\006\003\125\004  
\013\023\020\167\167\167\056\144\151\147\151\143\145\162\164\056  
\143\157\155\061\041\060\037\006\003\125\004\003\023\030\104\151  
\147\151\103\145\162\164\040\124\162\165\163\164\145\144\040\122  
\157\157\164\040\107\064\060\202\002\042\060\015\006\011\052\206  
\110\206\367\015\001\001\001\005\000\003\202\002\017\000\060\202  
\002\012\002\202\002\001\000\277\346\220\163\150\336\273\344\135  
\112\074\060\042\060\151\063\354\302\247\045\056\311\041\075\362  
\212\330\131\302\341\051\247\075\130\253\166\232\315\256\173\033  
\204\015\304\060\037\363\033\244\070\026\353\126\306\227\155\035  
\253\262\171\362\312\021\322\344\137\326\005\074\122\017\122\037  
\306\236\025\245\176\276\237\251\127\026\131\125\162\257\150\223  
\160\302\262\272\165\231\152\163\062\224\321\020\104\020\056\337  
\202\363\007\204\346\164\073\155\161\342\055\014\033\356\040\325

\311\040\035\143\051\055\316\354\136\116\310\223\370\041\141\233  
\064\353\005\306\136\354\133\032\274\353\311\317\315\254\064\100  
\137\261\172\146\356\167\310\110\250\146\127\127\237\124\130\216  
\014\053\267\117\247\060\331\126\356\312\173\135\343\255\311\117  
\136\345\065\347\061\313\332\223\136\334\216\217\200\332\266\221  
\230\100\220\171\303\170\307\266\261\304\265\152\030\070\003\020  
\215\330\324\067\244\056\005\175\210\365\202\076\020\221\160\253  
\125\202\101\062\327\333\004\163\052\156\221\001\174\041\114\324  
\274\256\033\003\165\135\170\146\331\072\061\104\232\063\100\277  
\010\327\132\111\244\302\346\251\240\147\335\244\047\274\241\117  
\071\265\021\130\027\367\044\134\106\217\144\367\301\151\210\166  
\230\166\075\131\135\102\166\207\211\227\151\172\110\360\340\242  
\022\033\146\232\164\312\336\113\036\347\016\143\256\346\324\357  
\222\222\072\236\075\334\000\344\105\045\211\266\232\104\031\053  
\176\300\224\264\322\141\155\353\063\331\305\337\113\004\000\314  
\175\034\225\303\217\367\041\262\262\021\267\273\177\362\325\214  
\160\054\101\140\252\261\143\030\104\225\032\166\142\176\366\200  
\260\373\350\144\246\063\321\211\007\341\275\267\346\103\244\030  
\270\246\167\001\341\017\224\014\041\035\262\124\051\045\211\154  
\345\016\122\121\107\164\276\046\254\266\101\165\336\172\254\137  
\215\077\311\274\323\101\021\022\133\345\020\120\353\061\305\312  
\162\026\042\011\337\174\114\165\077\143\354\041\137\304\040\121  
\153\157\261\253\206\213\117\302\326\105\137\235\040\374\241\036  
\305\300\217\242\261\176\012\046\231\365\344\151\057\230\035\055  
\365\331\251\262\035\345\033\002\003\001\000\001\243\102\060\100  
\060\017\006\003\125\035\023\001\001\377\004\005\060\003\001\001  
\377\060\016\006\003\125\035\017\001\001\377\004\004\003\002\001  
\206\060\035\006\003\125\035\016\004\026\004\024\354\327\343\202  
\322\161\135\144\114\337\056\147\077\347\272\230\256\034\017\117  
\060\015\006\011\052\206\110\206\367\015\001\001\014\005\000\003  
\202\002\001\000\273\141\331\175\251\154\276\027\304\221\033\303  
\241\242\000\215\343\144\150\017\126\317\167\256\160\371\375\232  
\112\231\271\311\170\134\014\014\137\344\346\024\051\126\013\066  
\111\135\104\143\340\255\234\226\030\146\033\043\015\075\171\351  
\155\153\326\124\370\322\074\301\103\100\256\035\120\365\122\374  
\220\073\273\230\231\151\153\307\301\247\250\150\244\047\334\235  
\371\047\256\060\205\271\366\147\115\072\076\217\131\071\042\123  
\104\353\310\135\003\312\355\120\172\175\142\041\012\200\310\163  
\146\321\240\005\140\137\350\245\264\247\257\250\367\155\065\234  
\174\132\212\326\242\070\231\363\170\213\364\115\322\040\013\336  
\004\356\214\233\107\201\162\015\300\024\062\357\060\131\056\256  
\340\161\362\126\344\152\227\157\222\120\155\226\215\150\172\232  
\262\066\024\172\006\362\044\271\011\021\120\327\010\261\270\211  
\172\204\043\141\102\051\345\243\315\242\040\101\327\321\234\144  
\331\352\046\241\213\024\327\114\031\262\120\101\161\075\077\115  
\160\043\206\014\112\334\201\322\314\062\224\204\015\010\011\227  
\034\117\300\356\153\040\164\060\322\340\071\064\020\205\041\025  
\001\010\350\125\062\336\161\111\331\050\027\120\115\346\276\115

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\321\165\254\320\312\373\101\270\103\245\252\323\303\005\104\117
\054\066\233\342\372\342\105\270\043\123\154\006\157\147\125\177
\106\265\114\077\156\050\132\171\046\322\244\250\142\227\322\036
\342\355\112\213\274\033\375\107\112\015\337\147\146\176\262\133
\101\320\073\344\364\073\364\004\143\351\357\302\124\000\121\240
\212\052\311\316\170\314\325\352\207\004\030\263\316\257\111\210
\257\363\222\231\266\263\346\141\017\322\205\000\347\120\032\344
\033\225\235\031\241\271\234\261\233\261\000\036\357\320\017\117
\102\154\311\012\274\356\103\372\072\161\245\310\115\046\245\065
\375\211\135\274\205\142\035\062\322\240\053\124\355\232\127\301
\333\372\020\317\031\267\213\112\033\217\001\266\047\225\123\350
\266\211\155\133\274\150\324\043\350\213\121\242\126\371\360\246
\200\240\326\036\263\274\017\017\123\165\051\252\352\023\167\344
\336\214\201\041\255\007\020\107\021\255\207\075\007\321\165\274
\317\363\146\176
```

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "DigiCert Trusted Root G4"

# Issuer: CN=DigiCert Trusted Root G4,OU=www.digicert.com,O=DigiCert Inc,C=US

# Serial Number:05:9b:1b:57:9e:8e:21:32:e2:39:07:bd:a7:77:75:5c

# Subject: CN=DigiCert Trusted Root G4,OU=www.digicert.com,O=DigiCert Inc,C=US

# Not Valid Before: Thu Aug 01 12:00:00 2013

# Not Valid After : Fri Jan 15 12:00:00 2038

# Fingerprint (SHA-256):

55:2F:7B:DC:F1:A7:AF:9E:6C:E6:72:01:7F:4F:12:AB:F7:72:40:C7:8E:76:1A:C2:03:D1:D9:D2:0A:C8:99:88

#

Fingerprint (SHA1): DD:FB:16:CD:49:31:C9:73:A2:03:7D:3F:C8:3A:4D:7D:77:5D:05:E4

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "DigiCert Trusted Root G4"

CKA\_CERT\_SHA1\_HASH MULTILINE\_OCTAL

```
\335\373\026\315\111\061\311\163\242\003\175\077\310\072\115\175
\167\135\005\344
```

END

CKA\_CERT\_MD5\_HASH MULTILINE\_OCTAL

```
\170\362\374\252\140\037\057\264\353\311\067\272\123\056\165\111
```

END

CKA\_ISSUER MULTILINE\_OCTAL

```
\060\142\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\025\060\023\006\003\125\004\012\023\014\104\151\147\151\103\145
\162\164\040\111\156\143\061\031\060\027\006\003\125\004\013\023
\020\167\167\167\056\144\151\147\151\143\145\162\164\056\143\157
```



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\155\061\041\060\037\006\003\125\004\003\023\030\104\151\147\151
\103\145\162\164\040\124\162\165\163\164\145\144\040\122\157\157
\164\040\107\064
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\020\005\233\033\127\236\216\041\062\342\071\007\275\247\167
\165\134
END
CKA_TRUST_SERVER_AUTH
CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "COMODO RSA Certification Authority"
#
# Issuer: CN=COMODO RSA Certification Authority,O=COMODO CA Limited,L=Salford,ST=Greater
Manchester,C=GB
# Serial Number:4c:aa:f9:ca:db:63:6f:e0:1f:f7:4e:d8:5b:03:86:9d
# Subject: CN=COMODO RSA Certification Authority,O=COMODO CA Limited,L=Salford,ST=Greater
Manchester,C=GB
# Not Valid Before: Tue Jan 19 00:00:00 2010
# Not Valid After : Mon Jan 18 23:59:59 2038
# Fingerprint (SHA-256):
52:F0:E1:C4:E5:8E:C6:29:29:1B:60:31:7F:07:46:71:B8:5D:7E:A8:0D:5B:07:27:34:63:53:4B:32:B4:02:34
# Fingerprint (SHA1): AF:E5:D2:44:A8:D1:19:42:30:FF:47:9F:E2:F8:97:BB:CD:7A:8C:B4
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE
CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "COMODO RSA Certification Authority"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\201\205\061\013\060\011\006\003\125\004\006\023\002\107\102
\061\033\060\031\006\003\125\004\010\023\022\107\162\145\141\164
\145\162\040\115\141\156\143\150\145\163\164\145\162\061\020\060
\016\006\003\125\004\007\023\007\123\141\154\146\157\162\144\061
\032\060\030\006\003\125\004\012\023\021\103\117\115\117\104\117
\040\103\101\040\114\151\155\151\164\145\144\061\053\060\051\006
\003\125\004\003\023\042\103\117\115\117\104\117\040\122\123\101
\040\103\145\162\164\151\146\151\143\141\164\151\157\156\040\101
\165\164\150\157\162\151\164\171
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\201\205\061\013\060\011\006\003\125\004\006\023\002\107\102

```

\061\033\060\031\006\003\125\004\010\023\022\107\162\145\141\164  
\145\162\040\115\141\156\143\150\145\163\164\145\162\061\020\060  
\016\006\003\125\004\007\023\007\123\141\154\146\157\162\144\061  
\032\060\030\006\003\125\004\012\023\021\103\117\115\117\104\117  
\040\103\101\040\114\151\155\151\164\145\144\061\053\060\051\006  
\003\125\004\003\023\042\103\117\115\117\104\117\040\122\123\101  
\040\103\145\162\164\151\146\151\143\141\164\151\157\156\040\101  
\165\164\150\157\162\151\164\171

END

CKA\_SERIAL\_NUMBER

MULTILINE\_OCTAL

\002\020\114\252\371\312\333\143\157\340\037\367\116\330\133\003  
\206\235

END

CKA\_VALUE MULTILINE\_OCTAL

\060\202\005\330\060\202\003\300\240\003\002\001\002\002\020\114  
\252\371\312\333\143\157\340\037\367\116\330\133\003\206\235\060  
\015\006\011\052\206\110\206\367\015\001\001\014\005\000\060\201  
\205\061\013\060\011\006\003\125\004\006\023\002\107\102\061\033  
\060\031\006\003\125\004\010\023\022\107\162\145\141\164\145\162  
\040\115\141\156\143\150\145\163\164\145\162\061\020\060\016\006  
\003\125\004\007\023\007\123\141\154\146\157\162\144\061\032\060  
\030\006\003\125\004\012\023\021\103\117\115\117\104\117\040\103  
\101\040\114\151\155\151\164\145\144\061\053\060\051\006\003\125  
\004\003\023\042\103\117\115\117\104\117\040\122\123\101\040\103  
\145\162\164\151\146\151\143\141\164\151\157\156\040\101\165\164  
\150\157\162\151\164\171\060\036\027\015\061\060\060\061\061\071  
\060\060\060\060\060\060\132\027\015\063\070\060\061\061\070\062  
\063\065\071\065\071\132\060\201\205\061\013\060\011\006\003\125  
\004\006\023\002\107\102\061\033\060\031\006\003\125\004\010\023  
\022\107\162\145\141\164\145\162\040\115\141\156\143\150\145\163  
\164\145\162\061\020\060\016\006\003\125\004\007\023\007\123\141  
\154\146\157\162\144\061\032\060\030\006\003\125\004\012\023\021  
\103\117\115\117\104\117\040\103\101\040\114\151\155\151\164\145  
\144\061\053\060\051\006\003\125\004\003\023\042\103\117\115\117  
\104\117\040\122\123\101\040\103\145\162\164\151\146\151\143\141  
\164\151\157\156\040\101\165\164\150\157\162\151\164\171\060\202  
\002\042\060\015\006\011\052\206\110\206\367\015\001\001\001\005  
\000\003\202\002\017\000\060\202\002\012\002\202\002\001\000\221  
\350\124\222\322\012\126\261\254\015\044\335\305\317\104\147\164  
\231\053\067\243\175\043\160\000\161\274\123\337\304\372\052\022  
\217\113\177\020\126\275\237\160\162\267\141\177\311\113\017\027  
\247\075\343\260\004\141\356\377\021\227\307\364\206\076\012\372  
\076\134\371\223\346\064\172\331\024\153\347\234\263\205\240\202  
\172\166\257\161\220\327\354\375\015\372\234\154\372\337\260\202  
\364\024\176\371\276\304\246\057\117\177\231\177\265\374\147\103  
\162\275\014\000\326\211\353\153\054\323\355\217\230\034\024\253  
\176\345\343\156\374\330\250\344\222\044\332\103\153\142\270\125

\375\352\301\274\154\266\213\363\016\215\232\344\233\154\151\231  
\370\170\110\060\105\325\255\341\015\074\105\140\374\062\226\121  
\047\274\147\303\312\056\266\153\352\106\307\307\040\240\261\037  
\145\336\110\010\272\244\116\251\362\203\106\067\204\353\350\314  
\201\110\103\147\116\162\052\233\134\275\114\033\050\212\134\042  
\173\264\253\230\331\356\340\121\203\303\011\106\116\155\076\231  
\372\225\027\332\174\063\127\101\074\215\121\355\013\266\134\257  
\054\143\032\337\127\310\077\274\351\135\304\233\257\105\231\342  
\243\132\044\264\272\251\126\075\317\157\252\377\111\130\276\360  
\250\377\364\270\255\351\067\373\272\270\364\013\072\371\350\103  
\102\036\211\330\204\313\023\361\331\273\341\211\140\270\214\050  
\126\254\024\035\234\012\347\161\353\317\016\335\075\251\226\241  
\110\275\074\367\257\265\015\042\114\300\021\201\354\126\073\366  
\323\242\342\133\267\262\004\042\122\225\200\223\151\350\216\114  
\145\361\221\003\055\160\164\002\352\213\147\025\051\151\122\002  
\273\327\337\120\152\125\106\277\240\243\050\141\177\160\320\303  
\242\252\054\041\252\107\316\050\234\006\105\166\277\202\030\047  
\264\325\256\264\313\120\346\153\364\114\206\161\060\351\246\337  
\026\206\340\330\377\100\335\373\320\102\210\177\243\063\072\056  
\134\036\101\021\201\143\316\030\161\153\053\354\246\212\267\061  
\134\072\152\107\340\303\171\131\326\040\032\257\362\152\230\252  
\162\274\127\112\322\113\235\273\020\374\260\114\101\345\355\035  
\075\136\050\235\234\314\277\263\121\332\247\107\345\204\123\002  
\003\001\000\001\243\102\060\100\060\035\006\003\125\035\016\004  
\026\004\024\273\257\176\002\075\372\246\361\074\204\216\255\356  
\070\230\354\331\062\062\324\060\016\006\003\125\035\017\001\001  
\377\004\004\003\002\001\006\060\017\006\003\125\035\023\001\001  
\377\004\005\060\003\001\001\377\060\015\006\011\052\206\110\206  
\367\015\001\001\014\005\000\003\202\002\001\000\012\361\325\106  
\204\267\256\121\273\154\262\115\101\024\000\223\114\234\313\345  
\300\124\317\240\045\216\002\371\375\260\242\015\365\040\230\074  
\023\055\254\126\242\260\326\176\021\222\351\056\272\236\056\232  
\162\261\275\031\104\154\141\065\242\232\264\026\022\151\132\214  
\341\327\076\244\032\350\057\003\364\256\141\035\020\033\052\244  
\213\172\305\376\005\246\341\300\326\310\376\236\256\217\053\272  
\075\231\370\330\163\011\130\106\156\246\234\364\327\047\323\225  
\332\067\203\162\034\323\163\340\242\107\231\003\070\135\325\111  
\171\000\051\034\307\354\233\040\034\007\044\151\127\170\262\071  
\374\072\204\240\265\234\174\215\277\056\223\142\047\267\071\332  
\027\030\256\275\074\011\150\377\204\233\074\325\326\013\003\343  
\127\236\024\367\321\353\117\310\275\207\043\267\266\111\103\171  
\205\134\272\353\222\013\241\306\350\150\250\114\026\261\032\231  
\012\350\123\054\222\273\241\011\030\165\014\145\250\173\313\043  
\267\032\302\050\205\303\033\377\320\053\142\357\244\173\011\221  
\230\147\214\024\001\315\150\006\152\143\041\165\003\200\210\212  
\156\201\306\205\362\251\244\055\347\364\245\044\020\107\203\312  
\315\364\215\171\130\261\006\233\347\032\052\331\235\001\327\224  
\175\355\003\112\312\360\333\350\251\001\076\365\126\231\311\036

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\216\111\075\273\345\011\271\340\117\111\222\075\026\202\100\314
\314\131\306\346\072\355\022\056\151\074\154\225\261\375\252\035
\173\177\206\276\036\016\062\106\373\373\023\217\165\177\114\213
\113\106\143\376\000\064\100\160\301\303\271\241\335\246\160\342
\004\263\101\274\351\200\221\352\144\234\172\341\042\003\251\234
\156\157\016\145\117\154\207\207\136\363\156\240\371\165\245\233
\100\350\123\262\047\235\112\271\300\167\041\215\377\207\362\336
\274\214\357\027\337\267\111\013\321\362\156\060\013\032\016\116
\166\355\021\374\365\351\126\262\175\277\307\155\012\223\214\245
\320\300\266\035\276\072\116\224\242\327\156\154\013\302\212\174
\372\040\363\304\344\345\315\015\250\313\221\222\261\174\205\354
\265\024\151\146\016\202\347\315\316\310\055\246\121\177\041\301
\065\123\205\006\112\135\237\255\273\033\137\164
```

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRUST\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRUST\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "COMODO RSA Certification Authority"

# Issuer: CN=COMODO RSA Certification Authority,O=COMODO CA Limited,L=Salford,ST=Greater Manchester,C=GB

# Serial Number:4c:aa:f9:ca:db:63:6f:e0:1f:f7:4e:d8:5b:03:86:9d

# Subject: CN=COMODO RSA Certification Authority,O=COMODO CA Limited,L=Salford,ST=Greater Manchester,C=GB

# Not Valid Before: Tue Jan 19 00:00:00 2010

# Not Valid After : Mon Jan 18 23:59:59 2038

# Fingerprint (SHA-256):

52:F0:E1:C4:E5:8E:C6:29:29:1B:60:31:7F:07:46:71:B8:5D:7E:A8:0D:5B:07:27:34:63:53:4B:32:B4:02:34

# Fingerprint (SHA1): AF:E5:D2:44:A8:D1:19:42:30:FF:47:9F:E2:F8:97:BB:CD:7A:8C:B4

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "COMODO RSA Certification Authority"

CKA\_CERT\_SHA1\_HASH MULTILINE\_OCTAL

```
\257\345\322\104\250\321\031\102\060\377\107\237\342\370\227\273
\315\172\214\264
```

END

CKA\_CERT\_MD5\_HASH MULTILINE\_OCTAL

```
\033\061\260\161\100\066\314\024\066\221\255\304\076\375\354\030
```

END

CKA\_ISSUER MULTILINE\_OCTAL

```
\060\201\205\061\013\060\011\006\003\125\004\006\023\002\107\102
\061\033\060\031\006\003\125\004\010\023\022\107\162\145\141\164
\145\162\040\115\141\156\143\150\145\163\164\145\162\061\020\060
\016\006\003\125\004\007\023\007\123\141\154\146\157\162\144\061
\032\060\030\006\003\125\004\012\023\021\103\117\115\117\104\117
```

```
\040\103\101\040\114\151\155\151\164\145\144\061\053\060\051\006
\003\125\004\003\023\042\103\117\115\117\104\117\040\122\123\101
\040\103\145\162\164\151\146\151\143\141\164\151\157\156\040\101
\165\164\150\157\162\151\164\171
```

END

CKA\_SERIAL\_NUMBER

MULTILINE\_OCTAL

```
\002\020\114\252\371\312\333\143\157\340\037\367\116\330\133\003
\206\235
```

END

CKA\_TRUST\_SERVER\_AUTH CK\_TRUST CKT\_NSS\_TRUSTED\_DELEGATOR

CKA\_TRUST\_EMAIL\_PROTECTION CK\_TRUST CKT\_NSS\_TRUSTED\_DELEGATOR

CKA\_TRUST\_CODE\_SIGNING CK\_TRUST CKT\_NSS\_MUST\_VERIFY\_TRUST

CKA\_TRUST\_STEP\_UP\_APPROVED CK\_BBOOL CK\_FALSE

#

# Certificate "USERTrust RSA Certification Authority"

#

# Issuer: CN=USERTrust RSA Certification Authority,O=The USERTRUST Network,L=Jersey City,ST=New Jersey,C=US

# Serial Number:01:fd:6d:30:fc:a3:ca:51:a8:1b:bc:64:0e:35:03:2d

# Subject: CN=USERTrust RSA Certification Authority,O=The USERTRUST Network,L=Jersey City,ST=New Jersey,C=US

# Not Valid Before: Mon

Feb 01 00:00:00 2010

# Not Valid After : Mon Jan 18 23:59:59 2038

# Fingerprint (SHA-256):

E7:93:C9:B0:2F:D8:AA:13:E2:1C:31:22:8A:CC:B0:81:19:64:3B:74:9C:89:89:64:B1:74:6D:46:C3:D4:CB:D2

# Fingerprint (SHA1): 2B:8F:1B:57:33:0D:BB:A2:D0:7A:6C:51:F7:0E:E9:0D:DA:B9:AD:8E

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_CERTIFICATE

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "USERTrust RSA Certification Authority"

CKA\_CERTIFICATE\_TYPE CK\_CERTIFICATE\_TYPE CKC\_X\_509

CKA\_SUBJECT MULTILINE\_OCTAL

```
\060\201\210\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\023\060\021\006\003\125\004\010\023\012\116\145\167\040\112
\145\162\163\145\171\061\024\060\022\006\003\125\004\007\023\013
\112\145\162\163\145\171\040\103\151\164\171\061\036\060\034\006
\003\125\004\012\023\025\124\150\145\040\125\123\105\122\124\122
\125\123\124\040\116\145\164\167\157\162\153\061\056\060\054\006
\003\125\004\003\023\045\125\123\105\122\124\162\165\163\164\040
\122\123\101\040\103\145\162\164\151\146\151\143\141\164\151\157
\156\040\101\165\164\150\157\162\151\164\171
```

END

CKA\_ID

UTF8 "0"

CKA\_ISSUER MULTILINE\_OCTAL

\060\201\210\061\013\060\011\006\003\125\004\006\023\002\125\123  
\061\023\060\021\006\003\125\004\010\023\012\116\145\167\040\112  
\145\162\163\145\171\061\024\060\022\006\003\125\004\007\023\013  
\112\145\162\163\145\171\040\103\151\164\171\061\036\060\034\006  
\003\125\004\012\023\025\124\150\145\040\125\123\105\122\124\122  
\125\123\124\040\116\145\164\167\157\162\153\061\056\060\054\006  
\003\125\004\003\023\045\125\123\105\122\124\162\165\163\164\040  
\122\123\101\040\103\145\162\164\151\146\151\143\141\164\151\157  
\156\040\101\165\164\150\157\162\151\164\171

END

CKA\_SERIAL\_NUMBER MULTILINE\_OCTAL

\002\020\001\375\155\060\374\243\312\121\250\033\274\144\016\065  
\003\055

END

CKA\_VALUE MULTILINE\_OCTAL

\060\202\005\336\060\202\003\306\240\003\002\001\002\002\020\001  
\375\155\060\374\243\312\121\250\033\274\144\016\065\003\055\060  
\015\006\011\052\206\110\206\367\015\001\001\014\005\000\060\201  
\210\061\013\060\011\006\003\125\004\006\023\002\125\123\061\023  
\060\021\006\003\125\004\010\023\012\116\145\167\040\112\145\162  
\163\145\171\061\024\060\022\006\003\125\004\007\023\013\112\145  
\162\163\145\171\040\103\151\164\171\061\036\060\034\006\003\125  
\004\012\023\025\124\150\145\040\125\123\105\122\124\122\125\123  
\124\040\116\145\164\167\157\162\153\061\056\060\054\006\003\125  
\004\003\023\045\125\123\105\122\124\162\165\163\164\040\122\123  
\101\040\103\145\162\164\151\146\151\143\141\164\151\157\156\040  
\101\165\164\150\157\162\151\164\171\060\036\027\015\061\060\060  
\062\060\061\060\060\060\060\060\060\132\027\015\063\070\060\061  
\061\070\062\063\065\071\065\071\132\060\201\210\061\013\060\011  
\006\003\125\004\006\023\002\125\123\061\023\060\021\006\003\125  
\004\010\023\012\116\145\167\040\112\145\162\163\145\171\061\024  
\060\022\006\003\125\004\007\023\013\112\145\162\163\145\171\040  
\103\151\164\171\061\036\060\034\006\003\125\004\012\023\025\124  
\150\145\040\125\123\105\122\124\122\125\123\124\040\116\145\164  
\167\157\162\153\061\056\060\054\006\003\125\004\003\023\045\125  
\123\105\122\124\162\165\163\164\040\122\123\101\040\103\145\162  
\164\151\146\151\143\141\164\151\157\156\040\101\165\164\150\157  
\162\151\164\171\060\202\002\042\060\015\006\011\052\206\110\206  
\367\015\001\001\001\005\000\003\202\002\017\000\060\202\002\012  
\002\202\002\001\000\200\022\145\027\066\016\303\333\010\263\320  
\254\127\015\166\355\315\047\323\114\255\120\203\141\342\252\040  
\115\011\055\144\011\334\316\211\237\314\075\251\354\366\317\301  
\334\361\323\261\326\173\067\050\021\053\107\332\071\306\274\072  
\031\264\137\246\275\175\235\243\143\102\266\166\362\251\073\053  
\221\370\342\157\320\354\026\040\220\011\076\342\350\164\311\030  
\264\221\324\142\144\333\177\243\006\361\210\030\152\220\042\074

\274\376\023\360\207\024\173\366\344\037\216\324\344\121\306\021  
\147\106\010\121\313\206\024\124\077\274\063\376\176\154\234\377  
\026\235\030\275\121\216\065\246\247\146\310\162\147\333\041\146  
\261\324\233\170\003\300\120\072\350\314\360\334\274\236\114\376  
\257\005\226\065\037\127\132\267\377\316\371\075\267\054\266\366  
\124\335\310\347\022\072\115\256\114\212\267\134\232\264\267\040  
\075\312\177\042\064\256\176\073\150\146\001\104\347\001\116\106  
\123\233\063\140\367\224\276\123\067\220\163\103\363\062\303\123  
\357\333\252\376\164\116\151\307\153\214\140\223\336\304\307\014  
\337\341\062\256\314\223\073\121\170\225\147\213\356\075\126\376  
\014\320\151\017\033\017\363\045\046\153\063\155\367\156\107\372  
\163\103\345\176\016\245\146\261\051\174\062\204\143\125\211\304  
\015\301\223\124\060\031\023\254\323\175\067\247\353\135\072\154  
\065\134\333\101\327\022\332\251\111\013\337\330\200\212\011\223  
\142\216\265\146\317\045\210\315\204\270\261\077\244\071\017\331  
\002\236\353\022\114\225\174\363\153\005\251\136\026\203\314\270  
\147\342\350\023\235\314\133\202\323\114\263\355\133\377\336\345  
\163\254\043\073\055\000\277\065\125\164\011\111\330\111\130\032  
\177\222\066\346\121\222\016\363\046\175\034\115\027\274\311\354  
\103\046\320\277\101\137\100\251\104\104\364\231\347\127\207\236  
\120\037\127\124\250\076\375\164\143\057\261\120\145\011\346\130  
\102\056\103\032\114\264\360\045\107\131\372\004\036\223\324\046  
\106\112\120\201\262\336\276\170\267\374\147\025\341\311\127\204  
\036\017\143\326\351\142\272\326\137\125\056\352\134\306\050\010  
\004\045\071\270\016\053\251\362\114\227\034\007\077\015\122\365  
\355\357\057\202\017\002\003\001\000\001\243\102\060\100\060\035  
\006\003\125\035\016\004\026\004\024\123\171\277\132\252\053\112  
\317\124\200\341\330\233\300\235\362\262\003\146\313\060\016\006  
\003\125\035\017\001\001\377\004\004\003\002\001\006\060\017\006  
\003\125\035\023\001\001\377\004\005\060\003\001\001\377\060\015  
\006\011\052\206\110\206\367\015\001\001\014\005\000\003\202\002  
\001\000\134\324\174\015\317\367\001\175\101\231\145\014\163\305  
\122\237\313\370\317\231\006\177\033\332\103\025\237\236\002\125  
\127\226\024\361\122\074\047\207\224\050\355\037\072\001\067\242  
\166\374\123\120\300\204\233\306\153\116\272\214\041\117\242\216  
\125\142\221\363\151\025\330\274\210\343\304\252\013\375\357\250  
\351\113\125\052\006\040\155\125\170\051\031\356\137\060\134\113  
\044\021\125\377\044\232\156\136\052\053\356\013\115\237\177\367  
\001\070\224\024\225\103\007\011\373\140\251\356\034\253\022\214  
\240\232\136\247\230\152\131\155\213\077\010\373\310\321\105\257  
\030\025\144\220\022\017\163\050\056\305\342\044\116\374\130\354  
\360\364\105\376\042\263\353\057\216\322\331\105\141\005\301\227  
\157\250\166\162\217\213\214\066\257\277\015\005\316\161\215\346  
\246\157\037\154\246\161\142\305\330\320\203\162\014\361\147\021  
\211\014\234\023\114\162\064\337\274\325\161\337\252\161\335\341  
\271\154\214\074\022\135\145\332\275\127\022\266\103\153\377\345  
\336\115\146\021\121\317\231\256\354\027\266\350\161\221\214\336  
\111\376\335\065\161\242\025\047\224\034\317\141\343\046\273\157

```
\243\147\045\041\135\346\335\035\013\056\150\033\073\202\257\354
\203\147\205\324\230\121\164\261\271\231\200\211\377\177\170\031
\134\171\112\140\056\222\100\256\114\067\052\054\311\307\142\310
\016\135\367\066\133\312\340\045\045\001\264\335\032\007\234\167
\000\077\320\334\325\354\075\324\372\273\077\314\205\326\157\177
\251\055\337\271\002\367\365\227\232\265\065\332\303\147\260\207
\112\251\050\236\043\216\377\134\047\153\341\260\117\363\007\356
\000\056\324\131\207\313\122\101\225\352\364\107\327\356\144\101
\125\174\215\131\002\225\335\142\235\302\271\356\132\050\164\204
\245\233\267\220\307\014\007\337\365\211\066\164\062\326\050\301
\260\260\013\340\234\114\303\034\326\374\343\151\265\107\106\201
\057\242\202\253\323\143\104\160\304\215\377\055\063\272\255\217
\173\265\160\210\256\076\031\317\100\050\330\374\310\220\273\135
\231\042\365\122\346\130\305\037\210\061\103\356\210\035\327\306
\216\074\103\152\035\247\030\336\175\075\026\361\142\371\312\220
\250\375
```

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "USERTrust RSA Certification Authority"

# Issuer: CN=USERTrust RSA Certification Authority,O=The USERTRUST Network,L=Jersey City,ST=New Jersey,C=US

# Serial Number:01:fd:6d:30:fc:a3:ca:51:a8:1b:bc:64:0e:35:03:2d

# Subject: CN=USERTrust RSA Certification Authority,O=The USERTRUST Network,L=Jersey City,ST=New Jersey,C=US

# Not Valid Before: Mon Feb 01 00:00:00 2010

# Not Valid After : Mon Jan 18 23:59:59 2038

# Fingerprint (SHA-256):

E7:93:C9:B0:2F:D8:AA:13:E2:1C:31:22:8A:CC:B0:81:19:64:3B:74:9C:89:89:64:B1:74:6D:46:C3:D4:CB:D2

# Fingerprint (SHA1): 2B:8F:1B:57:33:0D:BB:A2:D0:7A:6C:51:F7:0E:E9:0D:DA:B9:AD:8E

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "USERTrust RSA Certification Authority"

CKA\_CERT\_SHA1\_HASH MULTILINE\_OCTAL

```
\053\217\033\127\063\015\273\242\320\172\154\121\367\016\351\015
\332\271\255\216
```

END

CKA\_CERT\_MD5\_HASH

MULTILINE\_OCTAL

```
\033\376\151\321\221\267\031\063\243\162\250\017\341\125\345\265
```

END

CKA\_ISSUER MULTILINE\_OCTAL

```
\060\201\210\061\013\060\011\006\003\125\004\006\023\002\125\123
```



```
\061\023\060\021\006\003\125\004\010\023\012\116\145\167\040\112
\145\162\163\145\171\061\024\060\022\006\003\125\004\007\023\013
\112\145\162\163\145\171\040\103\151\164\171\061\036\060\034\006
\003\125\004\012\023\025\124\150\145\040\125\123\105\122\124\122
\125\123\124\040\116\145\164\167\157\162\153\061\056\060\054\006
\003\125\004\003\023\045\125\123\105\122\124\162\165\163\164\040
\122\123\101\040\103\145\162\164\151\146\151\143\141\164\151\157
\156\040\101\165\164\150\157\162\151\164\171
```

END

CKA\_SERIAL\_NUMBER MULTILINE\_OCTAL

```
\002\020\001\375\155\060\374\243\312\121\250\033\274\144\016\065
\003\055
```

END

CKA\_TRUST\_SERVER\_AUTH CK\_TRUST CKT\_NSS\_TRUSTED\_DELEGATOR

CKA\_TRUST\_EMAIL\_PROTECTION CK\_TRUST CKT\_NSS\_TRUSTED\_DELEGATOR

CKA\_TRUST\_CODE\_SIGNING

CK\_TRUST CKT\_NSS\_MUST\_VERIFY\_TRUST

CKA\_TRUST\_STEP\_UP\_APPROVED CK\_BBOOL CK\_FALSE

#

# Certificate "USERTrust ECC Certification Authority"

#

# Issuer: CN=USERTrust ECC Certification Authority,O=The USERTRUST Network,L=Jersey City,ST=New Jersey,C=US

# Serial Number:5c:8b:99:c5:5a:94:c5:d2:71:56:de:cd:89:80:cc:26

# Subject: CN=USERTrust ECC Certification Authority,O=The USERTRUST Network,L=Jersey City,ST=New Jersey,C=US

# Not Valid Before: Mon Feb 01 00:00:00 2010

# Not Valid After : Mon Jan 18 23:59:59 2038

# Fingerprint (SHA-256):

4F:F4:60:D5:4B:9C:86:DA:BF:BC:FC:57:12:E0:40:0D:2B:ED:3F:BC:4D:4F:BD:AA:86:E0:6A:DC:D2:A9:AD:7A

# Fingerprint (SHA1): D1:CB:CA:5D:B2:D5:2A:7F:69:3B:67:4D:E5:F0:5A:1D:0C:95:7D:F0

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_CERTIFICATE

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "USERTrust ECC Certification Authority"

CKA\_CERTIFICATE\_TYPE CK\_CERTIFICATE\_TYPE CKC\_X\_509

CKA\_SUBJECT MULTILINE\_OCTAL

```
\060\201\210\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\023\060\021\006\003\125\004\010\023\012\116\145\167\040\112
\145\162\163\145\171\061\024\060\022\006\003\125\004\007\023\013
\112\145\162\163\145\171\040\103\151\164\171\061\036\060\034\006
\003\125\004\012\023\025\124\150\145\040\125\123\105\122\124\122
\125\123\124\040\116\145\164\167\157\162\153\061\056\060\054\006
\003\125\004\003\023\045\125\123\105\122\124\162\165\163\164\040
\105\103\103\040\103\145\162\164\151\146\151\143\141\164\151\157
\156\040\101\165\164\150\157\162\151\164\171
```

END

CKA\_ID

UTF8 "0"

CKA\_ISSUER MULTILINE\_OCTAL

\060\201\210\061\013\060\011\006\003\125\004\006\023\002\125\123  
\061\023\060\021\006\003\125\004\010\023\012\116\145\167\040\112  
\145\162\163\145\171\061\024\060\022\006\003\125\004\007\023\013  
\112\145\162\163\145\171\040\103\151\164\171\061\036\060\034\006  
\003\125\004\012\023\025\124\150\145\040\125\123\105\122\124\122  
\125\123\124\040\116\145\164\167\157\162\153\061\056\060\054\006  
\003\125\004\003\023\045\125\123\105\122\124\162\165\163\164\040  
\105\103\103\040\103\145\162\164\151\146\151\143\141\164\151\157  
\156\040\101\165\164\150\157\162\151\164\171

END

CKA\_SERIAL\_NUMBER

MULTILINE\_OCTAL

\002\020\134\213\231\305\132\224\305\322\161\126\336\315\211\200  
\314\046

END

CKA\_VALUE MULTILINE\_OCTAL

\060\202\002\217\060\202\002\025\240\003\002\001\002\002\020\134  
\213\231\305\132\224\305\322\161\126\336\315\211\200\314\046\060  
\012\006\010\052\206\110\316\075\004\003\003\060\201\210\061\013  
\060\011\006\003\125\004\006\023\002\125\123\061\023\060\021\006  
\003\125\004\010\023\012\116\145\167\040\112\145\162\163\145\171  
\061\024\060\022\006\003\125\004\007\023\013\112\145\162\163\145  
\171\040\103\151\164\171\061\036\060\034\006\003\125\004\012\023  
\025\124\150\145\040\125\123\105\122\124\122\125\123\124\040\116  
\145\164\167\157\162\153\061\056\060\054\006\003\125\004\003\023  
\045\125\123\105\122\124\162\165\163\164\040\105\103\103\040\103  
\145\162\164\151\146\151\143\141\164\151\157\156\040\101\165\164  
\150\157\162\151\164\171\060\036\027\015\061\060\060\062\060\061  
\060\060\060\060\060\060\132\027\015\063\070\060\061\061\070\062  
\063\065\071\065\071\132\060\201\210\061\013\060\011\006\003\125  
\004\006\023\002\125\123\061\023\060\021\006\003\125\004\010\023  
\012\116\145\167\040\112\145\162\163\145\171\061\024\060\022\006  
\003\125\004\007\023\013\112\145\162\163\145\171\040\103\151\164  
\171\061\036\060\034\006\003\125\004\012\023\025\124\150\145\040  
\125\123\105\122\124\122\125\123\124\040\116\145\164\167\157\162  
\153\061\056\060\054\006\003\125\004\003\023\045\125\123\105\122  
\124\162\165\163\164\040\105\103\103\040\103\145\162\164\151\146  
\151\143\141\164\151\157\156\040\101\165\164\150\157\162\151\164  
\171\060\166\060\020\006\007\052\206\110\316\075\002\001\006\005  
\053\201\004\000\042\003\142\000\004\032\254\124\132\251\371\150  
\043\347\172\325\044\157\123\306\132\330\113\253\306\325\266\321  
\346\163\161\256\335\234\326\014\141\375\333\240\211\003\270\005  
\024\354\127\316\356\135\077\342\041\263\316\367\324\212\171\340  
\243\203\176\055\227\320\141\304\361\231\334\045\221\143\253\177

```
\060\243\264\160\342\307\241\063\234\363\277\056\134\123\261\137
\263\175\062\177\212\064\343\171\171\243\102\060\100\060\035\006
\003\125\035\016\004\026\004\024\072\341\011\206\324\317\031\302
\226\166\164\111\166\334\340\065\306\143\143\232\060\016\006\003
\125\035\017\001\001\377\004\004\003\002\001\006\060\017\006\003
\125\035\023\001\001\377\004\005\060\003\001\001\377\060\012\006
\010\052\206\110\316\075\004\003\003\003\150\000\060\145\002\060
\066\147\241\026\010\334\344\227\000\101\035\116\276\341\143\001
\317\073\252\102\021\144\240\235\224\071\002\021\171\134\173\035
\372\144\271\356\026\102\263\277\212\302\011\304\354\344\261\115
\002\061\000\351\052\141\107\214\122\112\113\116\030\160\366\326
\104\326\156\365\203\272\155\130\275\044\331\126\110\352\357\304
\242\106\201\210\152\072\106\321\251\233\115\311\141\332\321\135
\127\152\030
```

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "USERTrust ECC Certification Authority"

# Issuer: CN=USERTrust ECC Certification Authority,O=The USERTRUST Network,L=Jersey City,ST=New Jersey,C=US

# Serial Number:5c:8b:99:c5:5a:94:c5:d2:71:56:de:cd:89:80:cc:26

# Subject: CN=USERTrust ECC Certification Authority,O=The USERTRUST Network,L=Jersey City,ST=New Jersey,C=US

# Not Valid Before: Mon Feb 01 00:00:00 2010

# Not Valid After : Mon Jan 18 23:59:59 2038

# Fingerprint (SHA-256):

4F:F4:60:D5:4B:9C:86:DA:BF:BC:FC:57:12:E0:40:0D:2B:ED:3F:BC:4D:4F:BD:AA:86:E0:6A:DC:D2:A9:AD:7A

# Fingerprint (SHA1): D1:CB:CA:5D:B2:D5:2A:7F:69:3B:67:4D:E5:F0:5A:1D:0C:95:7D:F0

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "USERTrust ECC Certification Authority"

CKA\_CERT\_SHA1\_HASH MULTILINE\_OCTAL

```
\321\313\312\135\262\325\052\177\151\073\147\115\345\360\132\035
\014\225\175\360
```

END

CKA\_CERT\_MD5\_HASH

MULTILINE\_OCTAL

```
\372\150\274\331\265\177\255\375\311\035\006\203\050\314\044\301
```

END

CKA\_ISSUER MULTILINE\_OCTAL

```
\060\201\210\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\023\060\021\006\003\125\004\010\023\012\116\145\167\040\112
\145\162\163\145\171\061\024\060\022\006\003\125\004\007\023\013
```

```
\112\145\162\163\145\171\040\103\151\164\171\061\036\060\034\006
\003\125\004\012\023\025\124\150\145\040\125\123\105\122\124\122
\125\123\124\040\116\145\164\167\157\162\153\061\056\060\054\006
\003\125\004\003\023\045\125\123\105\122\124\162\165\163\164\040
\105\103\103\040\103\145\162\164\151\146\151\143\141\164\151\157
\156\040\101\165\164\150\157\162\151\164\171
```

END

CKA\_SERIAL\_NUMBER MULTILINE\_OCTAL

```
\002\020\134\213\231\305\132\224\305\322\161\126\336\315\211\200
\314\046
```

END

CKA\_TRUST\_SERVER\_AUTH CK\_TRUST CKT\_NSS\_TRUSTED\_DELEGATOR

CKA\_TRUST\_EMAIL\_PROTECTION CK\_TRUST CKT\_NSS\_TRUSTED\_DELEGATOR

CKA\_TRUST\_CODE\_SIGNING

CK\_TRUST CKT\_NSS\_MUST\_VERIFY\_TRUST

CKA\_TRUST\_STEP\_UP\_APPROVED CK\_BBOOL CK\_FALSE

#

# Certificate "GlobalSign ECC Root CA - R5"

#

# Issuer: CN=GlobalSign,O=GlobalSign,OU=GlobalSign ECC Root CA - R5

# Serial Number:60:59:49:e0:26:2e:bb:55:f9:0a:77:8a:71:f9:4a:d8:6c

# Subject: CN=GlobalSign,O=GlobalSign,OU=GlobalSign ECC Root CA - R5

# Not Valid Before: Tue Nov 13 00:00:00 2012

# Not Valid After : Tue Jan 19 03:14:07 2038

# Fingerprint (SHA-256):

17:9F:BC:14:8A:3D:D0:0F:D2:4E:A1:34:58:CC:43:BF:A7:F5:9C:81:82:D7:83:A5:13:F6:EB:EC:10:0C:89:24

# Fingerprint (SHA1): 1F:24:C6:30:CD:A4:18:EF:20:69:FF:AD:4F:DD:5F:46:3A:1B:69:AA

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_CERTIFICATE

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "GlobalSign ECC Root CA - R5"

CKA\_CERTIFICATE\_TYPE CK\_CERTIFICATE\_TYPE CKC\_X\_509

CKA\_SUBJECT MULTILINE\_OCTAL

```
\060\120\061\044\060\042\006\003\125\004\013\023\033\107\154\157
\142\141\154\123\151\147\156\040\105\103\103\040\122\157\157\164
\040\103\101\040\055\040\122\065\061\023\060\021\006\003\125\004
\012\023\012\107\154\157\142\141\154\123\151\147\156\061\023\060
\021\006\003\125\004\003\023\012\107\154\157\142\141\154\123\151
\147\156
```

END

CKA\_ID

UTF8 "0"

CKA\_ISSUER MULTILINE\_OCTAL

```
\060\120\061\044\060\042\006\003\125\004\013\023\033\107\154\157
\142\141\154\123\151\147\156\040\105\103\103\040\122\157\157\164
\040\103\101\040\055\040\122\065\061\023\060\021\006\003\125\004
```

\012\023\012\107\154\157\142\141\154\123\151\147\156\061\023\060  
\021\006\003\125\004\003\023\012\107\154\157\142\141\154\123\151  
\147\156

END

CKA\_SERIAL\_NUMBER MULTILINE\_OCTAL

\002\021\140\131\111\340\046\056\273\125\371\012\167\212\161\371  
\112\330\154

END

CKA\_VALUE MULTILINE\_OCTAL

\060\202\002\036\060\202\001\244\240\003\002\001\002\002\021\140  
\131\111\340\046\056\273\125\371\012\167\212\161\371\112\330\154  
\060\012\006\010\052\206\110\316\075\004\003\003\060\120\061\044  
\060\042\006\003\125\004\013\023\033\107\154\157\142\141\154\123  
\151\147\156\040\105\103\103\040\122\157\157\164\040\103\101\040  
\055\040\122\065\061\023\060\021\006\003\125\004\012\023\012\107  
\154\157\142\141\154\123\151\147\156\061\023\060\021\006\003\125  
\004\003\023\012\107\154\157\142\141\154\123\151\147\156\060\036  
\027\015\061\062\061\061\061\063\060\060\060\060\060\060\132\027  
\015\063\070\060\061\061\071\060\063\061\064\060\067\132\060\120  
\061\044\060\042\006\003\125\004\013\023\033\107\154\157\142\141  
\154\123\151\147\156\040\105\103\103\040\122\157\157\164\040\103  
\101\040\055\040\122\065\061\023\060\021\006\003\125\004\012\023  
\012\107\154\157\142\141\154\123\151\147\156\061\023\060\021\006  
\003\125\004\003\023\012\107\154\157\142\141\154\123\151\147\156  
\060\166\060\020\006\007\052\206\110\316\075\002\001\006\005\053  
\201\004\000\042\003\142\000\004\107\105\016\226\373\175\135\277  
\351\071\321\041\370\237\013\266\325\173\036\222\072\110\131\034  
\360\142\061\055\300\172\050\376\032\247\134\263\266\314\227\347  
\105\324\130\372\321\167\155\103\242\300\207\145\064\012\037\172  
\335\353\074\063\241\305\235\115\244\157\101\225\070\177\311\036  
\204\353\321\236\111\222\207\224\207\014\072\205\112\146\237\235  
\131\223\115\227\141\006\206\112\243\102\060\100\060\016\006\003  
\125\035\017\001\001\377\004\004\003\002\001\006\060\017\006\003  
\125\035\023\001\001\377\004\005\060\003\001\001\377\060\035\006  
\003\125\035\016\004\026\004\024\075\346\051\110\233\352\007\312  
\041\104\112\046\336\156\336\322\203\320\237\131\060\012\006\010  
\052\206\110\316\075\004\003\003\003\150\000\060\145\002\061\000  
\345\151\022\311\156\333\306\061\272\011\101\341\227\370\373\375  
\232\342\175\022\311\355\174\144\323\313\005\045\213\126\331\240  
\347\136\135\116\013\203\234\133\166\051\240\011\046\041\152\142  
\002\060\161\322\265\217\134\352\073\341\170\011\205\250\165\222  
\073\310\134\375\110\357\015\164\042\250\010\342\156\305\111\316  
\307\014\274\247\141\151\361\367\073\341\052\313\371\053\363\146  
\220\067

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "GlobalSign ECC Root CA - R5"

# Issuer: CN=GlobalSign,O=GlobalSign,OU=GlobalSign ECC Root CA - R5

# Serial Number:60:59:49:e0:26:2e:bb:55:f9:0a:77:8a:71:f9:4a:d8:6c

# Subject: CN=GlobalSign,O=GlobalSign,OU=GlobalSign ECC Root CA - R5

# Not Valid Before: Tue Nov 13 00:00:00 2012

# Not Valid After : Tue Jan 19 03:14:07 2038

# Fingerprint (SHA-256):

17:9F:BC:14:8A:3D:D0:0F:D2:4E:A1:34:58:CC:43:BF:A7:F5:9C:81:82:D7:83:A5:13:F6:EB:EC:10:0C:89:24

# Fingerprint (SHA1): 1F:24:C6:30:CD:A4:18:EF:20:69:FF:AD:4F:DD:5F:46:3A:1B:69:AA

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "GlobalSign ECC Root CA - R5"

CKA\_CERT\_SHA1\_HASH MULTILINE\_OCTAL

\037\044\306\060\315\244\030\357\040\151\377\255\117\335\137\106  
\072\033\151\252

END

CKA\_CERT\_MD5\_HASH MULTILINE\_OCTAL

\237\255\073\034\002\036\212\272\027\164\070\201\014\242\274\010

END

CKA\_ISSUER

MULTILINE\_OCTAL

\060\120\061\044\060\042\006\003\125\004\013\023\033\107\154\157  
\142\141\154\123\151\147\156\040\105\103\103\040\122\157\157\164  
\040\103\101\040\055\040\122\065\061\023\060\021\006\003\125\004  
\012\023\012\107\154\157\142\141\154\123\151\147\156\061\023\060  
\021\006\003\125\004\003\023\012\107\154\157\142\141\154\123\151  
\147\156

END

CKA\_SERIAL\_NUMBER MULTILINE\_OCTAL

\002\021\140\131\111\340\046\056\273\125\371\012\167\212\161\371  
\112\330\154

END

CKA\_TRUST\_SERVER\_AUTH CK\_TRUST CKT\_NSS\_TRUSTED\_DELEGATOR

CKA\_TRUST\_EMAIL\_PROTECTION CK\_TRUST CKT\_NSS\_TRUSTED\_DELEGATOR

CKA\_TRUST\_CODE\_SIGNING CK\_TRUST CKT\_NSS\_MUST\_VERIFY\_TRUST

CKA\_TRUST\_STEP\_UP\_APPROVED CK\_BBOOL CK\_FALSE

#

# Certificate "Staat der Nederlanden Root CA - G3"

#

# Issuer: CN=Staat der Nederlanden Root CA - G3,O=Staat der Nederlanden,C=NL

# Serial Number: 10003001 (0x98a239)

# Subject: CN=Staat der Nederlanden Root CA - G3,O=Staat der Nederlanden,C=NL

#

```
Not Valid Before: Thu Nov 14 11:28:42 2013
# Not Valid After : Mon Nov 13 23:00:00 2028
# Fingerprint (SHA-256):
3C:4F:B0:B9:5A:B8:B3:00:32:F4:32:B8:6F:53:5F:E1:72:C1:85:D0:FD:39:86:58:37:CF:36:18:7F:A6:F4:28
# Fingerprint (SHA1): D8:EB:6B:41:51:92:59:E0:F3:E7:85:00:C0:3D:B6:88:97:C9:EE:FC
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Staat der Nederlanden Root CA - G3"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\132\061\013\060\011\006\003\125\004\006\023\002\116\114\061
\036\060\034\006\003\125\004\012\014\025\123\164\141\141\164\040
\144\145\162\040\116\145\144\145\162\154\141\156\144\145\156\061
\053\060\051\006\003\125\004\003\014\042\123\164\141\141\164\040
\144\145\162\040\116\145\144\145\162\154\141\156\144\145\156\040
\122\157\157\164\040\103\101\040\055\040\107\063
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\132\061\013\060\011\006\003\125\004\006\023\002\116\114\061
\036\060\034\006\003\125\004\012\014\025\123\164\141\141\164\040
\144\145\162\040\116\145\144\145\162\154\141\156\144\145\156\061
\053\060\051\006\003\125\004\003\014\042\123\164\141\141\164\040
\144\145\162\040\116\145\144\145\162\154\141\156\144\145\156\040
\122\157\157\164\040\103\101\040\055\040\107\063
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\004\000\230\242\071
END
CKA_VALUE MULTILINE_OCTAL
\060\202\005\164\060\202\003\134\240\003\002\001\002\002\004\000
\230\242\071\060\015\006\011\052\206\110\206\367\015\001\001\013
\005\000\060\132\061\013\060\011\006\003\125\004\006\023\002\116
\114\061\036\060\034\006\003\125\004\012\014\025\123\164\141\141
\164\040\144\145\162\040\116\145\144\145\162\154\141\156\144\145
\156\061\053\060\051\006\003\125\004\003\014\042\123\164\141\141
\164\040\144\145\162\040\116\145\144\145\162\154\141\156\144\145
\156\040\122\157\157\164\040\103\101\040\055\040\107\063\060\036
\027\015\061\063\061\061\061\064\061\061\062\070\064\062\132\027
\015\062\070\061\061\061\063\062\063\060\060\060\060\132\060\132
\061\013\060\011\006\003\125\004\006\023\002\116\114\061\036\060
\034\006\003\125\004\012\014\025\123\164\141\141\164\040\144\145
\162\040\116\145\144\145\162\154\141\156\144\145\156\061\053\060
\051\006\003\125\004\003\014\042\123\164\141\141\164\040\144\145
\162\040\116\145\144\145\162\154\141\156\144\145\156\040\122\157
```

\157\164\040\103\101\040\055\040\107\063\060\202\002\042\060\015  
\006\011\052\206\110\206\367\015\001\001\001\005\000\003\202\002  
\017\000\060\202\002\012\002\202\002\001\000\276\062\242\124\017  
\160\373\054\134\131\353\154\304\244\121\350\205\052\263\314\112  
\064\362\260\137\363\016\307\034\075\123\036\210\010\150\330\157  
\075\255\302\236\314\202\147\007\047\207\150\161\072\237\165\226  
\042\106\005\260\355\255\307\133\236\052\336\234\374\072\306\225  
\247\365\027\147\030\347\057\111\010\014\134\317\346\314\064\355  
\170\373\120\261\334\153\062\360\242\376\266\074\344\354\132\227  
\307\077\036\160\010\060\240\334\305\263\155\157\320\202\162\021  
\253\322\201\150\131\202\027\267\170\222\140\372\314\336\077\204  
\353\215\070\063\220\012\162\043\372\065\314\046\161\061\321\162  
\050\222\331\133\043\155\146\265\155\007\102\353\246\063\316\222  
\333\300\366\154\143\170\315\312\116\075\265\345\122\233\361\276  
\073\346\124\140\260\146\036\011\253\007\376\124\211\021\102\321  
\367\044\272\140\170\032\230\367\311\021\375\026\301\065\032\124  
\165\357\103\323\345\256\116\316\347\173\303\306\116\141\121\113  
\253\232\105\113\241\037\101\275\110\123\025\161\144\013\206\263  
\345\056\276\316\244\033\301\051\204\242\265\313\010\043\166\103  
\042\044\037\027\004\324\156\234\306\374\177\053\146\032\354\212  
\345\326\317\115\365\143\011\267\025\071\326\173\254\353\343\174  
\351\116\374\165\102\310\355\130\225\014\006\102\242\234\367\344  
\160\263\337\162\157\132\067\100\211\330\205\244\327\361\013\336  
\103\031\324\112\130\054\214\212\071\236\277\204\207\361\026\073  
\066\014\351\323\264\312\154\031\101\122\011\241\035\260\152\277  
\202\357\160\121\041\062\334\005\166\214\313\367\144\344\003\120  
\257\214\221\147\253\305\362\356\130\330\336\276\367\347\061\317  
\154\311\073\161\301\325\210\265\145\274\300\350\027\027\007\022  
\265\134\322\253\040\223\264\346\202\203\160\066\305\315\243\215  
\255\213\354\243\301\103\207\346\103\342\064\276\225\213\065\355  
\007\071\332\250\035\172\237\066\236\022\260\014\145\022\220\025  
\140\331\046\100\104\343\126\140\245\020\324\152\074\375\101\334  
\016\132\107\266\357\227\141\165\117\331\376\307\262\035\324\355  
\135\111\263\251\152\313\146\204\023\325\134\240\334\337\156\167  
\006\321\161\165\310\127\157\257\017\167\133\002\003\001\000\001  
\243\102\060\100\060\017\006\003\125\035\023\001\001\377\004\005  
\060\003\001\001\377\060\016\006\003\125\035\017\001\001\377\004  
\004\003\002\001\006\060\035\006\003\125\035\016\004\026\004\024  
\124\255\372\307\222\127\256\312\065\234\056\022\373\344\272\135  
\040\334\224\127\060\015\006\011\052\206\110\206\367\015\001\001  
\013\005\000\003\202\002\001\000\060\231\235\005\062\310\136\016  
\073\230\001\072\212\244\347\007\367\172\370\347\232\337\120\103  
\123\227\052\075\312\074\107\230\056\341\025\173\361\222\363\141  
\332\220\045\026\145\300\237\124\135\016\003\073\133\167\002\234  
\204\266\015\230\137\064\335\073\143\302\303\050\201\302\234\051  
\056\051\342\310\303\001\362\063\352\052\252\314\011\010\367\145  
\147\306\315\337\323\266\053\247\275\314\321\016\160\137\270\043  
\321\313\221\116\012\364\310\172\345\331\143\066\301\324\337\374



```
\042\227\367\140\135\352\051\057\130\262\275\130\275\215\226\117
\020\165\277\110\173\075\121\207\241\074\164\042\302\374\007\177
\200\334\304\254\376\152\301\160\060\260\351\216\151\342\054\151
\201\224\011\272\335\376\115\300\203\214\224\130\300\106\040\257
\234\037\002\370\065\125\111\057\106\324\300\360\240\226\002\017
\063\305\161\363\236\043\175\224\267\375\072\323\011\203\006\041
\375\140\075\256\062\300\322\356\215\246\360\347\264\202\174\012
\314\160\311\171\200\370\376\114\367\065\204\031\212\061\373\012
\331\327\177\233\360\242\232\153\303\005\112\355\101\140\024\060
\321\252\021\102\156\323\043\002\004\013\306\145\335\335\122\167
\332\201\153\262\250\372\001\070\271\226\352\052\154\147\227\211
\224\236\274\341\124\325\344\152\170\357\112\275\053\232\075\100
\176\306\300\165\322\156\373\150\060\354\354\213\235\371\111\065
\232\032\054\331\263\225\071\325\036\222\367\246\271\145\057\345
\075\155\072\110\114\010\334\344\050\022\050\276\175\065\134\352
\340\026\176\023\033\152\327\076\327\236\374\055\165\262\301\024
\325\043\003\333\133\157\013\076\170\057\015\336\063\215\026\267
\110\347\203\232\201\017\173\301\103\115\125\004\027\070\112\121
\325\131\242\211\164\323\237\276\036\113\327\306\155\267\210\044
\157\140\221\244\202\205\133\126\101\274\320\104\253\152\023\276
\321\054\130\267\022\063\130\262\067\143\334\023\365\224\035\077
\100\121\365\117\365\072\355\310\305\353\302\036\035\026\225\172
\307\176\102\161\223\156\113\025\267\060\337\252\355\127\205\110
\254\035\152\335\071\151\344\341\171\170\276\316\005\277\241\014
\367\200\173\041\147\047\060\131
```

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRUST\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRUST\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "Staat der Nederlanden Root CA - G3"

# Issuer: CN=Staat der Nederlanden Root CA - G3,O=Staat der Nederlanden,C=NL

# Serial Number: 10003001 (0x98a239)

# Subject: CN=Staat der Nederlanden Root CA - G3,O=Staat der Nederlanden,C=NL

# Not Valid Before: Thu Nov 14 11:28:42 2013

# Not Valid After : Mon Nov 13 23:00:00 2028

# Fingerprint (SHA-256):

3C:4F:B0:B9:5A:B8:B3:00:32:F4:32:B8:6F:53:5F:E1:72:C1:85:D0:FD:39:86:58:37:CF:36:18:7F:A6:F4:28

# Fingerprint (SHA1): D8:EB:6B:41:51:92:59:E0:F3:E7:85:00:C0:3D:B6:88:97:C9:EE:FC

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "Staat der Nederlanden Root CA - G3"

CKA\_CERT\_SHA1\_HASH

MULTILINE\_OCTAL

```
\330\353\153\101\121\222\131\340\363\347\205\000\300\075\266\210
```

```

\227\311\356\374
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\013\106\147\007\333\020\057\031\214\065\120\140\321\013\364\067
END
CKA_ISSUER MULTILINE_OCTAL
\060\132\061\013\060\011\006\003\125\004\006\023\002\116\114\061
\036\060\034\006\003\125\004\012\014\025\123\164\141\141\164\040
\144\145\162\040\116\145\144\145\162\154\141\156\144\145\156\061
\053\060\051\006\003\125\004\003\014\042\123\164\141\141\164\040
\144\145\162\040\116\145\144\145\162\154\141\156\144\145\156\040
\122\157\157\164\040\103\101\040\055\040\107\063
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\004\000\230\242\071
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "IdenTrust Commercial Root CA 1"
#
# Issuer: CN=IdenTrust Commercial Root CA
1,O=IdenTrust,C=US
# Serial Number:0a:01:42:80:00:00:01:45:23:c8:44:b5:00:00:00:02
# Subject: CN=IdenTrust Commercial Root CA 1,O=IdenTrust,C=US
# Not Valid Before: Thu Jan 16 18:12:23 2014
# Not Valid After : Mon Jan 16 18:12:23 2034
# Fingerprint (SHA-256):
5D:56:49:9B:E4:D2:E0:8B:CF:CA:D0:8A:3E:38:72:3D:50:50:3B:DE:70:69:48:E4:2F:55:60:30:19:E5:28:AE
# Fingerprint (SHA1): DF:71:7E:AA:4A:D9:4E:C9:55:84:99:60:2D:48:DE:5F:BC:F0:3A:25
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "IdenTrust Commercial Root CA 1"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\112\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\022\060\020\006\003\125\004\012\023\011\111\144\145\156\124\162
\165\163\164\061\047\060\045\006\003\125\004\003\023\036\111\144
\145\156\124\162\165\163\164\040\103\157\155\155\145\162\143\151
\141\154\040\122\157\157\164\040\103\101\040\061
END
CKA_ID

```

UTF8 "0"

CKA\_ISSUER MULTILINE\_OCTAL

\060\112\061\013\060\011\006\003\125\004\006\023\002\125\123\061  
\022\060\020\006\003\125\004\012\023\011\111\144\145\156\124\162  
\165\163\164\061\047\060\045\006\003\125\004\003\023\036\111\144  
\145\156\124\162\165\163\164\040\103\157\155\155\145\162\143\151  
\141\154\040\122\157\157\164\040\103\101\040\061

END

CKA\_SERIAL\_NUMBER MULTILINE\_OCTAL

\002\020\012\001\102\200\000\000\001\105\043\310\104\265\000\000  
\000\002

END

CKA\_VALUE MULTILINE\_OCTAL

\060\202\005\140\060\202\003\110\240\003\002\001\002\002\020\012  
\001\102\200\000\000\001\105\043\310\104\265\000\000\000\002\060  
\015\006\011\052\206\110\206\367\015\001\001\013\005\000\060\112  
\061\013\060\011\006\003\125\004\006\023\002\125\123\061\022\060  
\020\006\003\125\004\012\023\011\111\144\145\156\124\162\165\163  
\164\061\047\060\045\006\003\125\004\003\023\036\111\144\145\156  
\124\162\165\163\164\040\103\157\155\155\145\162\143\151\141\154  
\040\122\157\157\164\040\103\101\040\061\060\036\027\015\061\064  
\060\061\061\066\061\070\061\062\062\063\132\027\015\063\064\060  
\061\061\066\061\070\061\062\062\063\132\060\112\061\013\060\011  
\006\003\125\004\006\023\002\125\123\061\022\060\020\006\003\125  
\004\012\023\011\111\144\145\156\124\162\165\163\164\061\047\060  
\045\006\003\125\004\003\023\036\111\144\145\156\124\162\165\163  
\164\040\103\157\155\155\145\162\143\151\141\154\040\122\157\157  
\164\040\103\101\040\061\060\202\002\042\060\015\006\011\052\206  
\110\206\367\015\001\001\001\005\000\003\202\002\017\000\060\202  
\002\012\002\202\002\001\000\247\120\031\336\077\231\075\324\063  
\106\361\157\121\141\202\262\251\117\217\147\211\135\204\331\123  
\335\014\050\331\327\360\377\256\225\103\162\231\371\265\135\174  
\212\301\102\341\061\120\164\321\201\015\174\315\233\041\253\103  
\342\254\255\136\206\156\363\011\212\037\132\062\275\242\353\224  
\371\350\134\012\354\377\230\322\257\161\263\264\123\237\116\207  
\357\222\274\275\354\117\062\060\210\113\027\136\127\304\123\302  
\366\002\227\215\331\142\053\277\044\037\142\215\337\303\270\051  
\113\111\170\074\223\140\210\042\374\231\332\066\310\302\242\324  
\054\124\000\147\065\156\163\277\002\130\360\244\335\345\260\242  
\046\172\312\340\066\245\031\026\365\375\267\357\256\077\100\365  
\155\132\004\375\316\064\312\044\334\164\043\033\135\063\023\022  
\135\304\001\045\366\060\335\002\135\237\340\325\107\275\264\353  
\033\241\273\111\111\330\237\133\002\363\212\344\044\220\344\142  
\117\117\301\257\213\016\164\027\250\321\162\210\152\172\001\111  
\314\264\106\171\306\027\261\332\230\036\007\131\372\165\041\205  
\145\335\220\126\316\373\253\245\140\235\304\235\371\122\260\213  
\275\207\371\217\053\043\012\043\166\073\367\063\341\311\000\363  
\151\371\113\242\340\116\274\176\223\071\204\007\367\104\160\176

\376\007\132\345\261\254\321\030\314\362\065\345\111\111\010\312  
\126\311\075\373\017\030\175\213\073\301\023\302\115\217\311\117  
\016\067\351\037\241\016\152\337\142\056\313\065\006\121\171\054  
\310\045\070\364\372\113\247\211\134\234\322\343\015\071\206\112  
\164\174\325\131\207\302\077\116\014\134\122\364\075\367\122\202  
\361\352\243\254\375\111\064\032\050\363\101\210\072\023\356\350  
\336\377\231\035\137\272\313\350\036\362\271\120\140\300\061\323  
\163\345\357\276\240\355\063\013\164\276\040\040\304\147\154\360  
\010\003\172\125\200\177\106\116\226\247\364\036\076\341\366\330  
\011\341\063\144\053\143\327\062\136\237\371\300\173\017\170\157  
\227\274\223\232\371\234\022\220\170\172\200\207\025\327\162\164  
\234\125\164\170\261\272\341\156\160\004\272\117\240\272\150\303  
\173\377\061\360\163\075\075\224\052\261\013\101\016\240\376\115  
\210\145\153\171\063\264\327\002\003\001\000\001\243\102\060\100  
\060\016\006\003\125\035\017\001\001\377\004\004\003\002\001\006  
\060\017\006\003\125\035\023\001\001\377\004\005\060\003\001\001  
\377\060\035\006\003\125\035\016\004\026\004\024\355\104\031\300  
\323\360\006\213\356\244\173\276\102\347\046\124\310\216\066\166  
\060\015\006\011\052\206\110\206\367\015\001\001\013\005\000\003  
\202\002\001\000\015\256\220\062\366\246\113\174\104\166\031\141  
\036\047\050\315\136\124\357\045\274\343\010\220\371\051\327\256  
\150\010\341\224\000\130\357\056\056\176\123\122\214\266\134\007  
\352\210\272\231\213\120\224\327\202\200\337\141\011\000\223\255  
\015\024\346\316\301\362\067\224\170\260\137\234\263\242\163\270  
\217\005\223\070\315\215\076\260\270\373\300\317\261\362\354\055  
\055\033\314\354\252\232\263\252\140\202\033\055\073\303\204\075  
\127\212\226\036\234\165\270\323\060\315\140\010\203\220\323\216  
\124\361\115\146\300\135\164\003\100\243\356\205\176\302\037\167  
\234\006\350\301\247\030\135\122\225\355\311\335\045\236\155\372  
\251\355\243\072\064\320\131\173\332\355\120\363\065\277\355\353  
\024\115\061\307\140\364\332\361\207\234\342\110\342\306\305\067  
\373\006\020\372\165\131\146\061\107\051\332\166\232\034\351\202  
\256\357\232\271\121\367\210\043\232\151\225\142\074\345\125\200  
\066\327\124\002\377\361\271\135\316\324\043\157\330\105\204\112  
\133\145\357\211\014\335\024\247\040\313\030\245\045\264\015\371  
\001\360\242\322\364\000\310\164\216\241\052\110\216\145\333\023  
\304\342\045\027\175\353\276\207\133\027\040\124\121\223\112\123  
\003\013\354\135\312\063\355\142\375\105\307\057\133\334\130\240  
\200\071\346\372\327\376\023\024\246\355\075\224\112\102\164\324  
\303\167\131\163\315\217\106\276\125\070\357\372\350\221\062\352  
\227\130\004\042\336\070\303\314\274\155\311\063\072\152\012\151  
\077\240\310\352\162\217\214\143\206\043\275\155\074\226\236\225  
\340\111\114\252\242\271\052\033\234\066\201\170\355\303\350\106  
\342\046\131\104\165\036\331\165\211\121\315\020\204\235\141\140  
\313\135\371\227\042\115\216\230\346\343\177\366\133\273\256\315  
\312\112\201\153\136\013\363\121\341\164\053\351\176\047\247\331  
\231\111\116\370\245\200\333\045\017\034\143\142\212\311\063\147  
\153\074\020\203\306\255\336\250\315\026\216\215\360\007\067\161

```
\237\362\253\374\101\365\301\213\354\000\067\135\011\345\116\200
\357\372\261\134\070\006\245\033\112\341\334\070\055\074\334\253
\037\220\032\325\112\234\356\321\160\154\314\356\364\127\370\030
\272\204\156\207
```

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "IdenTrust Commercial Root CA 1"

# Issuer: CN=IdenTrust Commercial Root CA 1,O=IdenTrust,C=US

# Serial Number:0a:01:42:80:00:00:01:45:23:c8:44:b5:00:00:00:02

# Subject: CN=IdenTrust Commercial Root CA 1,O=IdenTrust,C=US

# Not Valid Before: Thu Jan 16 18:12:23 2014

# Not Valid After : Mon Jan 16 18:12:23 2034

# Fingerprint (SHA-256):

5D:56:49:9B:E4:D2:E0:8B:CF:CA:D0:8A:3E:38:72:3D:50:50:3B:DE:70:69:48:E4:2F:55:60:30:19:E5:28:AE

# Fingerprint (SHA1): DF:71:7E:AA:4A:D9:4E:C9:55:84:99:60:2D:48:DE:5F:BC:F0:3A:25

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "IdenTrust Commercial Root CA 1"

CKA\_CERT\_SHA1\_HASH MULTILINE\_OCTAL

```
\337\161\176\252\112\331\116\311\125\204\231\140\055\110\336\137
\274\360\072\045
```

END

CKA\_CERT\_MD5\_HASH

MULTILINE\_OCTAL

```
\263\076\167\163\165\356\240\323\343\176\111\143\111\131\273\307
```

END

CKA\_ISSUER MULTILINE\_OCTAL

```
\060\112\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\022\060\020\006\003\125\004\012\023\011\111\144\145\156\124\162
\165\163\164\061\047\060\045\006\003\125\004\003\023\036\111\144
\145\156\124\162\165\163\164\040\103\157\155\155\145\162\143\151
\141\154\040\122\157\157\164\040\103\101\040\061
```

END

CKA\_SERIAL\_NUMBER MULTILINE\_OCTAL

```
\002\020\012\001\102\200\000\000\001\105\043\310\104\265\000\000
\000\002
```

END

CKA\_TRUST\_SERVER\_AUTH CK\_TRUST CKT\_NSS\_TRUSTED\_DELEGATOR

CKA\_TRUST\_EMAIL\_PROTECTION CK\_TRUST CKT\_NSS\_TRUSTED\_DELEGATOR

CKA\_TRUST\_CODE\_SIGNING CK\_TRUST CKT\_NSS\_MUST\_VERIFY\_TRUST

CKA\_TRUST\_STEP\_UP\_APPROVED CK\_BBOOL CK\_FALSE

```

#
# Certificate "IdenTrust Public Sector Root CA 1"
#
# Issuer: CN=IdenTrust Public Sector Root CA 1,O=IdenTrust,C=US
# Serial Number:0a:01:42:80:00:00:01:45:23:cf:46:7c:00:00:00:02
#
Subject: CN=IdenTrust Public Sector Root CA 1,O=IdenTrust,C=US
# Not Valid Before: Thu Jan 16 17:53:32 2014
# Not Valid After : Mon Jan 16 17:53:32 2034
# Fingerprint (SHA-256):
30:D0:89:5A:9A:44:8A:26:20:91:63:55:22:D1:F5:20:10:B5:86:7A:CA:E1:2C:78:EF:95:8F:D4:F4:38:9F:2F
# Fingerprint (SHA1): BA:29:41:60:77:98:3F:F4:F3:EF:F2:31:05:3B:2E:EA:6D:4D:45:FD
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "IdenTrust Public Sector Root CA 1"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\115\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\022\060\020\006\003\125\004\012\023\011\111\144\145\156\124\162
\165\163\164\061\052\060\050\006\003\125\004\003\023\041\111\144
\145\156\124\162\165\163\164\040\120\165\142\154\151\143\040\123
\145\143\164\157\162\040\122\157\157\164\040\103\101\040\061
END
CKA_ID UTF8 "0"
CKA_ISSUER
MULTILINE_OCTAL
\060\115\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\022\060\020\006\003\125\004\012\023\011\111\144\145\156\124\162
\165\163\164\061\052\060\050\006\003\125\004\003\023\041\111\144
\145\156\124\162\165\163\164\040\120\165\142\154\151\143\040\123
\145\143\164\157\162\040\122\157\157\164\040\103\101\040\061
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\020\012\001\102\200\000\000\001\105\043\317\106\174\000\000
\000\002
END
CKA_VALUE MULTILINE_OCTAL
\060\202\005\146\060\202\003\116\240\003\002\001\002\002\020\012
\001\102\200\000\000\001\105\043\317\106\174\000\000\000\002\060
\015\006\011\052\206\110\206\367\015\001\001\013\005\000\060\115
\061\013\060\011\006\003\125\004\006\023\002\125\123\061\022\060
\020\006\003\125\004\012\023\011\111\144\145\156\124\162\165\163
\164\061\052\060\050\006\003\125\004\003\023\041\111\144\145\156
\124\162\165\163\164\040\120\165\142\154\151\143\040\123\145\143
\164\157\162\040\122\157\157\164\040\103\101\040\061\060\036\027
\015\061\064\060\061\061\066\061\067\065\063\063\062\132\027\015

```

\063\064\060\061\061\066\061\067\065\063\063\062\132\060\115\061  
\013\060\011\006\003\125\004\006\023\002\125\123\061\022\060\020  
\006\003\125\004\012\023\011\111\144\145\156\124\162\165\163\164  
\061\052\060\050\006\003\125\004\003\023\041\111\144\145\156\124  
\162\165\163\164\040\120\165\142\154\151\143\040\123\145\143\164  
\157\162\040\122\157\157\164\040\103\101\040\061\060\202\002\042  
\060\015\006\011\052\206\110\206\367\015\001\001\001\005\000\003  
\202\002\017\000\060\202\002\012\002\202\002\001\000\266\042\224  
\374\244\110\257\350\107\153\012\373\047\166\344\362\077\212\073  
\172\112\054\061\052\214\215\260\251\303\061\153\250\167\166\204  
\046\266\254\201\102\015\010\353\125\130\273\172\370\274\145\175  
\362\240\155\213\250\107\351\142\166\036\021\356\010\024\321\262  
\104\026\364\352\320\372\036\057\136\333\313\163\101\256\274\000  
\260\112\053\100\262\254\341\073\113\302\055\235\344\241\233\354  
\032\072\036\360\010\263\320\344\044\065\007\237\234\264\311\122  
\155\333\007\312\217\265\133\360\203\363\117\307\055\245\310\255  
\313\225\040\244\061\050\127\130\132\344\215\033\232\253\236\015  
\014\362\012\063\071\042\071\012\227\056\363\123\167\271\104\105  
\375\204\313\066\040\201\131\055\232\157\155\110\110\141\312\114  
\337\123\321\257\122\274\104\237\253\057\153\203\162\357\165\200  
\332\006\063\033\135\310\332\143\306\115\315\254\146\061\315\321  
\336\076\207\020\066\341\271\244\172\357\140\120\262\313\312\246  
\126\340\067\257\253\064\023\071\045\350\071\146\344\230\172\252  
\022\230\234\131\146\206\076\255\361\260\312\076\006\017\173\360  
\021\113\067\240\104\155\173\313\250\214\161\364\325\265\221\066  
\314\360\025\306\053\336\121\027\261\227\114\120\075\261\225\131  
\174\005\175\055\041\325\000\277\001\147\242\136\173\246\134\362  
\367\042\361\220\015\223\333\252\104\121\146\314\175\166\003\353  
\152\250\052\070\031\227\166\015\153\212\141\371\274\366\356\166  
\375\160\053\335\051\074\370\012\036\133\102\034\213\126\057\125  
\033\034\241\056\265\307\026\346\370\252\074\222\216\151\266\001  
\301\265\206\235\211\017\013\070\224\124\350\352\334\236\075\045  
\274\123\046\355\325\253\071\252\305\100\114\124\253\262\264\331  
\331\370\327\162\333\034\274\155\275\145\137\357\210\065\052\146  
\057\356\366\263\145\360\063\215\174\230\101\151\106\017\103\034  
\151\372\233\265\320\141\152\315\312\113\331\114\220\106\253\025  
\131\241\107\124\051\056\203\050\137\034\302\242\253\162\027\000  
\006\216\105\354\213\342\063\075\177\332\031\104\344\142\162\303  
\337\042\306\362\126\324\335\137\225\162\355\155\137\367\110\003  
\133\375\305\052\240\366\163\043\204\020\033\001\347\002\003\001  
\000\001\243\102\060\100\060\016\006\003\125\035\017\001\001\377  
\004\004\003\002\001\006\060\017\006\003\125\035\023\001\001\377  
\004\005\060\003\001\001\377\060\035\006\003\125\035\016\004\026  
\004\024\343\161\340\236\330\247\102\331\333\161\221\153\224\223  
\353\303\243\321\024\243\060\015\006\011\052\206\110\206\367\015  
\001\001\013\005\000\003\202\002\001\000\107\372\335\012\260\021  
\221\070\255\115\135\367\345\016\227\124\031\202\110\207\124\214  
\252\144\231\330\132\376\210\001\305\130\245\231\261\043\124\043

\267\152\035\040\127\345\001\142\101\027\323\011\333\165\313\156  
\124\220\165\376\032\237\201\012\302\335\327\367\011\320\133\162  
\025\344\036\011\152\075\063\363\041\232\346\025\176\255\121\325  
\015\020\355\175\102\300\217\356\300\232\010\325\101\326\134\016  
\041\151\156\200\141\016\025\300\270\317\305\111\022\122\314\276  
\072\314\324\056\070\005\336\065\375\037\157\270\200\150\230\075  
\115\240\312\100\145\322\163\174\365\213\331\012\225\077\330\077  
\043\155\032\321\052\044\031\331\205\263\027\357\170\156\251\130  
\321\043\323\307\023\355\162\045\177\135\261\163\160\320\177\006  
\227\011\204\051\200\141\035\372\136\377\163\254\240\343\211\270  
\034\161\025\306\336\061\177\022\334\341\155\233\257\347\350\237  
\165\170\114\253\106\073\232\316\277\005\030\135\115\025\074\026  
\232\031\120\004\232\262\232\157\145\213\122\137\074\130\004\050  
\045\300\146\141\061\176\271\340\165\271\032\250\201\326\162\027  
\263\305\003\061\065\021\170\170\242\340\351\060\214\177\200\337  
\130\337\074\272\047\226\342\200\064\155\343\230\323\144\047\254  
\110\176\050\167\134\306\045\141\045\370\205\014\145\372\304\062  
\057\245\230\005\344\370\013\147\026\026\306\202\270\062\031\371  
\371\271\171\334\037\315\353\257\253\016\335\033\333\105\344\172  
\347\002\342\225\135\374\151\360\123\151\141\225\165\171\013\136  
\125\346\070\034\224\251\131\063\236\310\161\164\171\177\121\211  
\266\310\152\270\060\310\152\070\303\156\236\341\067\026\352\005  
\142\114\133\022\107\355\247\264\263\130\126\307\111\363\177\022  
\150\011\061\161\360\155\370\116\107\373\326\205\356\305\130\100  
\031\244\035\247\371\113\103\067\334\150\132\117\317\353\302\144  
\164\336\264\025\331\364\124\124\032\057\034\327\227\161\124\220  
\216\331\040\235\123\053\177\253\217\342\352\060\274\120\067\357  
\361\107\265\175\174\054\004\354\150\235\264\111\104\020\364\162  
\113\034\144\347\374\346\153\220\335\151\175\151\375\000\126\245  
\267\254\266\255\267\312\076\001\357\234

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "IdenTrust Public Sector Root CA 1"

# Issuer: CN=IdenTrust Public Sector Root CA 1,O=IdenTrust,C=US

# Serial Number:0a:01:42:80:00:00:01:45:23:cf:46:7c:00:00:00:02

# Subject: CN=IdenTrust Public Sector Root CA 1,O=IdenTrust,C=US

# Not Valid Before: Thu Jan 16 17:53:32 2014

# Not Valid After : Mon Jan 16 17:53:32 2034

# Fingerprint (SHA-256):

30:D0:89:5A:9A:44:8A:26:20:91:63:55:22:D1:F5:20:10:B5:86:7A:CA:E1:2C:78:EF:95:8F:D4:F4:38:9F:2F

# Fingerprint (SHA1): BA:29:41:60:77:98:3F:F4:F3:EF:F2:31:05:3B:2E:EA:6D:4D:45:FD

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE



```

CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "IdenTrust Public Sector Root CA 1"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\272\051\101\140\167\230\077\364\363\357\362\061\005\073\056\352
\155\115\105\375
END
CKA_CERT_MD5_HASH
MULTILINE_OCTAL
\067\006\245\260\374\211\235\272\364\153\214\032\144\315\325\272
END
CKA_ISSUER MULTILINE_OCTAL
\060\115\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\022\060\020\006\003\125\004\012\023\011\111\144\145\156\124\162
\165\163\164\061\052\060\050\006\003\125\004\003\023\041\111\144
\145\156\124\162\165\163\164\040\120\165\142\154\151\143\040\123
\145\143\164\157\162\040\122\157\157\164\040\103\101\040\061
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\020\012\001\102\200\000\000\001\105\043\317\106\174\000\000
\000\002
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "Entrust Root Certification Authority - G2"
#
# Issuer: CN=Entrust Root Certification Authority
- G2,OU="(c) 2009 Entrust, Inc. - for authorized use only",OU=See www.entrust.net/legal-terms,O="Entrust,
Inc.",C=US
# Serial Number: 1246989352 (0x4a538c28)
# Subject: CN=Entrust Root Certification Authority - G2,OU="(c) 2009 Entrust, Inc. - for authorized use
only",OU=See www.entrust.net/legal-terms,O="Entrust, Inc.",C=US
# Not Valid Before: Tue Jul 07 17:25:54 2009
# Not Valid After : Sat Dec 07 17:55:54 2030
# Fingerprint (SHA-256):
43:DF:57:74:B0:3E:7F:EF:5F:E4:0D:93:1A:7B:ED:F1:BB:2E:6B:42:73:8C:4E:6D:38:41:10:3D:3A:A7:F3:39
# Fingerprint (SHA1): 8C:F4:27:FD:79:0C:3A:D1:66:06:8D:E8:1E:57:EF:BB:93:22:72:D4
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Entrust Root Certification Authority - G2"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\201\276\061\013\060\011\006\003\125\004\006\023\002\125\123

```

\061\026\060\024\006\003\125\004\012\023\015\105\156\164\162\165  
\163\164\054\040\111\156\143\056\061\050\060\046\006\003\125\004  
\013\023\037\123\145\145\040\167\167\167\056\145\156\164\162\165  
\163\164\056\156\145\164\057\154\145\147\141\154\055\164\145\162  
\155\163\061\071\060\067\006\003\125\004\013\023\060\050\143\051  
\040\062\060\060\071\040\105\156\164\162\165\163\164\054\040\111  
\156\143\056\040\055\040\146\157\162\040\141\165\164\150\157\162  
\151\172\145\144\040\165\163\145\040\157\156\154\171\061\062\060  
\060\006\003\125\004\003\023\051\105\156\164\162\165\163\164\040  
\122\157\157\164\040\103\145\162\164\151\146\151\143\141\164\151  
\157\156\040\101\165\164\150\157\162\151\164\171\040\055\040\107  
\062

END

CKA\_ID

UTF8 "0"

CKA\_ISSUER MULTILINE\_OCTAL

\060\201\276\061\013\060\011\006\003\125\004\006\023\002\125\123  
\061\026\060\024\006\003\125\004\012\023\015\105\156\164\162\165  
\163\164\054\040\111\156\143\056\061\050\060\046\006\003\125\004  
\013\023\037\123\145\145\040\167\167\167\056\145\156\164\162\165  
\163\164\056\156\145\164\057\154\145\147\141\154\055\164\145\162  
\155\163\061\071\060\067\006\003\125\004\013\023\060\050\143\051  
\040\062\060\060\071\040\105\156\164\162\165\163\164\054\040\111  
\156\143\056\040\055\040\146\157\162\040\141\165\164\150\157\162  
\151\172\145\144\040\165\163\145\040\157\156\154\171\061\062\060  
\060\006\003\125\004\003\023\051\105\156\164\162\165\163\164\040  
\122\157\157\164\040\103\145\162\164\151\146\151\143\141\164\151  
\157\156\040\101\165\164\150\157\162\151\164\171\040\055\040\107  
\062

END

CKA\_SERIAL\_NUMBER

MULTILINE\_OCTAL

\002\004\112\123\214\050

END

CKA\_VALUE MULTILINE\_OCTAL

\060\202\004\076\060\202\003\046\240\003\002\001\002\002\004\112  
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\125\004\013\023\037\123\145\145\040\167\167\167\056\145\156\164  
\162\165\163\164\056\156\145\164\057\154\145\147\141\154\055\164  
\145\162\155\163\061\071\060\067\006\003\125\004\013\023\060\050  
\143\051\040\062\060\060\071\040\105\156\164\162\165\163\164\054  
\040\111\156\143\056\040\055\040\146\157\162\040\141\165\164\150  
\157\162\151\172\145\144\040\165\163\145\040\157\156\154\171\061  
\062\060\060\006\003\125\004\003\023\051\105\156\164\162\165\163  
\164\040\122\157\157\164\040\103\145\162\164\151\146\151\143\141

\164\151\157\156\040\101\165\164\150\157\162\151\164\171\040\055  
\040\107\062\060\036\027\015\060\071\060\067\060\067\061\067\062  
\065\065\064\132\027\015\063\060\061\062\060\067\061\067\065\065  
\065\064\132\060\201\276\061\013\060\011\006\003\125\004\006\023  
\002\125\123\061\026\060\024\006\003\125\004\012\023\015\105\156  
\164\162\165\163\164\054\040\111\156\143\056\061\050\060\046\006  
\003\125\004\013\023\037\123\145\145\040\167\167\167\056\145\156  
\164\162\165\163\164\056\156\145\164\057\154\145\147\141\154\055  
\164\145\162\155\163\061\071\060\067\006\003\125\004\013\023\060  
\050\143\051\040\062\060\060\071\040\105\156\164\162\165\163\164  
\054\040\111\156\143\056\040\055\040\146\157\162\040\141\165\164  
\150\157\162\151\172\145\144\040\165\163\145\040\157\156\154\171  
\061\062\060\060\006\003\125\004\003\023\051\105\156\164\162\165  
\163\164\040\122\157\157\164\040\103\145\162\164\151\146\151\143  
\141\164\151\157\156\040\101\165\164\150\157\162\151\164\171\040  
\055\040\107\062\060\202\001\042\060\015\006\011\052\206\110\206  
\367\015\001\001\001\005\000\003\202\001\017\000\060\202\001\012  
\002\202\001\001\000\272\204\266\162\333\236\014\153\342\231\351  
\060\001\247\166\352\062\270\225\101\032\311\332\141\116\130\162  
\317\376\366\202\171\277\163\141\006\012\245\047\330\263\137\323  
\105\116\034\162\326\116\062\362\162\212\017\367\203\031\320\152  
\200\200\000\105\036\260\307\347\232\277\022\127\047\034\243\150  
\057\012\207\275\152\153\016\136\145\363\034\167\325\324\205\215  
\160\041\264\263\062\347\213\242\325\206\071\002\261\270\322\107  
\316\344\311\111\304\073\247\336\373\124\175\127\276\360\350\156  
\302\171\262\072\013\125\342\120\230\026\062\023\134\057\170\126  
\301\302\224\263\362\132\344\047\232\237\044\327\306\354\320\233  
\045\202\343\314\302\304\105\305\214\227\172\006\153\052\021\237  
\251\012\156\110\073\157\333\324\021\031\102\367\217\007\277\365  
\123\137\234\076\364\027\054\346\151\254\116\062\114\142\167\352  
\267\350\345\273\064\274\031\213\256\234\121\347\267\176\265\123  
\261\063\042\345\155\317\160\074\032\372\342\233\147\266\203\364  
\215\245\257\142\114\115\340\130\254\144\064\022\003\370\266\215  
\224\143\044\244\161\002\003\001\000\001\243\102\060\100\060\016  
\006\003\125\035\017\001\001\377\004\004\003\002\001\006\060\017  
\006\003\125\035\023\001\001\377\004\005\060\003\001\001\377\060  
\035\006\003\125\035\016\004\026\004\024\152\162\046\172\320\036  
\357\175\347\073\151\121\324\154\215\237\220\022\146\253\060\015  
\006\011\052\206\110\206\367\015\001\001\013\005\000\003\202\001  
\001\000\171\237\035\226\306\266\171\077\042\215\207\323\207\003  
\004\140\152\153\232\056\131\211\163\021\254\103\321\365\023\377  
\215\071\053\300\362\275\117\160\214\251\057\352\027\304\013\124  
\236\324\033\226\230\063\074\250\255\142\242\000\166\253\131\151  
\156\006\035\176\304\271\104\215\230\257\022\324\141\333\012\031  
\106\107\363\353\367\143\301\100\005\100\245\322\267\364\265\232  
\066\277\251\210\166\210\004\125\004\053\234\207\177\032\067\074  
\176\055\245\032\330\324\211\136\312\275\254\075\154\330\155\257  
\325\363\166\017\315\073\210\070\042\235\154\223\232\304\075\277

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\202\033\145\077\246\017\135\252\374\345\262\025\312\265\255\306
\274\075\320\204\350\352\006\162\260\115\071\062\170\277\076\021
\234\013\244\235\232\041\363\360\233\013\060\170\333\301\334\207
\103\376\274\143\232\312\305\302\034\311\307\215\377\073\022\130
\010\346\266\075\354\172\054\116\373\203\226\316\014\074\151\207
\124\163\244\163\302\223\377\121\020\254\025\124\001\330\374\005
\261\211\241\177\164\203\232\111\327\334\116\173\212\110\157\213
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END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "Entrust Root Certification Authority - G2"

# Issuer: CN=Entrust Root Certification Authority - G2,OU="(c) 2009 Entrust, Inc. - for authorized use only",OU=See www.entrust.net/legal-terms,O="Entrust, Inc.",C=US

# Serial Number: 1246989352 (0x4a538c28)

# Subject: CN=Entrust Root Certification Authority - G2,OU="(c) 2009 Entrust, Inc. - for authorized use only",OU=See www.entrust.net/legal-terms,O="Entrust, Inc.",C=US

# Not Valid Before: Tue Jul 07 17:25:54 2009

# Not Valid After : Sat Dec 07 17:55:54 2030

# Fingerprint (SHA-256):

43:DF:57:74:B0:3E:7F:EF:5F:E4:0D:93:1A:7B:ED:F1:BB:2E:6B:42:73:8C:4E:6D:38:41:10:3D:3A:A7:F3:39

# Fingerprint (SHA1): 8C:F4:27:FD:79:0C:3A:D1:66:06:8D:E8:1E:57:EF:BB:93:22:72:D4

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE

CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "Entrust Root Certification Authority - G2"

CKA\_CERT\_SHA1\_HASH MULTILINE\_OCTAL

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\214\364\047\375\171\014\072\321\146\006\215\350\036\127\357\273
\223\042\162\324
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END

CKA\_CERT\_MD5\_HASH MULTILINE\_OCTAL

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\113\342\311\221\226\145\014\364\016\132\223\222\240\012\376\262
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END

CKA\_ISSUER MULTILINE\_OCTAL

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\060\201\276\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\026\060\024\006\003\125\004\012\023\015\105\156\164\162\165
\163\164\054\040\111\156\143\056\061\050\060\046\006\003\125\004
\013\023\037\123\145\145\040\167\167\167\056\145\156\164\162\165
\163\164\056\156\145\164\057\154\145\147\141\154\055\164\145\162
\155\163\061\071\060\067\006\003\125\004\013\023\060\050\143\051
\040\062\060\060\071\040\105\156\164\162\165\163\164\054\040\111
\156\143\056\040\055\040\146\157\162\040\141\165\164\150\157\162
\151\172\145\144\040\165\163\145\040\157\156\154\171\061\062\060
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\060\006\003\125\004\003\023\051\105\156\164\162\165\163\164\040
\122\157\157\164\040\103\145\162\164\151\146\151\143\141\164\151
\157\156\040\101\165\164\150\157\162\151\164\171\040\055\040\107
\062
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END

CKA\_SERIAL\_NUMBER

MULTILINE\_OCTAL

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\002\004\112\123\214\050
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END

CKA\_TRUST\_SERVER\_AUTH CK\_TRUST CKT\_NSS\_TRUSTED\_DELEGATOR

CKA\_TRUST\_EMAIL\_PROTECTION CK\_TRUST CKT\_NSS\_TRUSTED\_DELEGATOR

CKA\_TRUST\_CODE\_SIGNING CK\_TRUST CKT\_NSS\_MUST\_VERIFY\_TRUST

CKA\_TRUST\_STEP\_UP\_APPROVED CK\_BBOOL CK\_FALSE

#

# Certificate "Entrust Root Certification Authority - EC1"

#

# Issuer: CN=Entrust Root Certification Authority - EC1,OU="(c) 2012 Entrust, Inc. - for authorized use only",OU=See www.entrust.net/legal-terms,O="Entrust, Inc.",C=US

# Serial Number:00:a6:8b:79:29:00:00:00:00:50:d0:91:f9

# Subject: CN=Entrust Root Certification Authority - EC1,OU="(c) 2012 Entrust, Inc. - for authorized use only",OU=See www.entrust.net/legal-terms,O="Entrust, Inc.",C=US

# Not Valid Before: Tue Dec 18 15:25:36 2012

# Not Valid After : Fri Dec 18 15:55:36 2037

# Fingerprint (SHA-256):

02:ED:0E:B2:8C:14:DA:45:16:5C:56:67:91:70:0D:64:51:D7:FB:56:F0:B2:AB:1D:3B:8E:B0:70:E5:6E:DF:F5

#

Fingerprint (SHA1): 20:D8:06:40:DF:9B:25:F5:12:25:3A:11:EA:F7:59:8A:EB:14:B5:47

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_CERTIFICATE

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "Entrust Root Certification Authority - EC1"

CKA\_CERTIFICATE\_TYPE CK\_CERTIFICATE\_TYPE CKC\_X\_509

CKA\_SUBJECT MULTILINE\_OCTAL

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\163\164\054\040\111\156\143\056\061\050\060\046\006\003\125\004
\013\023\037\123\145\145\040\167\167\167\056\145\156\164\162\165
\163\164\056\156\145\164\057\154\145\147\141\154\055\164\145\162
\155\163\061\071\060\067\006\003\125\004\013\023\060\050\143\051
\040\062\060\061\062\040\105\156\164\162\165\163\164\054\040\111
\156\143\056\040\055\040\146\157\162\040\141\165\164\150\157\162
\151\172\145\144\040\165\163\145\040\157\156\154\171\061\063\060
\061\006\003\125\004\003\023\052\105\156\164\162\165\163\164\040
\122\157\157\164\040\103\145\162\164\151\146\151\143\141\164\151
\157\156\040\101\165\164\150\157\162\151\164\171\040\055\040\105
\103\061
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END

CKA\_ID

UTF8 "0"

CKA\_ISSUER MULTILINE\_OCTAL

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\163\164\054\040\111\156\143\056\061\050\060\046\006\003\125\004  
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\163\164\056\156\145\164\057\154\145\147\141\154\055\164\145\162  
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\040\062\060\061\062\040\105\156\164\162\165\163\164\054\040\111  
\156\143\056\040\055\040\146\157\162\040\141\165\164\150\157\162  
\151\172\145\144\040\165\163\145\040\157\156\154\171\061\063\060  
\061\006\003\125\004\003\023\052\105\156\164\162\165\163\164\040  
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\157\156\040\101\165\164\150\157\162\151\164\171\040\055\040\105  
\103\061

END

CKA\_SERIAL\_NUMBER

MULTILINE\_OCTAL

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END

CKA\_VALUE MULTILINE\_OCTAL

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\145\147\141\154\055\164\145\162\155\163\061\071\060\067\006\003  
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\040\157\156\154\171\061\063\060\061\006\003\125\004\003\023\052  
\105\156\164\162\165\163\164\040\122\157\157\164\040\103\145\162  
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\162\151\164\171\040\055\040\105\103\061\060\036\027\015\063\067\061  
\061\062\061\070\061\065\062\065\063\066\132\027\015\063\067\061  
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\040\167\167\167\056\145\156\164\162\165\163\164\056\156\145\164  
\057\154\145\147\141\154\055\164\145\162\155\163\061\071\060\067  
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\105\156\164\162\165\163\164\054\040\111\156\143\056\040\055\040  
\146\157\162\040\141\165\164\150\157\162\151\172\145\144\040\165

\163\145\040\157\156\154\171\061\063\060\061\006\003\125\004\003  
\023\052\105\156\164\162\165\163\164\040\122\157\157\164\040\103  
\145\162\164\151\146\151\143\141\164\151\157\156\040\101\165\164  
\150\157\162\151\164\171\040\055\040\105\103\061\060\166\060\020  
\006\007\052\206\110\316\075\002\001\006\005\053\201\004\000\042  
\003\142\000\004\204\023\311\320\272\155\101\173\342\154\320\353  
\125\137\146\002\032\044\364\133\211\151\107\343\270\302\175\361  
\362\002\305\237\240\366\133\325\213\006\031\206\117\123\020\155  
\007\044\047\241\240\370\325\107\031\141\114\175\312\223\047\352  
\164\014\357\157\226\011\376\143\354\160\135\066\255\147\167\256  
\311\235\174\125\104\072\242\143\121\037\365\343\142\324\251\107  
\007\076\314\040\243\102\060\100\060\016\006\003\125\035\017\001  
\001\377\004\004\003\002\001\006\060\017\006\003\125\035\023\001  
\001\377\004\005\060\003\001\001\377\060\035\006\003\125\035\016  
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\340\152\120\101\145\021\102\111\060\012\006\010\052\206\110\316  
\075\004\003\003\003\147\000\060\144\002\060\141\171\330\345\102  
\107\337\034\256\123\231\027\266\157\034\175\341\277\021\224\321  
\003\210\165\344\215\211\244\212\167\106\336\155\141\357\002\365  
\373\265\337\314\376\116\377\376\251\346\247\002\060\133\231\327  
\205\067\006\265\173\010\375\353\047\213\112\224\371\341\372\247  
\216\046\010\350\174\222\150\155\163\330\157\046\254\041\002\270  
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END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "Entrust Root Certification Authority - EC1"

# Issuer: CN=Entrust Root Certification Authority - EC1,OU="(c) 2012 Entrust, Inc. - for authorized use only",OU=See www.entrust.net/legal-terms,O="Entrust, Inc.",C=US

# Serial Number:00:a6:8b:79:29:00:00:00:00:50:d0:91:f9

# Subject: CN=Entrust Root Certification Authority - EC1,OU="(c) 2012 Entrust, Inc. - for authorized use only",OU=See www.entrust.net/legal-terms,O="Entrust, Inc.",C=US

# Not Valid Before: Tue Dec 18 15:25:36 2012

# Not Valid After : Fri Dec 18 15:55:36 2037

# Fingerprint (SHA-256):

02:ED:0E:B2:8C:14:DA:45:16:5C:56:67:91:70:0D:64:51:D7:FB:56:F0:B2:AB:1D:3B:8E:B0:70:E5:6E:DF:F5

# Fingerprint (SHA1): 20:D8:06:40:DF:9B:25:F5:12:25:3A:11:EA:F7:59:8A:EB:14:B5:47

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "Entrust Root Certification Authority - EC1"

CKA\_CERT\_SHA1\_HASH MULTILINE\_OCTAL

\040\330\006\100\337\233\045\365\022\045\072\021\352\367\131\212

\353\024\265\107

```

END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\266\176\035\360\130\305\111\154\044\073\075\355\230\030\355\274
END
CKA_ISSUER MULTILINE_OCTAL
\060\201\277\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\026\060\024\006\003\125\004\012\023\015\105\156\164\162\165
\163\164\054\040\111\156\143\056\061\050\060\046\006\003\125\004
\013\023\037\123\145\145\040\167\167\167\056\145\156\164\162\165
\163\164\056\156\145\164\057\154\145\147\141\154\055\164\145\162
\155\163\061\071\060\067\006\003\125\004\013\023\060\050\143\051
\040\062\060\061\062\040\105\156\164\162\165\163\164\054\040\111
\156\143\056\040\055\040\146\157\162\040\141\165\164\150\157\162
\151\172\145\144\040\165\163\145\040\157\156\154\171\061\063\060
\061\006\003\125\004\003\023\052\105\156\164\162\165\163\164\040
\122\157\157\164\040\103\145\162\164\151\146\151\143\141\164\151
\157\156\040\101\165\164\150\157\162\151\164\171\040\055\040\105
\103\061
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\015\000\246\213\171\051\000\000\000\000\120\320\221\371
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "CFCA EV ROOT"
#
# Issuer: CN=CFCA EV ROOT,O=China Financial Certification Authority,C=CN
# Serial Number: 407555286 (0x184accd6)
# Subject: CN=CFCA EV ROOT,O=China Financial Certification Authority,C=CN
# Not Valid Before: Wed Aug 08 03:07:01 2012
#
# Not Valid After : Mon Dec 31 03:07:01 2029
# Fingerprint (SHA-256):
5C:C3:D7:8E:4E:1D:5E:45:54:7A:04:E6:87:3E:64:F9:0C:F9:53:6D:1C:CC:2E:F8:00:F3:55:C4:C5:FD:70:FD
# Fingerprint (SHA1): E2:B8:29:4B:55:84:AB:6B:58:C2:90:46:6C:AC:3F:B8:39:8F:84:83
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "CFCA EV ROOT"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\126\061\013\060\011\006\003\125\004\006\023\002\103\116\061

```



\060\060\056\006\003\125\004\012\014\047\103\150\151\156\141\040  
\106\151\156\141\156\143\151\141\154\040\103\145\162\164\151\146  
\151\143\141\164\151\157\156\040\101\165\164\150\157\162\151\164  
\171\061\025\060\023\006\003\125\004\003\014\014\103\106\103\101  
\040\105\126\040\122\117\117\124

END

CKA\_ID UTF8 "0"

CKA\_ISSUER MULTILINE\_OCTAL

\060\126\061\013\060\011\006\003\125\004\006\023\002\103\116\061  
\060\060\056\006\003\125\004\012\014\047\103\150\151\156\141\040  
\106\151\156\141\156\143\151\141\154\040\103\145\162\164\151\146  
\151\143\141\164\151\157\156\040\101\165\164\150\157\162\151\164  
\171\061\025\060\023\006\003\125\004\003\014\014\103\106\103\101  
\040\105\126\040\122\117\117\124

END

CKA\_SERIAL\_NUMBER

MULTILINE\_OCTAL

\002\004\030\112\314\326

END

CKA\_VALUE MULTILINE\_OCTAL

\060\202\005\215\060\202\003\165\240\003\002\001\002\002\004\030  
\112\314\326\060\015\006\011\052\206\110\206\367\015\001\001\013  
\005\000\060\126\061\013\060\011\006\003\125\004\006\023\002\103  
\116\061\060\060\056\006\003\125\004\012\014\047\103\150\151\156  
\141\040\106\151\156\141\156\143\151\141\154\040\103\145\162\164  
\151\146\151\143\141\164\151\157\156\040\101\165\164\150\157\162  
\151\164\171\061\025\060\023\006\003\125\004\003\014\014\103\106  
\103\101\040\105\126\040\122\117\117\124\060\036\027\015\061\062  
\060\070\060\070\060\063\060\067\060\061\132\027\015\062\071\061  
\062\063\061\060\063\060\067\060\061\132\060\126\061\013\060\011  
\006\003\125\004\006\023\002\103\116\061\060\060\056\006\003\125  
\004\012\014\047\103\150\151\156\141\040\106\151\156\141\156\143  
\151\141\154\040\103\145\162\164\151\146\151\143\141\164\151\157  
\156\040\101\165\164\150\157\162\151\164\171\061\025\060\023\006  
\003\125\004\003\014\014\103\106\103\101\040\105\126\040\122\117  
\117\124\060\202\002\042\060\015\006\011\052\206\110\206\367\015  
\001\001\001\005\000\003\202\002\017\000\060\202\002\012\002\202  
\002\001\000\327\135\153\315\020\077\037\005\131\325\005\115\067  
\261\016\354\230\053\216\025\035\372\223\113\027\202\041\161\020  
\122\327\121\144\160\026\302\125\151\115\216\025\155\237\277\014  
\033\302\340\243\147\326\014\254\317\042\256\257\167\124\052\113  
\114\212\123\122\172\303\356\056\336\263\161\045\301\351\135\075  
\356\241\057\243\367\052\074\311\043\035\152\253\035\241\247\361  
\363\354\240\325\104\317\025\317\162\057\035\143\227\350\231\371  
\375\223\244\124\200\114\122\324\122\253\056\111\337\220\315\270  
\137\276\077\336\241\312\115\040\324\045\350\204\051\123\267\261  
\210\037\377\372\332\220\237\012\251\055\101\077\261\361\030\051  
\356\026\131\054\064\111\032\250\006\327\250\210\322\003\162\172

\062\342\352\150\115\156\054\226\145\173\312\131\372\362\342\335  
\356\060\054\373\314\106\254\304\143\353\157\177\066\053\064\163  
\022\224\177\337\314\046\236\361\162\135\120\145\131\217\151\263  
\207\136\062\157\303\030\212\265\225\217\260\172\067\336\132\105  
\073\307\066\341\357\147\321\071\323\227\133\163\142\031\110\055  
\207\034\006\373\164\230\040\111\163\360\005\322\033\261\240\243  
\267\033\160\323\210\151\271\132\326\070\364\142\334\045\213\170  
\277\370\350\176\270\134\311\225\117\137\247\055\271\040\153\317  
\153\335\365\015\364\202\267\364\262\146\056\020\050\366\227\132  
\173\226\026\217\001\031\055\154\156\177\071\130\006\144\203\001  
\203\203\303\115\222\335\062\306\207\244\067\351\026\316\252\055  
\150\257\012\201\145\072\160\301\233\255\115\155\124\312\052\055  
\113\205\033\263\200\346\160\105\015\153\136\065\360\177\073\270  
\234\344\004\160\211\022\045\223\332\012\231\042\140\152\143\140  
\116\166\006\230\116\275\203\255\035\130\212\045\205\322\307\145  
\036\055\216\306\337\266\306\341\177\212\004\041\025\051\164\360  
\076\234\220\235\014\056\361\212\076\132\252\014\011\036\307\325  
\074\243\355\227\303\036\064\372\070\371\010\016\343\300\135\053  
\203\321\126\152\311\266\250\124\123\056\170\062\147\075\202\177  
\164\320\373\341\266\005\140\271\160\333\216\013\371\023\130\157  
\161\140\020\122\020\271\301\101\011\357\162\037\147\061\170\377  
\226\005\215\002\003\001\000\001\243\143\060\141\060\037\006\003  
\125\035\043\004\030\060\026\200\024\343\376\055\375\050\320\013  
\265\272\266\242\304\277\006\252\005\214\223\373\057\060\017\006  
\003\125\035\023\001\001\377\004\005\060\003\001\001\377\060\016  
\006\003\125\035\017\001\001\377\004\004\003\002\001\006\060\035  
\006\003\125\035\016\004\026\004\024\343\376\055\375\050\320\013  
\265\272\266\242\304\277\006\252\005\214\223\373\057\060\015\006  
\011\052\206\110\206\367\015\001\001\013\005\000\003\202\002\001  
\000\045\306\272\153\353\207\313\336\202\071\226\075\360\104\247  
\153\204\163\003\336\235\053\117\272\040\177\274\170\262\317\227  
\260\033\234\363\327\171\056\365\110\266\322\373\027\210\346\323  
\172\077\355\123\023\320\342\057\152\171\313\000\043\050\346\036  
\067\127\065\211\204\302\166\117\064\066\255\147\303\316\101\006  
\210\305\367\356\330\032\270\326\013\177\120\377\223\252\027\113  
\214\354\355\122\140\262\244\006\352\116\353\364\153\031\375\353  
\365\032\340\045\052\232\334\307\101\066\367\310\164\005\204\071  
\225\071\326\013\073\244\047\372\010\330\134\036\370\004\140\122  
\021\050\050\003\377\357\123\146\000\245\112\064\026\146\174\375  
\011\244\256\236\147\032\157\101\013\153\006\023\233\217\206\161  
\005\264\057\215\211\146\063\051\166\124\232\021\370\047\372\262  
\077\221\340\316\015\033\363\060\032\255\277\042\135\033\323\277  
\045\005\115\341\222\032\177\231\237\074\104\223\312\324\100\111  
\154\200\207\327\004\072\303\062\122\065\016\126\370\245\335\175  
\304\213\015\021\037\123\313\036\262\027\266\150\167\132\340\324  
\313\310\007\256\365\072\056\216\067\267\320\001\113\103\051\167  
\214\071\227\217\202\132\370\121\345\211\240\030\347\150\177\135  
\012\056\373\243\107\016\075\246\043\172\306\001\307\217\310\136

```
\277\155\200\126\276\212\044\272\063\352\237\341\062\021\236\361
\322\117\200\366\033\100\257\070\236\021\120\171\163\022\022\315
\346\154\235\054\210\162\074\060\201\006\221\042\352\131\255\332
\031\056\042\302\215\271\214\207\340\146\274\163\043\137\041\144
\143\200\110\365\240\074\030\075\224\310\110\101\035\100\272\136
\376\376\126\071\241\310\317\136\236\031\144\106\020\332\027\221
\267\005\200\254\213\231\222\175\347\242\330\007\013\066\047\347
\110\171\140\212\303\327\023\134\370\162\100\337\112\313\317\231
\000\012\000\013\021\225\332\126\105\003\210\012\237\147\320\325
\171\261\250\215\100\155\015\302\172\100\372\363\137\144\107\222
\313\123\271\273\131\316\117\375\320\025\123\001\330\337\353\331
\346\166\357\320\043\273\073\251\171\263\325\002\051\315\211\243
\226\017\112\065\347\116\102\300\165\315\007\317\346\054\353\173
\056
```

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "CFCA EV ROOT"

# Issuer: CN=CFCA EV ROOT,O=China Financial Certification Authority,C=CN

# Serial Number: 407555286 (0x184accd6)

# Subject: CN=CFCA EV ROOT,O=China Financial Certification Authority,C=CN

# Not Valid Before: Wed Aug 08 03:07:01 2012

# Not Valid After : Mon Dec 31 03:07:01 2029

# Fingerprint (SHA-256):

5C:C3:D7:8E:4E:1D:5E:45:54:7A:04:E6:87:3E:64:F9:0C:F9:53:6D:1C:CC:2E:F8:00:F3:55:C4:C5:FD:70:FD

# Fingerprint (SHA1): E2:B8:29:4B:55:84:AB:6B:58:C2:90:46:6C:AC:3F:B8:39:8F:84:83

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "CFCA EV ROOT"

CKA\_CERT\_SHA1\_HASH MULTILINE\_OCTAL

```
\342\270\051\113\125\204\253\153\130\302\220\106\154\254\077\270
\071\217\204\203
```

END

CKA\_CERT\_MD5\_HASH

MULTILINE\_OCTAL

```
\164\341\266\355\046\172\172\104\060\063\224\253\173\047\201\060
```

END

CKA\_ISSUER MULTILINE\_OCTAL

```
\060\126\061\013\060\011\006\003\125\004\006\023\002\103\116\061
\060\060\056\006\003\125\004\012\014\047\103\150\151\156\141\040
\106\151\156\141\156\143\151\141\154\040\103\145\162\164\151\146
\151\143\141\164\151\157\156\040\101\165\164\150\157\162\151\164
\171\061\025\060\023\006\003\125\004\003\014\014\103\106\103\101
```

```

\040\105\126\040\122\117\117\124
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\004\030\112\314\326
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "OISTE WISeKey Global Root GB CA"
#
# Issuer: CN=OISTE WISeKey Global Root GB CA,OU=OISTE Foundation Endorsed,O=WISeKey,C=CH
# Serial Number:76:b1:20:52:74:f0:85:87:46:b3:f8:23:1a:f6:c2:c0
#
# Subject: CN=OISTE WISeKey Global Root GB CA,OU=OISTE Foundation Endorsed,O=WISeKey,C=CH
# Not Valid Before: Mon Dec 01 15:00:32 2014
# Not Valid After : Thu Dec 01 15:10:31 2039
# Fingerprint (SHA-256):
6B:9C:08:E8:6E:B0:F7:67:CF:AD:65:CD:98:B6:21:49:E5:49:4A:67:F5:84:5E:7B:D1:ED:01:9F:27:B8:6B:D6
# Fingerprint (SHA1): 0F:F9:40:76:18:D3:D7:6A:4B:98:F0:A8:35:9E:0C:FD:27:AC:CC:ED
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "OISTE WISeKey Global Root GB CA"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\155\061\013\060\011\006\003\125\004\006\023\002\103\110\061
\020\060\016\006\003\125\004\012\023\007\127\111\123\145\113\145
\171\061\042\060\040\006\003\125\004\013\023\031\117\111\123\124
\105\040\106\157\165\156\144\141\164\151\157\156\040\105\156\144
\157\162\163\145\144\061\050\060\046\006\003\125\004\003\023\037
\117\111\123\124\105\040\127\111\123\145\113\145\171\040\107\154
\157\142\141\154\040\122\157\157\164\040\107\102\040\103\101
END
CKA_ID
UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\155\061\013\060\011\006\003\125\004\006\023\002\103\110\061
\020\060\016\006\003\125\004\012\023\007\127\111\123\145\113\145
\171\061\042\060\040\006\003\125\004\013\023\031\117\111\123\124
\105\040\106\157\165\156\144\141\164\151\157\156\040\105\156\144
\157\162\163\145\144\061\050\060\046\006\003\125\004\003\023\037
\117\111\123\124\105\040\127\111\123\145\113\145\171\040\107\154
\157\142\141\154\040\122\157\157\164\040\107\102\040\103\101
END

```

CKA\_SERIAL\_NUMBER MULTILINE\_OCTAL

\002\020\166\261\040\122\164\360\205\207\106\263\370\043\032\366  
\302\300

END

CKA\_VALUE MULTILINE\_OCTAL

\060\202\003\265\060\202\002\235\240\003\002\001\002\002\020\166  
\261\040\122\164\360\205\207\106\263\370\043\032\366\302\300\060  
\015\006\011\052\206\110\206\367\015\001\001\013\005\000\060\155  
\061\013\060\011\006\003\125\004\006\023\002\103\110\061\020\060  
\016\006\003\125\004\012\023\007\127\111\123\145\113\145\171\061  
\042\060\040\006\003\125\004\013\023\031\117\111\123\124\105\040  
\106\157\165\156\144\141\164\151\157\156\040\105\156\144\157\162  
\163\145\144\061\050\060\046\006\003\125\004\003\023\037\117\111  
\123\124\105\040\127\111\123\145\113\145\171\040\107\154\157\142  
\141\154\040\122\157\157\164\040\107\102\040\103\101\060\036\027  
\015\061\064\061\062\060\061\061\065\060\060\063\062\132\027\015  
\063\071\061\062\060\061\061\065\061\060\063\061\132\060\155\061  
\013\060\011\006\003\125\004\006\023\002\103\110\061\020\060\016  
\006\003\125\004\012\023\007\127\111\123\145\113\145\171\061\042  
\060\040\006\003\125\004\013\023\031\117\111\123\124\105\040\106  
\157\165\156\144\141\164\151\157\156\040\105\156\144\157\162\163  
\145\144\061\050\060\046\006\003\125\004\003\023\037\117\111\123  
\124\105\040\127\111\123\145\113\145\171\040\107\154\157\142\141  
\154\040\122\157\157\164\040\107\102\040\103\101\060\202\001\042  
\060\015\006\011\052\206\110\206\367\015\001\001\001\005\000\003  
\202\001\017\000\060\202\001\012\002\202\001\001\000\330\027\267  
\034\112\044\052\326\227\261\312\342\036\373\175\070\357\230\365  
\262\071\230\116\047\270\021\135\173\322\045\224\210\202\025\046  
\152\033\061\273\250\133\041\041\053\330\017\116\237\132\361\261  
\132\344\171\326\062\043\053\341\123\314\231\105\134\173\117\255  
\274\277\207\112\013\113\227\132\250\366\110\354\175\173\015\315  
\041\006\337\236\025\375\101\212\110\267\040\364\241\172\033\127  
\324\135\120\377\272\147\330\043\231\037\310\077\343\336\377\157  
\133\167\261\153\156\270\311\144\367\341\312\101\106\016\051\161  
\320\271\043\374\311\201\137\116\367\157\337\277\204\255\163\144  
\273\267\102\216\151\366\324\166\035\176\235\247\270\127\212\121  
\147\162\327\324\250\270\225\124\100\163\003\366\352\364\353\376  
\050\102\167\077\235\043\033\262\266\075\200\024\007\114\056\117  
\367\325\012\026\015\275\146\103\067\176\043\103\171\303\100\206  
\365\114\051\332\216\232\255\015\245\004\207\210\036\205\343\351  
\123\325\233\310\213\003\143\170\353\340\031\112\156\273\057\153  
\063\144\130\223\255\151\277\217\033\357\202\110\307\002\003\001  
\000\001\243\121\060\117\060\013\006\003\125\035\017\004\004\003  
\002\001\206\060\017\006\003\125\035\023\001\001\377\004\005\060  
\003\001\001\377\060\035\006\003\125\035\016\004\026\004\024\065  
\017\310\066\143\136\342\243\354\371\073\146\025\316\121\122\343  
\221\232\075\060\020\006\011\053\006\001\004\001\202\067\025\001  
\004\003\002\001\000\060\015\006\011\052\206\110\206\367\015\001

```
\001\013\005\000\003\202\001\001\000\100\114\373\207\262\231\201
\220\176\235\305\260\260\046\315\210\173\053\062\215\156\270\041
\161\130\227\175\256\067\024\257\076\347\367\232\342\175\366\161
\230\231\004\252\103\164\170\243\343\111\141\076\163\214\115\224
\340\371\161\304\266\026\016\123\170\037\326\242\207\057\002\071
\201\051\074\257\025\230\041\060\376\050\220\000\214\321\341\313
\372\136\310\375\370\020\106\073\242\170\102\221\027\164\125\012
\336\120\147\115\146\321\247\377\375\331\300\265\250\243\212\316
\146\365\017\103\315\247\053\127\173\143\106\152\252\056\122\330
\364\355\341\155\255\051\220\170\110\272\341\043\252\243\211\354
\265\253\226\300\264\113\242\035\227\236\172\362\156\100\161\337
\150\361\145\115\316\174\005\337\123\145\251\245\360\261\227\004
\160\025\106\003\230\324\322\277\124\264\240\130\175\122\157\332
\126\046\142\324\330\333\211\061\157\034\360\042\302\323\142\034
\065\315\114\151\025\124\032\220\230\336\353\036\137\312\167\307
\313\216\075\103\151\234\232\130\320\044\073\337\033\100\226\176
\065\255\201\307\116\161\272\210\023
```

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "OISTE WISeKey Global Root GB CA"

# Issuer: CN=OISTE WISeKey Global Root GB CA,OU=OISTE Foundation Endorsed,O=WISeKey,C=CH

# Serial Number:76:b1:20:52:74:f0:85:87:46:b3:f8:23:1a:f6:c2:c0

# Subject:

CN=OISTE WISeKey Global Root GB CA,OU=OISTE Foundation Endorsed,O=WISeKey,C=CH

# Not Valid Before: Mon Dec 01 15:00:32 2014

# Not Valid After : Thu Dec 01 15:10:31 2039

# Fingerprint (SHA-256):

6B:9C:08:E8:6E:B0:F7:67:CF:AD:65:CD:98:B6:21:49:E5:49:4A:67:F5:84:5E:7B:D1:ED:01:9F:27:B8:6B:D6

# Fingerprint (SHA1): 0F:F9:40:76:18:D3:D7:6A:4B:98:F0:A8:35:9E:0C:FD:27:AC:CC:ED

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "OISTE WISeKey Global Root GB CA"

CKA\_CERT\_SHA1\_HASH MULTILINE\_OCTAL

```
\017\371\100\166\030\323\327\152\113\230\360\250\065\236\014\375
\047\254\314\355
```

END

CKA\_CERT\_MD5\_HASH MULTILINE\_OCTAL

```
\244\353\271\141\050\056\267\057\230\260\065\046\220\231\121\035
```

END

CKA\_ISSUER MULTILINE\_OCTAL

```
\060\155\061\013\060\011\006\003\125\004\006\023\002\103\110\061
\020\060\016\006\003\125\004\012\023\007\127\111\123\145\113\145
```

```
\171\061\042\060\040\006\003\125\004\013\023\031\117\111\123\124
\105\040\106\157\165\156\144\141\164\151\157\156\040\105\156\144
\157\162\163\145\144\061\050\060\046\006\003\125\004\003\023\037
\117\111\123\124\105\040\127\111\123\145\113\145\171\040\107\154
\157\142\141\154\040\122\157\157\164\040\107\102\040\103\101
```

END

CKA\_SERIAL\_NUMBER

MULTILINE\_OCTAL

```
\002\020\166\261\040\122\164\360\205\207\106\263\370\043\032\366
\302\300
```

END

CKA\_TRUST\_SERVER\_AUTH CK\_TRUST CKT\_NSS\_TRUSTED\_DELEGATOR

CKA\_TRUST\_EMAIL\_PROTECTION CK\_TRUST CKT\_NSS\_TRUSTED\_DELEGATOR

CKA\_TRUST\_CODE\_SIGNING CK\_TRUST CKT\_NSS\_MUST\_VERIFY\_TRUST

CKA\_TRUST\_STEP\_UP\_APPROVED CK\_BBOOL CK\_FALSE

#

# Certificate "SZAFIR ROOT CA2"

#

# Issuer: CN=SZAFIR ROOT CA2,O=Krajowa Izba Rozliczeniowa S.A.,C=PL

# Serial Number:3e:8a:5d:07:ec:55:d2:32:d5:b7:e3:b6:5f:01:eb:2d:dc:e4:d6:e4

# Subject: CN=SZAFIR ROOT CA2,O=Krajowa Izba Rozliczeniowa S.A.,C=PL

# Not Valid Before: Mon Oct 19 07:43:30 2015

# Not Valid After : Fri Oct 19 07:43:30 2035

# Fingerprint (SHA-256):

A1:33:9D:33:28:1A:0B:56:E5:57:D3:D3:2B:1C:E7:F9:36:7E:B0:94:BD:5F:A7:2A:7E:50:04:C8:DE:D7:CA:FE

#

Fingerprint (SHA1): E2:52:FA:95:3F:ED:DB:24:60:BD:6E:28:F3:9C:CC:CF:5E:B3:3F:DE

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_CERTIFICATE

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "SZAFIR ROOT CA2"

CKA\_CERTIFICATE\_TYPE CK\_CERTIFICATE\_TYPE CKC\_X\_509

CKA\_SUBJECT MULTILINE\_OCTAL

```
\060\121\061\013\060\011\006\003\125\004\006\023\002\120\114\061
\050\060\046\006\003\125\004\012\014\037\113\162\141\152\157\167
\141\040\111\172\142\141\040\122\157\172\154\151\143\172\145\156
\151\157\167\141\040\123\056\101\056\061\030\060\026\006\003\125
\004\003\014\017\123\132\101\106\111\122\040\122\117\117\124\040
\103\101\062
```

END

CKA\_ID UTF8 "0"

CKA\_ISSUER MULTILINE\_OCTAL

```
\060\121\061\013\060\011\006\003\125\004\006\023\002\120\114\061
\050\060\046\006\003\125\004\012\014\037\113\162\141\152\157\167
\141\040\111\172\142\141\040\122\157\172\154\151\143\172\145\156
\151\157\167\141\040\123\056\101\056\061\030\060\026\006\003\125
```

\004\003\014\017\123\132\101\106\111\122\040\122\117\117\124\040  
\103\101\062

END

CKA\_SERIAL\_NUMBER

MULTILINE\_OCTAL

\002\024\076\212\135\007\354\125\322\062\325\267\343\266\137\001  
\353\055\334\344\326\344

END

CKA\_VALUE MULTILINE\_OCTAL

\060\202\003\162\060\202\002\132\240\003\002\001\002\002\024\076  
\212\135\007\354\125\322\062\325\267\343\266\137\001\353\055\334  
\344\326\344\060\015\006\011\052\206\110\206\367\015\001\001\013  
\005\000\060\121\061\013\060\011\006\003\125\004\006\023\002\120  
\114\061\050\060\046\006\003\125\004\012\014\037\113\162\141\152  
\157\167\141\040\111\172\142\141\040\122\157\172\154\151\143\172  
\145\156\151\157\167\141\040\123\056\101\056\061\030\060\026\006  
\003\125\004\003\014\017\123\132\101\106\111\122\040\122\117\117  
\124\040\103\101\062\060\036\027\015\061\065\061\060\061\071\060  
\067\064\063\063\060\132\027\015\063\065\061\060\061\071\060\067  
\064\063\063\060\132\060\121\061\013\060\011\006\003\125\004\006  
\023\002\120\114\061\050\060\046\006\003\125\004\012\014\037\113  
\162\141\152\157\167\141\040\111\172\142\141\040\122\157\172\154  
\151\143\172\145\156\151\157\167\141\040\123\056\101\056\061\030  
\060\026\006\003\125\004\003\014\017\123\132\101\106\111\122\040  
\122\117\117\124\040\103\101\062\060\202\001\042\060\015\006\011  
\052\206\110\206\367\015\001\001\001\005\000\003\202\001\017\000  
\060\202\001\012\002\202\001\001\000\267\274\076\120\250\113\315  
\100\265\316\141\347\226\312\264\241\332\014\042\260\372\265\173  
\166\000\167\214\013\317\175\250\206\314\046\121\344\040\075\205  
\014\326\130\343\347\364\052\030\235\332\321\256\046\356\353\123  
\334\364\220\326\023\112\014\220\074\303\364\332\322\216\015\222  
\072\334\261\261\377\070\336\303\272\055\137\200\271\002\275\112  
\235\033\017\264\303\302\301\147\003\335\334\033\234\075\263\260  
\336\000\036\250\064\107\273\232\353\376\013\024\275\066\204\332  
\015\040\277\372\133\313\251\026\040\255\071\140\356\057\165\266  
\347\227\234\371\076\375\176\115\157\115\057\357\210\015\152\372  
\335\361\075\156\040\245\240\022\264\115\160\271\316\327\162\073  
\211\223\247\200\204\034\047\111\162\111\265\377\073\225\236\301  
\314\310\001\354\350\016\212\012\226\347\263\246\207\345\326\371  
\005\053\015\227\100\160\074\272\254\165\132\234\325\115\235\002  
\012\322\113\233\146\113\106\007\027\145\255\237\154\210\000\334  
\042\211\340\341\144\324\147\274\061\171\141\074\273\312\101\315  
\134\152\000\310\074\070\216\130\257\002\003\001\000\001\243\102  
\060\100\060\017\006\003\125\035\023\001\001\377\004\005\060\003  
\001\001\377\060\016\006\003\125\035\017\001\001\377\004\004\003  
\002\001\006\060\035\006\003\125\035\016\004\026\004\024\056\026  
\251\112\030\265\313\314\365\157\120\363\043\137\370\135\347\254  
\360\310\060\015\006\011\052\206\110\206\367\015\001\001\013\005



```
\000\003\202\001\001\000\265\163\370\003\334\131\133\035\166\351
\243\052\173\220\050\262\115\300\063\117\252\232\261\324\270\344
\047\377\251\226\231\316\106\340\155\174\114\242\070\244\006\160
\360\364\101\021\354\077\107\215\077\162\207\371\073\375\244\157
\053\123\000\340\377\071\271\152\007\016\353\035\034\366\242\162
\220\313\202\075\021\202\213\322\273\237\052\257\041\346\143\206
\235\171\031\357\367\273\014\065\220\303\212\355\117\017\365\314
\022\331\244\076\273\240\374\040\225\137\117\046\057\021\043\203
\116\165\007\017\277\233\321\264\035\351\020\004\376\312\140\217
\242\114\270\255\317\341\220\017\315\256\012\307\135\173\267\120
\322\324\141\372\325\025\333\327\237\207\121\124\353\245\343\353
\311\205\240\045\040\067\373\216\316\014\064\204\341\074\201\262
\167\116\103\245\210\137\206\147\241\075\346\264\134\141\266\076
\333\376\267\050\305\242\007\256\265\312\312\215\052\022\357\227
\355\302\060\244\311\052\172\373\363\115\043\033\231\063\064\240
\056\365\251\013\077\324\135\341\317\204\237\342\031\302\137\212
\326\040\036\343\163\267
```

END

CKA\_NSS\_Mozilla\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL

CK\_FALSE

# Trust for "SZAFIR ROOT CA2"

# Issuer: CN=SZAFIR ROOT CA2,O=Krajowa Izba Rozliczeniowa S.A.,C=PL

# Serial Number:3e:8a:5d:07:ec:55:d2:32:d5:b7:e3:b6:5f:01:eb:2d:dc:e4:d6:e4

# Subject: CN=SZAFIR ROOT CA2,O=Krajowa Izba Rozliczeniowa S.A.,C=PL

# Not Valid Before: Mon Oct 19 07:43:30 2015

# Not Valid After : Fri Oct 19 07:43:30 2035

# Fingerprint (SHA-256):

A1:33:9D:33:28:1A:0B:56:E5:57:D3:D3:2B:1C:E7:F9:36:7E:B0:94:BD:5F:A7:2A:7E:50:04:C8:DE:D7:CA:FE

# Fingerprint (SHA1): E2:52:FA:95:3F:ED:DB:24:60:BD:6E:28:F3:9C:CC:CF:5E:B3:3F:DE

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "SZAFIR ROOT CA2"

CKA\_CERT\_SHA1\_HASH MULTILINE\_OCTAL

```
\342\122\372\225\077\355\333\044\140\275\156\050\363\234\314\317
\136\263\077\336
```

END

CKA\_CERT\_MD5\_HASH MULTILINE\_OCTAL

```
\021\144\301\211\260\044\261\214\261\007\176\211\236\121\236\231
```

END

CKA\_ISSUER MULTILINE\_OCTAL

```
\060\121\061\013\060\011\006\003\125\004\006\023\002\120\114\061
\050\060\046\006\003\125\004\012\014\037\113\162\141\152\157\167
```

```
\141\040\111\172\142\141\040\122\157\172\154\151\143\172\145\156
\151\157\167\141\040\123\056\101\056\061\030\060\026\006\003\125
\004\003\014\017\123\132\101\106\111\122\040\122\117\117\124\040
\103\101\062
```

END

CKA\_SERIAL\_NUMBER

MULTILINE\_OCTAL

```
\002\024\076\212\135\007\354\125\322\062\325\267\343\266\137\001
\353\055\334\344\326\344
```

END

CKA\_TRUST\_SERVER\_AUTH CK\_TRUST CKT\_NSS\_TRUSTED\_DELEGATOR

CKA\_TRUST\_EMAIL\_PROTECTION CK\_TRUST CKT\_NSS\_TRUSTED\_DELEGATOR

CKA\_TRUST\_CODE\_SIGNING CK\_TRUST CKT\_NSS\_MUST\_VERIFY\_TRUST

CKA\_TRUST\_STEP\_UP\_APPROVED CK\_BBOOL CK\_FALSE

#

# Certificate "Certum Trusted Network CA 2"

#

# Issuer: CN=Certum Trusted Network CA 2,OU=Certum Certification Authority,O=Unizeto Technologies S.A.,C=PL

# Serial Number:21:d6:d0:4a:4f:25:0f:c9:32:37:fc:aa:5e:12:8d:e9

# Subject: CN=Certum Trusted Network CA 2,OU=Certum Certification Authority,O=Unizeto Technologies S.A.,C=PL

# Not Valid Before:

Thu Oct 06 08:39:56 2011

# Not Valid After : Sat Oct 06 08:39:56 2046

# Fingerprint (SHA-256):

B6:76:F2:ED:DA:E8:77:5C:D3:6C:B0:F6:3C:D1:D4:60:39:61:F4:9E:62:65:BA:01:3A:2F:03:07:B6:D0:B8:04

# Fingerprint (SHA1): D3:DD:48:3E:2B:BF:4C:05:E8:AF:10:F5:FA:76:26:CF:D3:DC:30:92

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_CERTIFICATE

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "Certum Trusted Network CA 2"

CKA\_CERTIFICATE\_TYPE CK\_CERTIFICATE\_TYPE CKC\_X\_509

CKA\_SUBJECT MULTILINE\_OCTAL

```
\060\201\200\061\013\060\011\006\003\125\004\006\023\002\120\114
\061\042\060\040\006\003\125\004\012\023\031\125\156\151\172\145
\164\157\040\124\145\143\150\156\157\154\157\147\151\145\163\040
\123\056\101\056\061\047\060\045\006\003\125\004\013\023\036\103
\145\162\164\165\155\040\103\145\162\164\151\146\151\143\141\164
\151\157\156\040\101\165\164\150\157\162\151\164\171\061\044\060
\042\006\003\125\004\003\023\033\103\145\162\164\165\155\040\124
\162\165\163\164\145\144\040\116\145\164\167\157\162\153\040\103
\101\040\062
```

END

CKA\_ID

UTF8 "0"

CKA\_ISSUER MULTILINE\_OCTAL

\060\201\200\061\013\060\011\006\003\125\004\006\023\002\120\114  
\061\042\060\040\006\003\125\004\012\023\031\125\156\151\172\145  
\164\157\040\124\145\143\150\156\157\154\157\147\151\145\163\040  
\123\056\101\056\061\047\060\045\006\003\125\004\013\023\036\103  
\145\162\164\165\155\040\103\145\162\164\151\146\151\143\141\164  
\151\157\156\040\101\165\164\150\157\162\151\164\171\061\044\060  
\042\006\003\125\004\003\023\033\103\145\162\164\165\155\040\124  
\162\165\163\164\145\144\040\116\145\164\167\157\162\153\040\103  
\101\040\062

END

CKA\_SERIAL\_NUMBER MULTILINE\_OCTAL

\002\020\041\326\320\112\117\045\017\311\062\067\374\252\136\022  
\215\351

END

CKA\_VALUE MULTILINE\_OCTAL

\060\202\005\322\060\202\003\272\240\003\002\001\002\002\020\041  
\326\320\112\117\045\017\311\062\067\374\252\136\022\215\351\060  
\015\006\011\052\206\110\206\367\015\001\001\015\005\000\060\201  
\200\061\013\060\011\006\003\125\004\006\023\002\120\114\061\042  
\060\040\006\003\125\004\012\023\031\125\156\151\172\145\164\157  
\040\124\145\143\150\156\157\154\157\147\151\145\163\040\123\056  
\101\056\061\047\060\045\006\003\125\004\013\023\036\103\145\162  
\164\165\155\040\103\145\162\164\151\146\151\143\141\164\151\157  
\156\040\101\165\164\150\157\162\151\164\171\061\044\060\042\006  
\003\125\004\003\023\033\103\145\162\164\165\155\040\124\162\165  
\163\164\145\144\040\116\145\164\167\157\162\153\040\103\101\040  
\062\060\042\030\017\062\060\061\061\061\060\060\066\060\070\063  
\071\065\066\132\030\017\062\060\064\066\061\060\060\066\060\070  
\063\071\065\066\132\060\201\200\061\013\060\011\006\003\125\004  
\006\023\002\120\114\061\042\060\040\006\003\125\004\012\023\031  
\125\156\151\172\145\164\157\040\124\145\143\150\156\157\154\157  
\147\151\145\163\040\123\056\101\056\061\047\060\045\006\003\125  
\004\013\023\036\103\145\162\164\165\155\040\103\145\162\164\151  
\146\151\143\141\164\151\157\156\040\101\165\164\150\157\162\151  
\164\171\061\044\060\042\006\003\125\004\003\023\033\103\145\162  
\164\165\155\040\124\162\165\163\164\145\144\040\116\145\164\167  
\157\162\153\040\103\101\040\062\060\202\002\042\060\015\006\011  
\052\206\110\206\367\015\001\001\001\005\000\003\202\002\017\000  
\060\202\002\012\002\202\002\001\000\275\371\170\370\346\325\200  
\014\144\235\206\033\226\144\147\077\042\072\036\165\001\175\357  
\373\134\147\214\311\314\134\153\251\221\346\271\102\345\040\113  
\233\332\233\173\271\231\135\331\233\200\113\327\204\100\053\047  
\323\350\272\060\273\076\011\032\247\111\225\357\053\100\044\302  
\227\307\247\356\233\045\357\250\012\000\227\205\132\252\235\334  
\051\311\342\065\007\353\160\115\112\326\301\263\126\270\241\101  
\070\233\321\373\061\177\217\340\137\341\261\077\017\216\026\111

\140\327\006\215\030\371\252\046\020\253\052\323\320\321\147\215  
\033\106\276\107\060\325\056\162\321\305\143\332\347\143\171\104  
\176\113\143\044\211\206\056\064\077\051\114\122\213\052\247\300  
\342\221\050\211\271\300\133\371\035\331\347\047\255\377\232\002  
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\132\074\306\035\144\330\265\061\344\246\074\172\250\127\013\333  
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END

CKA\_NSS\_Mozilla\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

#

Trust for "Certum Trusted Network CA 2"

# Issuer: CN=Certum Trusted Network CA 2,OU=Certum Certification Authority,O=Unizeto Technologies  
S.A.,C=PL

# Serial Number:21:d6:d0:4a:4f:25:0f:c9:32:37:fc:aa:5e:12:8d:e9

# Subject: CN=Certum Trusted Network CA 2,OU=Certum Certification Authority,O=Unizeto Technologies  
S.A.,C=PL

# Not Valid Before: Thu Oct 06 08:39:56 2011

# Not Valid After : Sat Oct 06 08:39:56 2046

# Fingerprint (SHA-256):

B6:76:F2:ED:DA:E8:77:5C:D3:6C:B0:F6:3C:D1:D4:60:39:61:F4:9E:62:65:BA:01:3A:2F:03:07:B6:D0:B8:04

# Fingerprint (SHA1): D3:DD:48:3E:2B:BF:4C:05:E8:AF:10:F5:FA:76:26:CF:D3:DC:30:92

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "Certum Trusted Network CA 2"

CKA\_CERT\_SHA1\_HASH MULTILINE\_OCTAL

\323\335\110\076\053\277\114\005\350\257\020\365\372\166\046\317  
\323\334\060\222

END

CKA\_CERT\_MD5\_HASH MULTILINE\_OCTAL

\155\106\236\331\045\155\010\043\133\136\164\175\036\047\333\362

END

CKA\_ISSUER

MULTILINE\_OCTAL

\060\201\200\061\013\060\011\006\003\125\004\006\023\002\120\114

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\061\042\060\040\006\003\125\004\012\023\031\125\156\151\172\145
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\123\056\101\056\061\047\060\045\006\003\125\004\013\023\036\103
\145\162\164\165\155\040\103\145\162\164\151\146\151\143\141\164
\151\157\156\040\101\165\164\150\157\162\151\164\171\061\044\060
\042\006\003\125\004\003\023\033\103\145\162\164\165\155\040\124
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END

CKA\_SERIAL\_NUMBER MULTILINE\_OCTAL

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END

CKA\_TRUST\_SERVER\_AUTH CK\_TRUST CKT\_NSS\_TRUSTED\_DELEGATOR

CKA\_TRUST\_EMAIL\_PROTECTION CK\_TRUST CKT\_NSS\_TRUSTED\_DELEGATOR

CKA\_TRUST\_CODE\_SIGNING CK\_TRUST CKT\_NSS\_MUST\_VERIFY\_TRUST

CKA\_TRUST\_STEP\_UP\_APPROVED CK\_BBOOL CK\_FALSE

#

# Certificate "Hellenic Academic and Research Institutions RootCA 2015"

#

# Issuer: CN=Hellenic

Academic and Research Institutions RootCA 2015,O=Hellenic Academic and Research Institutions Cert.  
Authority,L=Athens,C=GR

# Serial Number: 0 (0x0)

# Subject: CN=Hellenic Academic and Research Institutions RootCA 2015,O=Hellenic Academic and Research  
Institutions Cert. Authority,L=Athens,C=GR

# Not Valid Before: Tue Jul 07 10:11:21 2015

# Not Valid After : Sat Jun 30 10:11:21 2040

# Fingerprint (SHA-256):

A0:40:92:9A:02:CE:53:B4:AC:F4:F2:FF:C6:98:1C:E4:49:6F:75:5E:6D:45:FE:0B:2A:69:2B:CD:52:52:3F:36

# Fingerprint (SHA1): 01:0C:06:95:A6:98:19:14:FF:BF:5F:C6:B0:B6:95:EA:29:E9:12:A6

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_CERTIFICATE

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "Hellenic Academic and Research Institutions RootCA 2015"

CKA\_CERTIFICATE\_TYPE CK\_CERTIFICATE\_TYPE CKC\_X\_509

CKA\_SUBJECT MULTILINE\_OCTAL

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\163\061\104\060\102\006\003\125\004\012\023\073\110\145\154\154
\145\156\151\143\040\101\143\141\144\145\155\151\143\040\141\156
\144\040\122\145\163\145\141\162\143\150\040\111\156\163\164\151
\164\165\164\151\157\156\163\040\103\145\162\164\056\040\101\165
\164\150\157\162\151\164\171\061\100\060\076\006\003\125\004\003
\023\067\110\145\154\154\145\156\151\143\040\101\143\141\144\145
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CKA_SERIAL_NUMBER
MULTILINE_OCTAL
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END
CKA_VALUE MULTILINE_OCTAL
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```

END

CKA\_NSS\_Mozilla\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "Hellenic Academic and Research Institutions RootCA 2015"

# Issuer: CN=Hellenic Academic and Research Institutions RootCA 2015,O=Hellenic Academic and Research  
Institutions Cert. Authority,L=Athens,C=GR

# Serial Number: 0 (0x0)

# Subject: CN=Hellenic Academic and Research Institutions RootCA 2015,O=Hellenic Academic and Research  
Institutions Cert. Authority,L=Athens,C=GR

# Not Valid Before: Tue Jul 07 10:11:21 2015

# Not Valid After : Sat Jun 30 10:11:21 2040

# Fingerprint (SHA-256):

A0:40:92:9A:02:CE:53:B4:AC:F4:F2:FF:C6:98:1C:E4:49:6F:75:5E:6D:45:FE:0B:2A:69:2B:CD:52:52:3F:36

# Fingerprint (SHA1): 01:0C:06:95:A6:98:19:14:FF:BF:5F:C6:B0:B6:95:EA:29:E9:12:A6

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "Hellenic Academic and Research Institutions RootCA 2015"

CKA\_CERT\_SHA1\_HASH MULTILINE\_OCTAL

\001\014\006\225\246\230\031\024\377\277\137\306\260\266\225\352

```

\051\351\022\246
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\312\377\342\333\003\331\313\113\351\017\255\204\375\173\030\316
END
CKA_ISSUER MULTILINE_OCTAL
\060\201\246\061\013\060\011\006\003\125\004\006\023\002\107\122
\061\017\060\015\006\003\125\004\007\023\006\101\164\150\145\156
\163\061\104\060\102\006\003\125\004\012\023\073\110\145\154\154
\145\156\151\143\040\101\143\141\144\145\155\151\143\040\141\156
\144\040\122\145\163\145\141\162\143\150\040\111\156\163\164\151
\164\165\164\151\157\156\163\040\103\145\162\164\056\040\101\165
\164\150\157\162\151\164\171\061\100\060\076\006\003\125\004\003
\023\067\110\145\154\154\145\156\151\143\040\101\143\141\144\145
\155\151\143\040\141\156\144\040\122\145\163\145\141\162\143\150
\040\111\156\163\164\151\164\165\164\151\157\156\163\040\122\157
\157\164\103\101\040\062\060\061\065
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\001\000
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "Hellenic Academic and Research Institutions ECC RootCA 2015"
#
#
# Issuer: CN=Hellenic Academic and Research Institutions ECC RootCA 2015,O=Hellenic Academic and Research
Institutions Cert. Authority,L=Athens,C=GR
# Serial Number: 0 (0x0)
# Subject: CN=Hellenic Academic and Research Institutions ECC RootCA 2015,O=Hellenic Academic and
Research Institutions Cert. Authority,L=Athens,C=GR
# Not Valid Before: Tue Jul 07 10:37:12 2015
# Not Valid After : Sat Jun 30 10:37:12 2040
# Fingerprint (SHA-256):
44:B5:45:AA:8A:25:E6:5A:73:CA:15:DC:27:FC:36:D2:4C:1C:B9:95:3A:06:65:39:B1:15:82:DC:48:7B:48:33
# Fingerprint (SHA1): 9F:F1:71:8D:92:D5:9A:F3:7D:74:97:B4:BC:6F:84:68:0B:BA:B6:66
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Hellenic Academic and Research Institutions ECC RootCA 2015"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL

```

\060\201\252\061\013\060\011\006\003\125\004\006\023\002\107\122  
\061\017\060\015\006\003\125\004\007\023\006\101\164\150\145\156  
\163\061\104\060\102\006\003\125\004\012\023\073\110\145\154\154  
\145\156\151\143\040\101\143\141\144\145\155\151\143\040\141\156  
\144\040\122\145\163\145\141\162\143\150\040\111\156\163\164\151  
\164\165\164\151\157\156\163\040\103\145\162\164\056\040\101\165  
\164\150\157\162\151\164\171\061\104\060\102\006\003\125\004\003  
\023\073\110\145\154\154\145\156\151\143\040\101\143\141\144\145  
\155\151\143\040\141\156\144\040\122\145\163\145\141\162\143\150  
\040\111\156\163\164\151\164\165\164\151\157\156\163\040\105\103  
\103\040\122\157\157\164\103\101\040\062\060\061\065

END

CKA\_ID

UTF8 "0"

CKA\_ISSUER MULTILINE\_OCTAL

\060\201\252\061\013\060\011\006\003\125\004\006\023\002\107\122  
\061\017\060\015\006\003\125\004\007\023\006\101\164\150\145\156  
\163\061\104\060\102\006\003\125\004\012\023\073\110\145\154\154  
\145\156\151\143\040\101\143\141\144\145\155\151\143\040\141\156  
\144\040\122\145\163\145\141\162\143\150\040\111\156\163\164\151  
\164\165\164\151\157\156\163\040\103\145\162\164\056\040\101\165  
\164\150\157\162\151\164\171\061\104\060\102\006\003\125\004\003  
\023\073\110\145\154\154\145\156\151\143\040\101\143\141\144\145  
\155\151\143\040\141\156\144\040\122\145\163\145\141\162\143\150  
\040\111\156\163\164\151\164\165\164\151\157\156\163\040\105\103  
\103\040\122\157\157\164\103\101\040\062\060\061\065

END

CKA\_SERIAL\_NUMBER

MULTILINE\_OCTAL

\002\001\000

END

CKA\_VALUE MULTILINE\_OCTAL

\060\202\002\303\060\202\002\112\240\003\002\001\002\002\001\000  
\060\012\006\010\052\206\110\316\075\004\003\002\060\201\252\061  
\013\060\011\006\003\125\004\006\023\002\107\122\061\017\060\015  
\006\003\125\004\007\023\006\101\164\150\145\156\163\061\104\060  
\102\006\003\125\004\012\023\073\110\145\154\154\145\156\151\143  
\040\101\143\141\144\145\155\151\143\040\141\156\144\040\122\145  
\163\145\141\162\143\150\040\111\156\163\164\151\164\165\164\151  
\157\156\163\040\103\145\162\164\056\040\101\165\164\150\157\162  
\151\164\171\061\104\060\102\006\003\125\004\003\023\073\110\145  
\154\154\145\156\151\143\040\101\143\141\144\145\155\151\143\040  
\141\156\144\040\122\145\163\145\141\162\143\150\040\111\156\163  
\164\151\164\165\164\151\157\156\163\040\105\103\103\040\122\157  
\157\164\103\101\040\062\060\061\065\060\036\027\015\061\065\060  
\067\060\067\061\060\063\067\061\062\132\027\015\064\060\060\066  
\063\060\061\060\063\067\061\062\132\060\201\252\061\013\060\011  
\006\003\125\004\006\023\002\107\122\061\017\060\015\006\003\125

```
\004\007\023\006\101\164\150\145\156\163\061\104\060\102\006\003
\125\004\012\023\073\110\145\154\154\145\156\151\143\040\101\143
\141\144\145\155\151\143\040\141\156\144\040\122\145\163\145\141
\162\143\150\040\111\156\163\164\151\164\165\164\151\157\156\163
\040\103\145\162\164\056\040\101\165\164\150\157\162\151\164\171
\061\104\060\102\006\003\125\004\003\023\073\110\145\154\154\145
\156\151\143\040\101\143\141\144\145\155\151\143\040\141\156\144
\040\122\145\163\145\141\162\143\150\040\111\156\163\164\151\164
\165\164\151\157\156\163\040\105\103\103\040\122\157\157\164\103
\101\040\062\060\061\065\060\166\060\020\006\007\052\206\110\316
\075\002\001\006\005\053\201\004\000\042\003\142\000\004\222\240
\101\350\113\202\204\134\342\370\061\021\231\206\144\116\011\045
\057\235\101\057\012\256\065\117\164\225\262\121\144\153\215\153
\346\077\160\225\360\005\104\107\246\162\070\120\166\225\002\132
\216\256\050\236\371\055\116\231\357\054\110\157\114\045\051\350
\321\161\133\337\035\301\165\067\264\327\372\173\172\102\234\152
\012\126\132\174\151\013\252\200\011\044\154\176\301\106\243\102
\060\100\060\017\006\003\125\035\023\001\001\377\004\005\060\003
\001\001\377\060\016\006\003\125\035\017\001\001\377\004\004\003
\002\001\006\060\035\006\003\125\035\016\004\026\004\024\264\042
\013\202\231\044\001\016\234\273\344\016\375\277\373\227\040\223
\231\052\060\012\006\010\052\206\110\316\075\004\003\002\003\147
\000\060\144\002\060\147\316\026\142\070\242\254\142\105\247\251
\225\044\300\032\047\234\062\073\300\300\325\272\251\347\370\004
\103\123\205\356\122\041\336\235\365\045\203\076\236\130\113\057
\327\147\023\016\041\002\060\005\341\165\001\336\150\355\052\037
\115\114\011\010\015\354\113\255\144\027\050\347\165\316\105\145
\162\041\027\313\042\101\016\214\023\230\070\232\124\155\233\312
\342\174\352\002\130\042\221
```

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "Hellenic Academic and Research Institutions ECC RootCA 2015"

# Issuer: CN=Hellenic Academic and Research Institutions ECC RootCA 2015,O=Hellenic Academic and Research Institutions Cert. Authority,L=Athens,C=GR

# Serial Number: 0 (0x0)

# Subject: CN=Hellenic Academic and Research Institutions ECC RootCA 2015,O=Hellenic Academic and Research Institutions Cert. Authority,L=Athens,C=GR

# Not Valid Before: Tue Jul 07 10:37:12 2015

# Not Valid After : Sat Jun 30 10:37:12 2040

# Fingerprint (SHA-256):

44:B5:45:AA:8A:25:E6:5A:73:CA:15:DC:27:FC:36:D2:4C:1C:B9:95:3A:06:65:39:B1:15:82:DC:48:7B:48:33

#

Fingerprint (SHA1): 9F:F1:71:8D:92:D5:9A:F3:7D:74:97:B4:BC:6F:84:68:0B:BA:B6:66

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

```

CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Hellenic Academic and Research Institutions ECC RootCA 2015"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\237\361\161\215\222\325\232\363\175\164\227\264\274\157\204\150
\013\272\266\146
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\201\345\264\027\353\302\365\341\113\015\101\173\111\222\376\357
END
CKA_ISSUER MULTILINE_OCTAL
\060\201\252\061\013\060\011\006\003\125\004\006\023\002\107\122
\061\017\060\015\006\003\125\004\007\023\006\101\164\150\145\156
\163\061\104\060\102\006\003\125\004\012\023\073\110\145\154\154
\145\156\151\143\040\101\143\141\144\145\155\151\143\040\141\156
\144\040\122\145\163\145\141\162\143\150\040\111\156\163\164\151
\164\165\164\151\157\156\163\040\103\145\162\164\056\040\101\165
\164\150\157\162\151\164\171\061\104\060\102\006\003\125\004\003
\023\073\110\145\154\154\145\156\151\143\040\101\143\141\144\145
\155\151\143\040\141\156\144\040\122\145\163\145\141\162\143\150
\040\111\156\163\164\151\164\165\164\151\157\156\163\040\105\103
\103\040\122\157\157\164\103\101\040\062\060\061\065
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\001\000
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "ISRG Root X1"
#
# Issuer: CN=ISRG Root X1,O=Internet Security Research Group,C=US
# Serial Number:00:82:10:cf:b0:d2:40:e3:59:44:63:e0:bb:63:82:8b:00
# Subject: CN=ISRG Root X1,O=Internet Security Research Group,C=US
# Not Valid Before: Thu Jun 04 11:04:38 2015
# Not Valid After : Mon Jun 04 11:04:38 2035
# Fingerprint (SHA-256):
96:BC:EC:06:26:49:76:F3:74:60:77:9A:CF:28:C5:A7:CF:E8:A3:C0:AA:E1:1A:8F:FC:EE:05:C0:BD:DF:08:C6
#
Fingerprint (SHA1): CA:BD:2A:79:A1:07:6A:31:F2:1D:25:36:35:CB:03:9D:43:29:A5:E8
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE

```

```
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "ISRG Root X1"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\117\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\051\060\047\006\003\125\004\012\023\040\111\156\164\145\162\156
\145\164\040\123\145\143\165\162\151\164\171\040\122\145\163\145
\141\162\143\150\040\107\162\157\165\160\061\025\060\023\006\003
\125\004\003\023\014\111\123\122\107\040\122\157\157\164\040\130
\061
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\117\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\051\060\047\006\003\125\004\012\023\040\111\156\164\145\162\156
\145\164\040\123\145\143\165\162\151\164\171\040\122\145\163\145
\141\162\143\150\040\107\162\157\165\160\061\025\060\023\006\003
\125\004\003\023\014\111\123\122\107\040\122\157\157\164\040\130
\061
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\021\000\202\020\317\260\322\100\343\131\104\143\340\273\143
\202\213\000
END
CKA_VALUE MULTILINE_OCTAL
\060\202\005\153\060\202\003\123\240\003\002\001\002\002\021\000
\202\020\317\260\322\100\343\131\104\143\340\273\143\202\213\000
\060\015\006\011\052\206\110\206\367\015\001\001\013\005\000\060
\117\061\013\060\011\006\003\125\004\006\023\002\125\123\061\051
\060\047\006\003\125\004\012\023\040\111\156\164\145\162\156\145
\164\040\123\145\143\165\162\151\164\171\040\122\145\163\145\141
\162\143\150\040\107\162\157\165\160\061\025\060\023\006\003\125
\004\003\023\014\111\123\122\107\040\122\157\157\164\040\130\061
\060\036\027\015\061\065\060\066\060\064\061\061\060\064\063\070
\132\027\015\063\065\060\066\060\064\061\061\060\064\063\070\132
\060\117\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\051\060\047\006\003\125\004\012\023\040\111\156\164\145\162\156
\145\164\040\123\145\143\165\162\151\164\171\040\122\145\163\145
\141\162\143\150\040\107\162\157\165\160\061\025\060\023\006\003
\125\004\003\023\014\111\123\122\107\040\122\157\157\164\040\130
\061\060\202\002\042\060\015\006\011\052\206\110\206\367\015\001
\001\001\005\000\003\202\002\017\000\060\202\002\012\002\202\002
\001\000\255\350\044\163\364\024\067\363\233\236\053\127\050\034
\207\276\334\267\337\070\220\214\156\074\346\127\240\170\367\165
\302\242\376\365\152\156\366\000\117\050\333\336\150\206\154\104
\223\266\261\143\375\024\022\153\277\037\322\352\061\233\041\176
\321\063\074\272\110\365\335\171\337\263\270\377\022\361\041\232
```

\113\301\212\206\161\151\112\146\146\154\217\176\074\160\277\255  
\051\042\006\363\344\300\346\200\256\342\113\217\267\231\176\224  
\003\237\323\107\227\174\231\110\043\123\350\070\256\117\012\157  
\203\056\321\111\127\214\200\164\266\332\057\320\070\215\173\003  
\160\041\033\165\362\060\074\372\217\256\335\332\143\253\353\026  
\117\302\216\021\113\176\317\013\350\377\265\167\056\364\262\173  
\112\340\114\022\045\014\160\215\003\051\240\341\123\044\354\023  
\331\356\031\277\020\263\112\214\077\211\243\141\121\336\254\207  
\007\224\364\143\161\354\056\342\157\133\230\201\341\211\134\064  
\171\154\166\357\073\220\142\171\346\333\244\232\057\046\305\320  
\020\341\016\336\331\020\216\026\373\267\367\250\367\307\345\002  
\007\230\217\066\010\225\347\342\067\226\015\066\165\236\373\016  
\162\261\035\233\274\003\371\111\005\330\201\335\005\264\052\326  
\101\351\254\001\166\225\012\017\330\337\325\275\022\037\065\057  
\050\027\154\322\230\301\250\011\144\167\156\107\067\272\316\254  
\131\136\150\235\177\162\326\211\305\006\101\051\076\131\076\335  
\046\365\044\311\021\247\132\243\114\100\037\106\241\231\265\247  
\072\121\156\206\073\236\175\162\247\022\005\170\131\355\076\121  
\170\025\013\003\217\215\320\057\005\262\076\173\112\034\113\163  
\005\022\374\306\352\340\120\023\174\103\223\164\263\312\164\347  
\216\037\001\010\320\060\324\133\161\066\264\007\272\301\060\060  
\134\110\267\202\073\230\246\175\140\212\242\243\051\202\314\272  
\275\203\004\033\242\203\003\101\241\326\005\361\033\302\266\360  
\250\174\206\073\106\250\110\052\210\334\166\232\166\277\037\152  
\245\075\031\217\353\070\363\144\336\310\053\015\012\050\377\367  
\333\342\025\102\324\042\320\047\135\341\171\376\030\347\160\210  
\255\116\346\331\213\072\306\335\047\121\156\377\274\144\365\063  
\103\117\002\003\001\000\001\243\102\060\100\060\016\006\003\125  
\035\017\001\001\377\004\004\003\002\001\006\060\017\006\003\125  
\035\023\001\001\377\004\005\060\003\001\001\377\060\035\006\003  
\125\035\016\004\026\004\024\171\264\131\346\173\266\345\344\001  
\163\200\010\210\310\032\130\366\351\233\156\060\015\006\011\052  
\206\110\206\367\015\001\001\013\005\000\003\202\002\001\000\125  
\037\130\251\274\262\250\120\320\014\261\330\032\151\040\047\051  
\010\254\141\165\134\212\156\370\202\345\151\057\325\366\126\113  
\271\270\163\020\131\323\041\227\176\347\114\161\373\262\322\140  
\255\071\250\013\352\027\041\126\205\361\120\016\131\353\316\340  
\131\351\272\311\025\357\206\235\217\204\200\366\344\351\221\220  
\334\027\233\142\033\105\360\146\225\322\174\157\302\352\073\357  
\037\317\313\326\256\047\361\251\260\310\256\375\175\176\232\372  
\042\004\353\377\331\177\352\221\053\042\261\027\016\217\362\212  
\064\133\130\330\374\001\311\124\271\270\046\314\212\210\063\211  
\114\055\204\074\202\337\356\226\127\005\272\054\273\367\304\267  
\307\116\073\202\276\061\310\042\163\163\222\321\302\200\244\071  
\071\020\063\043\202\114\074\237\206\262\125\230\035\276\051\206  
\214\042\233\236\342\153\073\127\072\202\160\115\334\011\307\211  
\313\012\007\115\154\350\135\216\311\357\316\253\307\273\265\053  
\116\105\326\112\320\046\314\345\162\312\010\152\245\225\343\025

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\241\367\244\355\311\054\137\245\373\377\254\050\002\056\276\327
\173\273\343\161\173\220\026\323\007\136\106\123\174\067\007\102
\214\323\304\226\234\325\231\265\052\340\225\032\200\110\256\114
\071\007\316\314\107\244\122\225\053\272\270\373\255\322\063\123
\175\345\035\115\155\325\241\261\307\102\157\346\100\047\065\134
\243\050\267\007\215\347\215\063\220\347\043\237\373\120\234\171
\154\106\325\264\025\263\226\156\176\233\014\226\072\270\122\055
\077\326\133\341\373\010\302\204\376\044\250\243\211\332\254\152
\341\030\052\261\250\103\141\133\323\037\334\073\215\166\362\055
\350\215\165\337\027\063\154\075\123\373\173\313\101\137\377\334
\242\320\141\070\341\226\270\254\135\213\067\327\165\325\063\300
\231\021\256\235\101\301\162\165\204\276\002\101\102\137\147\044
\110\224\321\233\047\276\007\077\271\270\117\201\164\121\341\172
\267\355\235\043\342\276\340\325\050\004\023\074\061\003\236\335
\172\154\217\306\007\030\306\177\336\107\216\077\050\236\004\006
\317\245\124\064\167\275\354\211\233\351\027\103\337\133\333\137
\376\216\036\127\242\315\100\235\176\142\042\332\336\030\047
```

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER

CK\_BBOOL CK\_FALSE

# Trust for "ISRG Root X1"

# Issuer: CN=ISRG Root X1,O=Internet Security Research Group,C=US

# Serial Number:00:82:10:cf:b0:d2:40:e3:59:44:63:e0:bb:63:82:8b:00

# Subject: CN=ISRG Root X1,O=Internet Security Research Group,C=US

# Not Valid Before: Thu Jun 04 11:04:38 2015

# Not Valid After : Mon Jun 04 11:04:38 2035

# Fingerprint (SHA-256):

96:BC:EC:06:26:49:76:F3:74:60:77:9A:CF:28:C5:A7:CF:E8:A3:C0:AA:E1:1A:8F:FC:EE:05:C0:BD:DF:08:C6

# Fingerprint (SHA1): CA:BD:2A:79:A1:07:6A:31:F2:1D:25:36:35:CB:03:9D:43:29:A5:E8

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "ISRG Root X1"

CKA\_CERT\_SHA1\_HASH MULTILINE\_OCTAL

```
\312\275\052\171\241\007\152\061\362\035\045\066\065\313\003\235
\103\051\245\350
```

END

CKA\_CERT\_MD5\_HASH MULTILINE\_OCTAL

```
\014\322\371\340\332\027\163\351\355\206\115\245\343\160\347\116
```

END

CKA\_ISSUER MULTILINE\_OCTAL

```
\060\117\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\051\060\047\006\003\125\004\012\023\040\111\156\164\145\162\156
```



```
\145\164\040\123\145\143\165\162\151\164\171\040\122\145\163\145
\141\162\143\150\040\107\162\157\165\160\061\025\060\023\006\003
\125\004\003\023\014\111\123\122\107\040\122\157\157\164\040\130
\061
```

END

CKA\_SERIAL\_NUMBER

MULTILINE\_OCTAL

```
\002\021\000\202\020\317\260\322\100\343\131\104\143\340\273\143
\202\213\000
```

END

CKA\_TRUST\_SERVER\_AUTH CK\_TRUST CKT\_NSS\_TRUSTED\_DELEGATOR

CKA\_TRUST\_EMAIL\_PROTECTION CK\_TRUST CKT\_NSS\_MUST\_VERIFY\_TRUST

CKA\_TRUST\_CODE\_SIGNING CK\_TRUST CKT\_NSS\_MUST\_VERIFY\_TRUST

CKA\_TRUST\_STEP\_UP\_APPROVED CK\_BBOOL CK\_FALSE

#

# Certificate "AC RAIZ FNMT-RCM"

#

# Issuer: OU=AC RAIZ FNMT-RCM,O=FNMT-RCM,C=ES

# Serial Number:5d:93:8d:30:67:36:c8:06:1d:1a:c7:54:84:69:07

# Subject: OU=AC RAIZ FNMT-RCM,O=FNMT-RCM,C=ES

# Not Valid Before: Wed Oct 29 15:59:56 2008

# Not Valid After : Tue Jan 01 00:00:00 2030

# Fingerprint (SHA-256):

EB:C5:57:0C:29:01:8C:4D:67:B1:AA:12:7B:AF:12:F7:03:B4:61:1E:BC:17:B7:DA:B5:57:38:94:17:9B:93:FA

#

Fingerprint (SHA1): EC:50:35:07:B2:15:C4:95:62:19:E2:A8:9A:5B:42:99:2C:4C:2C:20

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_CERTIFICATE

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "AC RAIZ FNMT-RCM"

CKA\_CERTIFICATE\_TYPE CK\_CERTIFICATE\_TYPE CKC\_X\_509

CKA\_SUBJECT MULTILINE\_OCTAL

```
\060\073\061\013\060\011\006\003\125\004\006\023\002\105\123\061
\021\060\017\006\003\125\004\012\014\010\106\116\115\124\055\122
\103\115\061\031\060\027\006\003\125\004\013\014\020\101\103\040
\122\101\111\132\040\106\116\115\124\055\122\103\115
```

END

CKA\_ID UTF8 "0"

CKA\_ISSUER MULTILINE\_OCTAL

```
\060\073\061\013\060\011\006\003\125\004\006\023\002\105\123\061
\021\060\017\006\003\125\004\012\014\010\106\116\115\124\055\122
\103\115\061\031\060\027\006\003\125\004\013\014\020\101\103\040
\122\101\111\132\040\106\116\115\124\055\122\103\115
```

END

CKA\_SERIAL\_NUMBER MULTILINE\_OCTAL

```
\002\017\135\223\215\060\147\066\310\006\035\032\307\124\204\151
```

\007  
END  
CKA\_VALUE  
MULTILINE\_OCTAL  
\060\202\005\203\060\202\003\153\240\003\002\001\002\002\017\135  
\223\215\060\147\066\310\006\035\032\307\124\204\151\007\060\015  
\006\011\052\206\110\206\367\015\001\001\013\005\000\060\073\061  
\013\060\011\006\003\125\004\006\023\002\105\123\061\021\060\017  
\006\003\125\004\012\014\010\106\116\115\124\055\122\103\115\061  
\031\060\027\006\003\125\004\013\014\020\101\103\040\122\101\111  
\132\040\106\116\115\124\055\122\103\115\060\036\027\015\060\070  
\061\060\062\071\061\065\065\071\065\066\132\027\015\063\060\060  
\061\060\061\060\060\060\060\060\060\132\060\073\061\013\060\011  
\006\003\125\004\006\023\002\105\123\061\021\060\017\006\003\125  
\004\012\014\010\106\116\115\124\055\122\103\115\061\031\060\027  
\006\003\125\004\013\014\020\101\103\040\122\101\111\132\040\106  
\116\115\124\055\122\103\115\060\202\002\042\060\015\006\011\052  
\206\110\206\367\015\001\001\001\005\000\003\202\002\017\000\060  
\202\002\012\002\202\002\001\000\272\161\200\172\114\206\156\177  
\310\023\155\300\306\175\034\000\227\217\054\014\043\273\020\232  
\100\251\032\267\207\210\370\233\126\152\373\346\173\216\213\222  
\216\247\045\135\131\021\333\066\056\267\121\027\037\251\010\037  
\004\027\044\130\252\067\112\030\337\345\071\324\127\375\327\301  
\054\221\001\221\342\042\324\003\300\130\374\167\107\354\217\076  
\164\103\272\254\064\215\115\070\166\147\216\260\310\157\060\063  
\130\161\134\264\365\153\156\324\001\120\270\023\176\154\112\243  
\111\321\040\031\356\274\300\051\030\145\247\336\376\357\335\012  
\220\041\347\032\147\222\102\020\230\137\117\060\274\076\034\105  
\264\020\327\150\100\024\300\100\372\347\167\027\172\346\013\217  
\145\133\074\331\232\122\333\265\275\236\106\317\075\353\221\005  
\002\300\226\262\166\114\115\020\226\073\222\372\234\177\017\231  
\337\276\043\065\105\036\002\134\376\265\250\233\231\045\332\136  
\363\042\303\071\365\344\052\056\323\306\037\304\154\252\305\034  
\152\001\005\112\057\322\305\301\250\064\046\135\146\245\322\002  
\041\371\030\267\006\365\116\231\157\250\253\114\121\350\317\120  
\030\305\167\310\071\011\054\111\222\062\231\250\273\027\027\171  
\260\132\305\346\243\304\131\145\107\065\203\136\251\350\065\013  
\231\273\344\315\040\306\233\112\006\071\265\150\374\042\272\356  
\125\214\053\116\352\363\261\343\374\266\231\232\325\102\372\161  
\115\010\317\207\036\152\161\175\371\323\264\351\245\161\201\173  
\302\116\107\226\245\366\166\205\243\050\217\351\200\156\201\123  
\245\155\137\270\110\371\302\371\066\246\056\111\377\270\226\302  
\214\007\263\233\210\130\374\353\033\034\336\055\160\342\227\222  
\060\241\211\343\274\125\250\047\326\113\355\220\255\213\372\143  
\045\131\055\250\065\335\312\227\063\274\345\315\307\235\321\354  
\357\136\016\112\220\006\046\143\255\271\331\065\055\007\272\166  
\145\054\254\127\217\175\364\007\224\327\201\002\226\135\243\007  
\111\325\172\320\127\371\033\347\123\106\165\252\260\171\102\313

\150\161\010\351\140\275\071\151\316\364\257\303\126\100\307\255  
\122\242\011\344\157\206\107\212\037\353\050\047\135\203\040\257  
\004\311\154\126\232\213\106\365\002\003\001\000\001\243\201\203  
\060\201\200\060\017\006\003\125\035\023\001\001\377\004\005\060  
\003\001\001\377\060\016\006\003\125\035\017\001\001\377\004\004  
\003\002\001\006\060\035\006\003\125\035\016\004\026\004\024\367  
\175\305\375\304\350\232\033\167\144\247\365\035\240\314\277\207  
\140\232\155\060\076\006\003\125\035\040\004\067\060\065\060\063  
\006\004\125\035\040\000\060\053\060\051\006\010\053\006\001\005  
\005\007\002\001\026\035\150\164\164\160\072\057\057\167\167\167  
\056\143\145\162\164\056\146\156\155\164\056\145\163\057\144\160  
\143\163\057\060\015\006\011\052\206\110\206\367\015\001\001\013  
\005\000\003\202\002\001\000\007\220\112\337\363\043\116\360\303  
\234\121\145\233\234\042\242\212\014\205\363\163\051\153\115\376  
\001\342\251\014\143\001\277\004\147\245\235\230\137\375\001\023  
\372\354\232\142\351\206\376\266\142\322\156\114\224\373\300\165  
\105\174\145\014\370\262\067\317\254\017\317\215\157\371\031\367  
\217\354\036\362\160\236\360\312\270\357\267\377\166\067\166\133  
\366\156\210\363\257\142\062\042\223\015\072\152\216\024\146\014  
\055\123\164\127\145\036\325\262\335\043\201\073\245\146\043\047  
\147\011\217\341\167\252\103\315\145\121\010\355\121\130\376\346  
\071\371\313\107\204\244\025\361\166\273\244\356\244\073\304\137  
\357\262\063\226\021\030\267\311\145\276\030\341\243\244\334\372  
\030\371\323\274\023\233\071\172\064\272\323\101\373\372\062\212  
\052\267\053\206\013\151\203\070\276\315\212\056\013\160\255\215  
\046\222\356\036\365\001\053\012\331\326\227\233\156\340\250\031  
\034\072\041\213\014\036\100\255\003\347\335\146\176\365\271\040  
\015\003\350\226\371\202\105\324\071\340\240\000\135\327\230\346  
\175\236\147\163\303\232\052\367\253\213\241\072\024\357\064\274  
\122\016\211\230\232\004\100\204\035\176\105\151\223\127\316\353  
\316\370\120\174\117\034\156\004\103\233\371\326\073\043\030\351  
\352\216\321\115\106\215\361\073\344\152\312\272\373\043\267\233  
\372\231\001\051\132\130\132\055\343\371\324\155\016\046\255\301  
\156\064\274\062\370\014\005\372\145\243\333\073\067\203\042\351  
\326\334\162\063\375\135\362\040\275\166\074\043\332\050\367\371  
\033\353\131\144\325\334\137\162\176\040\374\315\211\265\220\147  
\115\142\172\077\116\255\035\303\071\376\172\364\050\026\337\101  
\366\110\200\005\327\017\121\171\254\020\253\324\354\003\146\346  
\152\260\272\061\222\102\100\152\276\072\323\162\341\152\067\125  
\274\254\035\225\267\151\141\362\103\221\164\346\240\323\012\044  
\106\241\010\257\326\332\105\031\226\324\123\035\133\204\171\360  
\300\367\107\357\213\217\305\006\256\235\114\142\235\377\106\004  
\370\323\311\266\020\045\100\165\376\026\252\311\112\140\206\057  
\272\357\060\167\344\124\342\270\204\231\130\200\252\023\213\121  
\072\117\110\366\213\266\263

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

```
CK_BBOOL CK_TRUE
CKA_NSS_SERVER_DISTRUST_AFTER CK_BBOOL CK_FALSE
CKA_NSS_EMAIL_DISTRUST_AFTER CK_BBOOL CK_FALSE

# Trust for "AC RAIZ FNMT-RCM"
# Issuer: OU=AC RAIZ FNMT-RCM,O=FNMT-RCM,C=ES
#
# Serial Number:5d:93:8d:30:67:36:c8:06:1d:1a:c7:54:84:69:07
# Subject: OU=AC RAIZ FNMT-RCM,O=FNMT-RCM,C=ES
# Not Valid Before: Wed Oct 29 15:59:56 2008
# Not Valid After : Tue Jan 01 00:00:00 2030
# Fingerprint (SHA-256):
EB:C5:57:0C:29:01:8C:4D:67:B1:AA:12:7B:AF:12:F7:03:B4:61:1E:BC:17:B7:DA:B5:57:38:94:17:9B:93:FA
# Fingerprint (SHA1): EC:50:35:07:B2:15:C4:95:62:19:E2:A8:9A:5B:42:99:2C:4C:2C:20
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "AC RAIZ FNMT-RCM"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\354\120\065\007\262\025\304\225\142\031\342\250\232\133\102\231
\054\114\054\040
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\342\011\004\264\323\275\321\240\024\375\032\322\107\304\127\035
END
CKA_ISSUER MULTILINE_OCTAL
\060\073\061\013\060\011\006\003\125\004\006\023\002\105\123\061
\021\060\017\006\003\125\004\012\014\010\106\116\115\124\055\122
\103\115\061\031\060\027\006\003\125\004\013\014\020\101\103\040
\122\101\111\132\040\106\116\115\124\055\122\103\115
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\017\135\223\215\060\147\066\310\006\035\032\307\124\204\151
\007
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "Amazon Root CA 1"
#
# Issuer: CN=Amazon Root CA 1,O=Amazon,C=US
# Serial Number:06:6c:9f:cf:99:bf:8c:0a:39:e2:f0:78:8a:43:e6:96:36:5b:ca
# Subject: CN=Amazon Root CA 1,O=Amazon,C=US
```

```
# Not Valid Before: Tue May 26 00:00:00 2015
# Not Valid After : Sun Jan 17 00:00:00 2038
# Fingerprint (SHA-256):
8E:CD:E6:88:4F:3D:87:B1:12:5B:A3:1A:C3:FC:B1:3D:70:16:DE:7F:57:CC:90:4F:E1:CB:97:C6:AE:98:19:6E
# Fingerprint (SHA1): 8D:A7:F9:65:EC:5E:FC:37:91:0F:1C:6E:59:FD:C1:CC:6A:6E:DE:16
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE
CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Amazon Root CA 1"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\071\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\017\060\015\006\003\125\004\012\023\006\101\155\141\172\157\156
\061\031\060\027\006\003\125\004\003\023\020\101\155\141\172\157
\156\040\122\157\157\164\040\103\101\040\061
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\071\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\017\060\015\006\003\125\004\012\023\006\101\155\141\172\157\156
\061\031\060\027\006\003\125\004\003\023\020\101\155\141\172\157
\156\040\122\157\157\164\040\103\101\040\061
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\023\006\154\237\317\231\277\214\012\071\342\360\170\212\103
\346\226\066\133\312
END
CKA_VALUE MULTILINE_OCTAL
\060\202\003\101\060\202\002\051\240\003\002\001\002\002\023\006
\154\237\317\231\277\214\012\071\342\360\170\212\103\346\226\066
\133\312\060\015\006\011\052\206\110\206\367\015\001\001\013\005
\000\060\071\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\017\060\015\006\003\125\004\012\023\006\101\155\141\172\157
\156\061\031\060\027\006\003\125\004\003\023\020\101\155\141\172
\157\156\040\122\157\157\164\040\103\101\040\061\060\036\027\015
\061\065\060\065\062\066\060\060\060\060\060\132\027\015\063
\070\060\061\061\067\060\060\060\060\060\132\060\071\061\013
\060\011\006\003\125\004\006\023\002\125\123\061\017\060\015\006
\003\125\004\012\023\006\101\155\141\172\157\156\061\031\060\027
\006\003\125\004\003\023\020\101\155\141\172\157\156\040\122\157
\157\164\040\103\101\040\061\060\202\001\042\060\015\006\011\052
\206\110\206\367\015\001\001\001\005\000\003\202\001\017\000\060
\202\001\012\002\202\001\001\000\262\170\200\161\312\170\325\343
\161\257\107\200\120\164\175\156\330\327\210\166\364\231\150\367
\130\041\140\371\164\204\001\057\254\002\055\206\323\240\103\172
\116\262\244\320\066\272\001\276\215\333\110\310\007\027\066\114
```

\364\356\210\043\307\076\353\067\365\265\031\370\111\150\260\336  
\327\271\166\070\035\141\236\244\376\202\066\245\345\112\126\344  
\105\341\371\375\264\026\372\164\332\234\233\065\071\057\372\260  
\040\120\006\154\172\320\200\262\246\371\257\354\107\031\217\120  
\070\007\334\242\207\071\130\370\272\325\251\371\110\147\060\226  
\356\224\170\136\157\211\243\121\300\060\206\146\241\105\146\272  
\124\353\243\303\221\371\110\334\377\321\350\060\055\175\055\164  
\160\065\327\210\044\367\236\304\131\156\273\163\207\027\362\062  
\106\050\270\103\372\267\035\252\312\264\362\237\044\016\055\113  
\367\161\134\136\151\377\352\225\002\313\070\212\256\120\070\157  
\333\373\055\142\033\305\307\036\124\341\167\340\147\310\017\234  
\207\043\326\077\100\040\177\040\200\304\200\114\076\073\044\046  
\216\004\256\154\232\310\252\015\002\003\001\000\001\243\102\060  
\100\060\017\006\003\125\035\023\001\001\377\004\005\060\003\001  
\001\377\060\016\006\003\125\035\017\001\001\377\004\004\003\002  
\001\206\060\035\006\003\125\035\016\004\026\004\024\204\030\314  
\205\064\354\274\014\224\224\056\010\131\234\307\262\020\116\012  
\010\060\015\006\011\052\206\110\206\367\015\001\001\013\005\000  
\003\202\001\001\000\230\362\067\132\101\220\241\032\305\166\121  
\050\040\066\043\016\256\346\050\273\252\370\224\256\110\244\060  
\177\033\374\044\215\113\264\310\241\227\366\266\361\172\160\310  
\123\223\314\010\050\343\230\045\317\043\244\371\336\041\323\174  
\205\011\255\116\232\165\072\302\013\152\211\170\166\104\107\030  
\145\154\215\101\216\073\177\232\313\364\265\247\120\327\005\054  
\067\350\003\113\255\351\141\240\002\156\365\362\360\305\262\355  
\133\267\334\372\224\134\167\236\023\245\177\122\255\225\362\370  
\223\073\336\213\134\133\312\132\122\133\140\257\024\367\113\357  
\243\373\237\100\225\155\061\124\374\102\323\307\106\037\043\255  
\331\017\110\160\232\331\165\170\161\321\162\103\064\165\156\127  
\131\302\002\134\046\140\051\317\043\031\026\216\210\103\245\324  
\344\313\010\373\043\021\103\350\103\051\162\142\241\251\135\136  
\010\324\220\256\270\330\316\024\302\320\125\362\206\366\304\223  
\103\167\146\141\300\271\350\101\327\227\170\140\003\156\112\162  
\256\245\321\175\272\020\236\206\154\033\212\271\131\063\370\353  
\304\220\276\361\271

END

CKA\_NSS\_Mozilla\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "Amazon Root CA 1"

# Issuer: CN=Amazon Root CA 1,O=Amazon,C=US

# Serial Number:06:6c:9f:cf:99:bf:8c:0a:39:e2:f0:78:8a:43:e6:96:36:5b:ca

# Subject: CN=Amazon Root CA 1,O=Amazon,C=US

# Not Valid Before: Tue May 26 00:00:00 2015

# Not Valid After : Sun Jan 17 00:00:00 2038

# Fingerprint (SHA-256):

```

8E:CD:E6:88:4F:3D:87:B1:12:5B:A3:1A:C3:FC:B1:3D:70:16:DE:7F:57:CC:90:4F:E1:CB:97:C6:AE:98:19:6E
# Fingerprint (SHA1): 8D:A7:F9:65:EC:5E:FC:37:91:0F:1C:6E:59:FD:C1:CC:6A:6E:DE:16
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Amazon
Root CA 1"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\215\247\371\145\354\136\374\067\221\017\034\156\131\375\301\314
\152\156\336\026
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\103\306\277\256\354\376\255\057\030\306\210\150\060\374\310\346
END
CKA_ISSUER MULTILINE_OCTAL
\060\071\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\017\060\015\006\003\125\004\012\023\006\101\155\141\172\157\156
\061\031\060\027\006\003\125\004\003\023\020\101\155\141\172\157
\156\040\122\157\157\164\040\103\101\040\061
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\023\006\154\237\317\231\277\214\012\071\342\360\170\212\103
\346\226\066\133\312
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "Amazon Root CA 2"
#
# Issuer: CN=Amazon Root CA 2,O=Amazon,C=US
# Serial Number:06:6c:9f:d2:96:35:86:9f:0a:0f:e5:86:78:f8:5b:26:bb:8a:37
#
Subject: CN=Amazon Root CA 2,O=Amazon,C=US
# Not Valid Before: Tue May 26 00:00:00 2015
# Not Valid After : Sat May 26 00:00:00 2040
# Fingerprint (SHA-256):
1B:A5:B2:AA:8C:65:40:1A:82:96:01:18:F8:0B:EC:4F:62:30:4D:83:CE:C4:71:3A:19:C3:9C:01:1E:A4:6D:B4
# Fingerprint (SHA1): 5A:8C:EF:45:D7:A6:98:59:76:7A:8C:8B:44:96:B5:78:CF:47:4B:1A
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Amazon Root CA 2"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509

```

CKA\_SUBJECT MULTILINE\_OCTAL

\060\071\061\013\060\011\006\003\125\004\006\023\002\125\123\061  
\017\060\015\006\003\125\004\012\023\006\101\155\141\172\157\156  
\061\031\060\027\006\003\125\004\003\023\020\101\155\141\172\157  
\156\040\122\157\157\164\040\103\101\040\062

END

CKA\_ID UTF8 "0"

CKA\_ISSUER MULTILINE\_OCTAL

\060\071\061\013\060\011\006\003\125\004\006\023\002\125\123\061  
\017\060\015\006\003\125\004\012\023\006\101\155\141\172\157\156  
\061\031\060\027\006\003\125\004\003\023\020\101\155\141\172\157  
\156\040\122\157\157\164\040\103\101\040\062

END

CKA\_SERIAL\_NUMBER

MULTILINE\_OCTAL

\002\023\006\154\237\322\226\065\206\237\012\017\345\206\170\370  
\133\046\273\212\067

END

CKA\_VALUE MULTILINE\_OCTAL

\060\202\005\101\060\202\003\051\240\003\002\001\002\002\023\006  
\154\237\322\226\065\206\237\012\017\345\206\170\370\133\046\273  
\212\067\060\015\006\011\052\206\110\206\367\015\001\001\014\005  
\000\060\071\061\013\060\011\006\003\125\004\006\023\002\125\123  
\061\017\060\015\006\003\125\004\012\023\006\101\155\141\172\157  
\156\061\031\060\027\006\003\125\004\003\023\020\101\155\141\172  
\157\156\040\122\157\157\164\040\103\101\040\062\060\036\027\015  
\061\065\060\065\062\066\060\060\060\060\060\060\132\027\015\064  
\060\060\065\062\066\060\060\060\060\060\060\132\060\071\061\013  
\060\011\006\003\125\004\006\023\002\125\123\061\017\060\015\006  
\003\125\004\012\023\006\101\155\141\172\157\156\061\031\060\027  
\006\003\125\004\003\023\020\101\155\141\172\157\156\040\122\157  
\157\164\040\103\101\040\062\060\202\002\042\060\015\006\011\052  
\206\110\206\367\015\001\001\001\005\000\003\202\002\017\000\060  
\202\002\012\002\202\002\001\000\255\226\237\055\234\112\114\112  
\201\171\121\231\354\212\313\153\140\121\023\274\115\155\006\374  
\260\010\215\335\031\020\152\307\046\014\065\330\300\157\040\204  
\351\224\261\233\205\003\303\133\333\112\350\310\370\220\166\331  
\133\117\343\114\350\006\066\115\314\232\254\075\014\220\053\222  
\324\006\031\140\254\067\104\171\205\201\202\255\132\067\340\015  
\314\235\246\114\122\166\352\103\235\267\004\321\120\366\125\340  
\325\322\246\111\205\351\067\351\312\176\256\134\225\115\110\232  
\077\256\040\132\155\210\225\331\064\270\122\032\103\220\260\277  
\154\005\271\266\170\267\352\320\344\072\074\022\123\142\377\112  
\362\173\276\065\005\251\022\064\343\363\144\164\142\054\075\000  
\111\132\050\376\062\104\273\207\335\145\047\002\161\073\332\112  
\367\037\332\315\367\041\125\220\117\017\354\256\202\341\237\153  
\331\105\323\273\360\137\207\355\074\054\071\206\332\077\336\354  
\162\125\353\171\243\255\333\335\174\260\272\034\316\374\336\117



\065\166\317\017\370\170\037\152\066\121\106\047\141\133\351\236  
\317\360\242\125\175\174\045\212\157\057\264\305\317\204\056\053  
\375\015\121\020\154\373\137\033\274\033\176\305\256\073\230\001  
\061\222\377\013\127\364\232\262\271\127\351\253\357\015\166\321  
\360\356\364\316\206\247\340\156\351\264\151\241\337\151\366\063  
\306\151\056\227\023\236\245\207\260\127\020\201\067\311\123\263  
\273\177\366\222\321\234\320\030\364\222\156\332\203\117\246\143  
\231\114\245\373\136\357\041\144\172\040\137\154\144\205\025\313  
\067\351\142\014\013\052\026\334\001\056\062\332\076\113\365\236  
\072\366\027\100\224\357\236\221\010\206\372\276\143\250\132\063  
\354\313\164\103\225\371\154\151\122\066\307\051\157\374\125\003  
\134\037\373\237\275\107\353\347\111\107\225\013\116\211\042\011  
\111\340\365\141\036\361\277\056\212\162\156\200\131\377\127\072  
\371\165\062\243\116\137\354\355\050\142\331\115\163\362\314\201  
\027\140\355\315\353\334\333\247\312\305\176\002\275\362\124\010  
\124\375\264\055\011\054\027\124\112\230\321\124\341\121\147\010  
\322\355\156\176\157\077\322\055\201\131\051\146\313\220\071\225  
\021\036\164\047\376\335\353\257\002\003\001\000\001\243\102\060  
\100\060\017\006\003\125\035\023\001\001\377\004\005\060\003\001  
\001\377\060\016\006\003\125\035\017\001\001\377\004\004\003\002  
\001\206\060\035\006\003\125\035\016\004\026\004\024\260\014\360  
\114\060\364\005\130\002\110\375\063\345\122\257\113\204\343\146  
\122\060\015\006\011\052\206\110\206\367\015\001\001\014\005\000  
\003\202\002\001\000\252\250\200\217\016\170\243\340\242\324\315  
\346\365\230\172\073\352\000\003\260\227\016\223\274\132\250\366  
\054\214\162\207\251\261\374\177\163\375\143\161\170\245\207\131  
\317\060\341\015\020\262\023\132\155\202\365\152\346\200\237\240  
\005\013\150\344\107\153\307\152\337\266\375\167\062\162\345\030  
\372\011\364\240\223\054\135\322\214\165\205\166\145\220\014\003  
\171\267\061\043\143\255\170\203\011\206\150\204\312\377\371\317  
\046\232\222\171\347\315\113\305\347\141\247\027\313\363\251\022  
\223\223\153\247\350\057\123\222\304\140\130\260\314\002\121\030  
\133\205\215\142\131\143\266\255\264\336\232\373\046\367\000\047  
\300\135\125\067\164\231\311\120\177\343\131\056\104\343\054\045  
\356\354\114\062\167\264\237\032\351\113\135\040\305\332\375\034  
\207\026\306\103\350\324\273\046\232\105\160\136\251\013\067\123  
\342\106\173\047\375\340\106\362\211\267\314\102\266\313\050\046  
\156\331\245\311\072\310\101\023\140\367\120\214\025\256\262\155  
\032\025\032\127\170\346\222\052\331\145\220\202\077\154\002\257  
\256\022\072\047\226\066\004\327\035\242\200\143\251\233\361\345  
\272\264\174\024\260\116\311\261\037\164\137\070\366\121\352\233  
\372\054\242\021\324\251\055\047\032\105\261\257\262\116\161\015  
\300\130\106\326\151\006\313\123\313\263\376\153\101\315\101\176  
\175\114\017\174\162\171\172\131\315\136\112\016\254\233\251\230  
\163\171\174\264\364\314\271\270\007\014\262\164\134\270\307\157  
\210\241\220\247\364\252\371\277\147\072\364\032\025\142\036\267  
\237\276\075\261\051\257\147\241\022\362\130\020\031\123\003\060  
\033\270\032\211\366\234\275\227\003\216\243\011\363\035\213\041

```
\361\264\337\344\034\321\237\145\002\006\352\134\326\023\263\204
\357\242\245\134\214\167\051\247\150\300\153\256\100\322\250\264
\352\315\360\215\113\070\234\031\232\033\050\124\270\211\220\357
\312\165\201\076\036\362\144\044\307\030\257\116\377\107\236\007
\366\065\145\244\323\012\126\377\365\027\144\154\357\250\042\045
\111\223\266\337\000\027\332\130\176\135\356\305\033\260\321\321
\137\041\020\307\371\363\272\002\012\047\007\305\361\326\307\323
\340\373\011\140\154
```

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "Amazon Root CA 2"

# Issuer: CN=Amazon Root CA 2,O=Amazon,C=US

# Serial Number:06:6c:9f:d2:96:35:86:9f:0a:0f:e5:86:78:f8:5b:26:bb:8a:37

#

Subject: CN=Amazon Root CA 2,O=Amazon,C=US

# Not Valid Before: Tue May 26 00:00:00 2015

# Not Valid After : Sat May 26 00:00:00 2040

# Fingerprint (SHA-256):

1B:A5:B2:AA:8C:65:40:1A:82:96:01:18:F8:0B:EC:4F:62:30:4D:83:CE:C4:71:3A:19:C3:9C:01:1E:A4:6D:B4

# Fingerprint (SHA1): 5A:8C:EF:45:D7:A6:98:59:76:7A:8C:8B:44:96:B5:78:CF:47:4B:1A

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "Amazon Root CA 2"

CKA\_CERT\_SHA1\_HASH MULTILINE\_OCTAL

```
\132\214\357\105\327\246\230\131\166\172\214\213\104\226\265\170
\317\107\113\032
```

END

CKA\_CERT\_MD5\_HASH MULTILINE\_OCTAL

```
\310\345\215\316\250\102\342\172\300\052\134\174\236\046\277\146
```

END

CKA\_ISSUER MULTILINE\_OCTAL

```
\060\071\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\017\060\015\006\003\125\004\012\023\006\101\155\141\172\157\156
\061\031\060\027\006\003\125\004\003\023\020\101\155\141\172\157
\156\040\122\157\157\164\040\103\101\040\062
```

END

CKA\_SERIAL\_NUMBER

MULTILINE\_OCTAL

```
\002\023\006\154\237\322\226\065\206\237\012\017\345\206\170\370
\133\046\273\212\067
```

END

CKA\_TRUST\_SERVER\_AUTH CK\_TRUST CKT\_NSS\_TRUSTED\_DELEGATOR

CKA\_TRUST\_EMAIL\_PROTECTION CK\_TRUST CKT\_NSS\_TRUSTED\_DELEGATOR  
CKA\_TRUST\_CODE\_SIGNING CK\_TRUST CKT\_NSS\_MUST\_VERIFY\_TRUST  
CKA\_TRUST\_STEP\_UP\_APPROVED CK\_BBOOL CK\_FALSE

#

# Certificate "Amazon Root CA 3"

#

# Issuer: CN=Amazon Root CA 3,O=Amazon,C=US

# Serial Number:06:6c:9f:d5:74:97:36:66:3f:3b:0b:9a:d9:e8:9e:76:03:f2:4a

# Subject: CN=Amazon Root CA 3,O=Amazon,C=US

# Not Valid Before: Tue May 26 00:00:00 2015

# Not Valid After : Sat May 26 00:00:00 2040

# Fingerprint (SHA-256):

18:CE:6C:FE:7B:F1:4E:60:B2:E3:47:B8:DF:E8:68:CB:31:D0:2E:BB:3A:DA:27:15:69:F5:03:43:B4:6D:B3:A4

# Fingerprint (SHA1): 0D:44:DD:8C:3C:8C:1A:1A:58:75:64:81:E9:0F:2E:2A:FF:B3:D2:6E

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_CERTIFICATE

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL

CK\_FALSE

CKA\_LABEL UTF8 "Amazon Root CA 3"

CKA\_CERTIFICATE\_TYPE CK\_CERTIFICATE\_TYPE CKC\_X\_509

CKA\_SUBJECT MULTILINE\_OCTAL

\060\071\061\013\060\011\006\003\125\004\006\023\002\125\123\061

\017\060\015\006\003\125\004\012\023\006\101\155\141\172\157\156

\061\031\060\027\006\003\125\004\003\023\020\101\155\141\172\157

\156\040\122\157\157\164\040\103\101\040\063

END

CKA\_ID UTF8 "0"

CKA\_ISSUER MULTILINE\_OCTAL

\060\071\061\013\060\011\006\003\125\004\006\023\002\125\123\061

\017\060\015\006\003\125\004\012\023\006\101\155\141\172\157\156

\061\031\060\027\006\003\125\004\003\023\020\101\155\141\172\157

\156\040\122\157\157\164\040\103\101\040\063

END

CKA\_SERIAL\_NUMBER MULTILINE\_OCTAL

\002\023\006\154\237\325\164\227\066\146\077\073\013\232\331\350

\236\166\003\362\112

END

CKA\_VALUE MULTILINE\_OCTAL

\060\202\001\266\060\202\001\133\240\003\002\001\002\002\023\006

\154\237\325\164\227\066\146\077\073\013\232\331\350\236\166\003

\362\112\060\012\006\010\052\206\110\316\075\004\003\002\060\071

\061\013\060\011\006\003\125\004\006\023\002\125\123\061\017\060

\015\006\003\125\004\012\023\006\101\155\141\172\157\156\061\031

\060\027\006\003\125\004\003\023\020\101\155\141\172\157\156\040

\122\157\157\164\040\103\101\040\063\060\036\027\015\061\065\060

\065\062\066\060\060\060\060\060\060\060\132\027\015\064\060\060\065

```
\062\066\060\060\060\060\060\060\060\132\060\071\061\013\060\011\006
\003\125\004\006\023\002\125\123\061\017\060\015\006\003\125\004
\012\023\006\101\155\141\172\157\156\061\031\060\027\006\003\125
\004\003\023\020\101\155\141\172\157\156\040\122\157\157\164\040
\103\101\040\063\060\131\060\023\006\007\052\206\110\316\075\002
\001\006\010\052\206\110\316\075\003\001\007\003\102\000\004\051
\227\247\306\101\177\300\015\233\350\001\033\126\306\362\122\245
\272\055\262\022\350\322\056\327\372\311\305\330\252\155\037\163
\201\073\073\230\153\071\174\063\245\305\116\206\216\200\027\150
\142\105\127\175\104\130\035\263\067\345\147\010\353\146\336\243
\102\060\100\060\017\006\003\125\035\023\001\001\377\004\005\060
\003\001\001\377\060\016\006\003\125\035\017\001\001\377\004\004
\003\002\001\206\060\035\006\003\125\035\016\004\026\004\024\253
\266\333\327\006\236\067\254\060\206\007\221\160\307\234\304\031
\261\170\300\060\012\006\010\052\206\110\316\075\004\003\002\003
\111\000\060\106\002\041\000\340\205\222\243\027\267\215\371\053
\006\245\223\254\032\230\150\141\162\372\341\241\320\373\034\170
\140\246\103\231\305\270\304\002\041\000\234\002\357\361\224\234
\263\226\371\353\306\052\370\266\054\376\072\220\024\026\327\214
\143\044\110\034\337\060\175\325\150\073
```

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "Amazon Root CA 3"

# Issuer: CN=Amazon Root CA 3,O=Amazon,C=US

# Serial Number:06:6c:9f:d5:74:97:36:66:3f:3b:0b:9a:d9:e8:9e:76:03:f2:4a

# Subject: CN=Amazon Root CA 3,O=Amazon,C=US

# Not Valid Before: Tue May 26 00:00:00 2015

# Not Valid After

: Sat May 26 00:00:00 2040

# Fingerprint (SHA-256):

18:CE:6C:FE:7B:F1:4E:60:B2:E3:47:B8:DF:E8:68:CB:31:D0:2E:BB:3A:DA:27:15:69:F5:03:43:B4:6D:B3:A4

# Fingerprint (SHA1): 0D:44:DD:8C:3C:8C:1A:1A:58:75:64:81:E9:0F:2E:2A:FF:B3:D2:6E

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "Amazon Root CA 3"

CKA\_CERT\_SHA1\_HASH MULTILINE\_OCTAL

```
\015\104\335\214\074\214\032\032\130\165\144\201\351\017\056\052
\377\263\322\156
```

END

CKA\_CERT\_MD5\_HASH MULTILINE\_OCTAL

```
\240\324\357\013\367\265\330\111\225\052\354\365\304\374\201\207
```

END

```

CKA_ISSUER MULTILINE_OCTAL
\060\071\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\017\060\015\006\003\125\004\012\023\006\101\155\141\172\157\156
\061\031\060\027\006\003\125\004\003\023\020\101\155\141\172\157
\156\040\122\157\157\164\040\103\101\040\063
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\023\006\154\237\325\164\227\066\146\077\073\013\232\331\350
\236\166\003\362\112
END
CKA_TRUST_SERVER_AUTH
CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "Amazon Root CA 4"
#
# Issuer: CN=Amazon Root CA 4,O=Amazon,C=US
# Serial Number:06:6c:9f:d7:c1:bb:10:4c:29:43:e5:71:7b:7b:2c:c8:1a:c1:0e
# Subject: CN=Amazon Root CA 4,O=Amazon,C=US
# Not Valid Before: Tue May 26 00:00:00 2015
# Not Valid After : Sat May 26 00:00:00 2040
# Fingerprint (SHA-256):
E3:5D:28:41:9E:D0:20:25:CF:A6:90:38:CD:62:39:62:45:8D:A5:C6:95:FB:DE:A3:C2:2B:0B:FB:25:89:70:92
# Fingerprint (SHA1): F6:10:84:07:D6:F8:BB:67:98:0C:C2:E2:44:C2:EB:AE:1C:EF:63:BE
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Amazon Root CA 4"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\071\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\017\060\015\006\003\125\004\012\023\006\101\155\141\172\157\156
\061\031\060\027\006\003\125\004\003\023\020\101\155\141\172\157
\156\040\122\157\157\164\040\103\101\040\064
END
CKA_ID
UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\071\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\017\060\015\006\003\125\004\012\023\006\101\155\141\172\157\156
\061\031\060\027\006\003\125\004\003\023\020\101\155\141\172\157
\156\040\122\157\157\164\040\103\101\040\064
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL

```

\002\023\006\154\237\327\301\273\020\114\051\103\345\161\173\173  
\054\310\032\301\016

END

CKA\_VALUE MULTILINE\_OCTAL

\060\202\001\362\060\202\001\170\240\003\002\001\002\002\023\006  
\154\237\327\301\273\020\114\051\103\345\161\173\173\054\310\032  
\301\016\060\012\006\010\052\206\110\316\075\004\003\003\060\071  
\061\013\060\011\006\003\125\004\006\023\002\125\123\061\017\060  
\015\006\003\125\004\012\023\006\101\155\141\172\157\156\061\031  
\060\027\006\003\125\004\003\023\020\101\155\141\172\157\156\040  
\122\157\157\164\040\103\101\040\064\060\036\027\015\061\065\060  
\065\062\066\060\060\060\060\060\132\027\015\064\060\060\065  
\062\066\060\060\060\060\060\132\060\071\061\013\060\011\006  
\003\125\004\006\023\002\125\123\061\017\060\015\006\003\125\004  
\012\023\006\101\155\141\172\157\156\061\031\060\027\006\003\125  
\004\003\023\020\101\155\141\172\157\156\040\122\157\157\164\040  
\103\101\040\064\060\166\060\020\006\007\052\206\110\316\075\002  
\001\006\005\053\201\004\000\042\003\142\000\004\322\253\212\067  
\117\243\123\015\376\301\212\173\113\250\173\106\113\143\260\142  
\366\055\033\333\010\161\041\322\000\350\143\275\232\047\373\360  
\071\156\135\352\075\245\311\201\252\243\133\040\230\105\135\026  
\333\375\350\020\155\343\234\340\343\275\137\204\142\363\160\144  
\063\240\313\044\057\160\272\210\241\052\240\165\370\201\256\142  
\006\304\201\333\071\156\051\260\036\372\056\134\243\102\060\100  
\060\017\006\003\125\035\023\001\001\377\004\005\060\003\001\001  
\377\060\016\006\003\125\035\017\001\001\377\004\004\003\002\001  
\206\060\035\006\003\125\035\016\004\026\004\024\323\354\307\072  
\145\156\314\341\332\166\232\126\373\234\363\206\155\127\345\201  
\060\012\006\010\052\206\110\316\075\004\003\003\003\150\000\060  
\145\002\060\072\213\041\361\275\176\021\255\320\357\130\226\057  
\326\353\235\176\220\215\053\317\146\125\303\054\343\050\251\160  
\012\107\016\360\067\131\022\377\055\231\224\050\116\052\117\065  
\115\063\132\002\061\000\352\165\000\116\073\304\072\224\022\221  
\311\130\106\235\041\023\162\247\210\234\212\344\114\112\333\226  
\324\254\213\153\153\111\022\123\063\255\327\344\276\044\374\265  
\012\166\324\245\274\020

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "Amazon Root CA 4"

# Issuer: CN=Amazon Root CA 4,O=Amazon,C=US

# Serial Number:06:6c:9f:d7:c1:bb:10:4c:29:43:e5:71:7b:7b:2c:c8:1a:c1:0e

# Subject:

CN=Amazon Root CA 4,O=Amazon,C=US

# Not Valid Before: Tue May 26 00:00:00 2015

```

# Not Valid After : Sat May 26 00:00:00 2040
# Fingerprint (SHA-256):
E3:5D:28:41:9E:D0:20:25:CF:A6:90:38:CD:62:39:62:45:8D:A5:C6:95:FB:DE:A3:C2:2B:0B:FB:25:89:70:92
# Fingerprint (SHA1): F6:10:84:07:D6:F8:BB:67:98:0C:C2:E2:44:C2:EB:AE:1C:EF:63:BE
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Amazon Root CA 4"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\366\020\204\007\326\370\273\147\230\014\302\342\104\302\353\256
\034\357\143\276
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\211\274\047\325\353\027\215\006\152\151\325\375\211\107\264\315
END
CKA_ISSUER MULTILINE_OCTAL
\060\071\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\017\060\015\006\003\125\004\012\023\006\101\155\141\172\157\156
\061\031\060\027\006\003\125\004\003\023\020\101\155\141\172\157
\156\040\122\157\157\164\040\103\101\040\064
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\023\006\154\237\327\301\273\020\114\051\103\345\161\173\173
\054\310\032\301\016
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "Symantec Class 1 Public Primary Certification Authority - G6"
#
# Issuer: CN=Symantec Class 1 Public Primary Certification Authority - G6,OU=Symantec Trust
Network,O=Symantec Corporation,C=US
# Serial Number:24:32:75:f2:1d:2f:d2:09:33:f7:b4:6a:ca:d0:f3:98
# Subject: CN=Symantec Class 1 Public Primary Certification Authority - G6,OU=Symantec Trust
Network,O=Symantec Corporation,C=US
# Not Valid Before: Tue Oct 18 00:00:00 2011
# Not Valid After : Tue Dec 01 23:59:59 2037
# Fingerprint (SHA-256):
9D:19:0B:2E:31:45:66:68:5B:E8:A8:89:E2:7A:A8:C7:D7:AE:1D:8A:AD:DB:A3:C1:EC:F9:D2:48:63:CD:34:B9
# Fingerprint (SHA1): 51:7F:61:1E:29:91:6B:53:82:FB:72:E7:44:D9:8D:C3:CC:53:6D:64
CKA_CLASS
CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE

```

```
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Symantec Class 1 Public Primary Certification Authority - G6"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\201\224\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\035\060\033\006\003\125\004\012\023\024\123\171\155\141\156
\164\145\143\040\103\157\162\160\157\162\141\164\151\157\156\061
\037\060\035\006\003\125\004\013\023\026\123\171\155\141\156\164
\145\143\040\124\162\165\163\164\040\116\145\164\167\157\162\153
\061\105\060\103\006\003\125\004\003\023\074\123\171\155\141\156
\164\145\143\040\103\154\141\163\163\040\061\040\120\165\142\154
\151\143\040\120\162\151\155\141\162\171\040\103\145\162\164\151
\146\151\143\141\164\151\157\156\040\101\165\164\150\157\162\151
\164\171\040\055\040\107\066
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\201\224\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\035\060\033\006\003\125\004\012\023\024\123\171\155\141\156
\164\145\143\040\103\157\162\160\157\162\141\164\151\157\156\061
\037\060\035\006\003\125\004\013\023\026\123\171\155\141\156\164
\145\143\040\124\162\165\163\164\040\116\145\164\167\157\162\153
\061\105\060\103\006\003\125\004\003\023\074\123\171\155\141\156
\164\145\143\040\103\154\141\163\163\040\061\040\120\165\142\154
\151\143\040\120\162\151\155\141\162\171\040\103\145\162\164\151
\146\151\143\141\164\151\157\156\040\101\165\164\150\157\162\151
\164\171\040\055\040\107\066
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\020\044\062\165\362\035\057\322\011\063\367\264\152\312\320
\363\230
END
CKA_VALUE MULTILINE_OCTAL
\060\202\003\366\060\202\002\336\240\003\002\001\002\002\020\044
\062\165\362\035\057\322\011\063\367\264\152\312\320\363\230\060
\015\006\011\052\206\110\206\367\015\001\001\013\005\000\060\201
\224\061\013\060\011\006\003\125\004\006\023\002\125\123\061\035
\060\033\006\003\125\004\012\023\024\123\171\155\141\156\164\145
\143\040\103\157\162\160\157\162\141\164\151\157\156\061\037\060
\035\006\003\125\004\013\023\026\123\171\155\141\156\164\145\143
\040\124\162\165\163\164\040\116\145\164\167\157\162\153\061\105
\060\103\006\003\125\004\003\023\074\123\171\155\141\156\164\145
\143\040\103\154\141\163\163\040\061\040\120\165\142\154\151\143
\040\120\162\151\155\141\162\171\040\103\145\162\164\151\146\151
\143\141\164\151\157\156\040\101\165\164\150\157\162\151\164\171
\040\055\040\107\066\060\036\027\015\061\061\061\060\061\070\060
```



\060\060\060\060\060\132\027\015\063\067\061\062\060\061\062\063  
\065\071\065\071\132\060\201\224\061\013\060\011\006\003\125\004  
\006\023\002\125\123\061\035\060\033\006\003\125\004\012\023\024  
\123\171\155\141\156\164\145\143\040\103\157\162\160\157\162\141  
\164\151\157\156\061\037\060\035\006\003\125\004\013\023\026\123  
\171\155\141\156\164\145\143\040\124\162\165\163\164\040\116\145  
\164\167\157\162\153\061\105\060\103\006\003\125\004\003\023\074  
\123\171\155\141\156\164\145\143\040\103\154\141\163\163\040\061  
\040\120\165\142\154\151\143\040\120\162\151\155\141\162\171\040  
\103\145\162\164\151\146\151\143\141\164\151\157\156\040\101\165  
\164\150\157\162\151\164\171\040\055\040\107\066\060\202\001\042  
\060\015\006\011\052\206\110\206\367\015\001\001\001\005\000\003  
\202\001\017\000\060\202\001\012\002\202\001\001\000\307\071\327  
\111\144\251\231\202\042\114\352\105\331\007\026\343\173\364\203  
\350\231\163\372\153\261\066\340\232\167\240\100\302\201\215\001  
\307\314\214\275\217\175\367\171\343\172\114\003\115\331\373\375  
\207\070\050\054\335\232\213\124\010\333\147\373\033\214\376\050  
\222\057\276\267\262\110\247\201\241\330\136\210\303\314\071\100  
\101\132\321\334\345\332\020\237\057\332\001\115\375\056\106\174  
\371\056\047\012\151\067\356\221\243\033\152\314\104\277\033\307  
\303\324\021\262\120\140\227\011\275\056\042\365\101\204\146\237  
\315\100\246\251\000\200\301\037\225\222\237\336\363\110\357\333  
\035\167\141\374\177\337\356\226\244\162\320\266\076\377\170\047  
\257\313\222\025\151\010\333\143\020\342\346\227\254\156\334\254  
\366\242\316\036\107\231\271\211\267\022\346\241\324\315\131\021  
\147\303\157\205\330\102\116\050\276\131\125\131\004\225\253\217  
\067\200\277\015\360\374\037\072\144\061\130\201\170\327\342\065  
\366\040\077\051\270\217\026\156\076\110\334\265\114\007\341\362  
\032\352\176\012\171\326\250\275\353\135\206\053\115\002\003\001  
\000\001\243\102\060\100\060\016\006\003\125\035\017\001\001\377  
\004\004\003\002\001\006\060\017\006\003\125\035\023\001\001\377  
\004\005\060\003\001\001\377\060\035\006\003\125\035\016\004\026  
\004\024\063\101\350\310\071\022\025\223\110\362\226\062\056\132  
\365\332\224\137\123\140\060\015\006\011\052\206\110\206\367\015  
\001\001\013\005\000\003\202\001\001\000\025\343\163\127\261\027  
\266\137\111\151\104\246\366\136\172\147\254\322\336\165\111\253  
\376\045\125\307\072\311\104\025\020\156\277\061\153\313\331\007  
\223\177\034\205\143\000\343\062\022\340\314\313\373\071\154\217  
\342\123\342\074\100\063\331\244\214\107\346\255\130\373\211\257  
\343\336\206\051\126\064\054\105\270\022\372\104\211\156\055\024  
\045\050\044\001\145\326\352\122\254\005\156\126\022\011\075\320  
\164\364\327\275\006\312\250\072\215\126\102\372\215\162\076\164  
\361\003\162\337\207\033\136\016\172\125\226\054\070\267\230\205  
\315\115\063\104\311\224\217\132\061\060\067\113\243\072\022\263  
\347\066\321\041\150\113\055\070\346\123\256\034\045\126\010\126  
\003\147\204\235\306\303\316\044\142\307\114\066\317\260\006\104  
\267\365\137\002\335\331\124\351\057\220\116\172\310\116\203\100  
\014\232\227\074\067\277\277\354\366\360\264\205\167\050\301\013

\310\147\202\020\027\070\242\267\006\352\233\277\072\370\351\043  
\007\277\164\340\230\070\025\125\170\356\162\000\134\031\243\364  
\322\063\340\377\275\321\124\071\051\017

END

CKA\_NSS\_Mozilla\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# For Email Distrust After: Wed Aug

31 00:00:00 2022

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER MULTILINE\_OCTAL

\062\062\060\070\063\061\060\060\060\060\060\060\132

END

# Trust for "Symantec Class 1 Public Primary Certification Authority - G6"

# Issuer: CN=Symantec Class 1 Public Primary Certification Authority - G6,OU=Symantec Trust

Network,O=Symantec Corporation,C=US

# Serial Number:24:32:75:f2:1d:2f:d2:09:33:f7:b4:6a:ca:d0:f3:98

# Subject: CN=Symantec Class 1 Public Primary Certification Authority - G6,OU=Symantec Trust

Network,O=Symantec Corporation,C=US

# Not Valid Before: Tue Oct 18 00:00:00 2011

# Not Valid After : Tue Dec 01 23:59:59 2037

# Fingerprint (SHA-256):

9D:19:0B:2E:31:45:66:68:5B:E8:A8:89:E2:7A:A8:C7:D7:AE:1D:8A:AD:DB:A3:C1:EC:F9:D2:48:63:CD:34:B9

# Fingerprint (SHA1): 51:7F:61:1E:29:91:6B:53:82:FB:72:E7:44:D9:8D:C3:CC:53:6D:64

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "Symantec Class 1 Public Primary Certification  
Authority - G6"

CKA\_CERT\_SHA1\_HASH MULTILINE\_OCTAL

\121\177\141\036\051\221\153\123\202\373\162\347\104\331\215\303  
\314\123\155\144

END

CKA\_CERT\_MD5\_HASH MULTILINE\_OCTAL

\057\250\264\332\366\144\113\036\202\371\106\075\124\032\174\260

END

CKA\_ISSUER MULTILINE\_OCTAL

\060\201\224\061\013\060\011\006\003\125\004\006\023\002\125\123  
\061\035\060\033\006\003\125\004\012\023\024\123\171\155\141\156  
\164\145\143\040\103\157\162\160\157\162\141\164\151\157\156\061  
\037\060\035\006\003\125\004\013\023\026\123\171\155\141\156\164  
\145\143\040\124\162\165\163\164\040\116\145\164\167\157\162\153  
\061\105\060\103\006\003\125\004\003\023\074\123\171\155\141\156  
\164\145\143\040\103\154\141\163\163\040\061\040\120\165\142\154  
\151\143\040\120\162\151\155\141\162\171\040\103\145\162\164\151  
\146\151\143\141\164\151\157\156\040\101\165\164\150\157\162\151  
\164\171\040\055\040\107\066

```

END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\020\044\062\165\362\035\057\322\011\063\367\264\152\312\320
\363\230
END
CKA_TRUST_SERVER_AUTH
CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "Symantec Class 2 Public Primary Certification Authority - G6"
#
# Issuer: CN=Symantec Class 2 Public Primary Certification Authority - G6,OU=Symantec Trust
Network,O=Symantec Corporation,C=US
# Serial Number:64:82:9e:fc:37:1e:74:5d:fc:97:ff:97:c8:b1:ff:41
# Subject: CN=Symantec Class 2 Public Primary Certification Authority - G6,OU=Symantec Trust
Network,O=Symantec Corporation,C=US
# Not Valid Before: Tue Oct 18 00:00:00 2011
# Not Valid After : Tue Dec 01 23:59:59 2037
# Fingerprint (SHA-256):
CB:62:7D:18:B5:8A:D5:6D:DE:33:1A:30:45:6B:C6:5C:60:1A:4E:9B:18:DE:DC:EA:08:E7:DA:AA:07:81:5F:F0
# Fingerprint (SHA1): 40:B3:31:A0:E9:BF:E8:55:BC:39:93:CA:70:4F:4E:C2:51:D4:1D:8F
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL
CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Symantec Class 2 Public Primary Certification Authority - G6"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\201\224\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\035\060\033\006\003\125\004\012\023\024\123\171\155\141\156
\164\145\143\040\103\157\162\160\157\162\141\164\151\157\156\061
\037\060\035\006\003\125\004\013\023\026\123\171\155\141\156\164
\145\143\040\124\162\165\163\164\040\116\145\164\167\157\162\153
\061\105\060\103\006\003\125\004\003\023\074\123\171\155\141\156
\164\145\143\040\103\154\141\163\163\040\062\040\120\165\142\154
\151\143\040\120\162\151\155\141\162\171\040\103\145\162\164\151
\146\151\143\141\164\151\157\156\040\101\165\164\150\157\162\151
\164\171\040\055\040\107\066
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\201\224\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\035\060\033\006\003\125\004\012\023\024\123\171\155\141\156
\164\145\143\040\103\157\162\160\157\162\141\164\151\157\156\061

```

\037\060\035\006\003\125\004\013\023\026\123\171\155\141\156\164  
\145\143\040\124\162\165\163\164\040\116\145\164\167\157\162\153  
\061\105\060\103\006\003\125\004\003\023\074\123\171\155\141\156  
\164\145\143\040\103\154\141\163\163\040\062\040\120\165\142\154  
\151\143\040\120\162\151\155\141\162\171\040\103\145\162\164\151  
\146\151\143\141\164\151\157\156\040\101\165\164\150\157\162\151  
\164\171\040\055\040\107\066

END

CKA\_SERIAL\_NUMBER

MULTILINE\_OCTAL

\002\020\144\202\236\374\067\036\164\135\374\227\377\227\310\261  
\377\101

END

CKA\_VALUE MULTILINE\_OCTAL

\060\202\003\366\060\202\002\336\240\003\002\001\002\002\020\144  
\202\236\374\067\036\164\135\374\227\377\227\310\261\377\101\060  
\015\006\011\052\206\110\206\367\015\001\001\013\005\000\060\201  
\224\061\013\060\011\006\003\125\004\006\023\002\125\123\061\035  
\060\033\006\003\125\004\012\023\024\123\171\155\141\156\164\145  
\143\040\103\157\162\160\157\162\141\164\151\157\156\061\037\060  
\035\006\003\125\004\013\023\026\123\171\155\141\156\164\145\143  
\040\124\162\165\163\164\040\116\145\164\167\157\162\153\061\105  
\060\103\006\003\125\004\003\023\074\123\171\155\141\156\164\145  
\143\040\103\154\141\163\163\040\062\040\120\165\142\154\151\143  
\040\120\162\151\155\141\162\171\040\103\145\162\164\151\146\151  
\143\141\164\151\157\156\040\101\165\164\150\157\162\151\164\171  
\040\055\040\107\066\060\036\027\015\061\061\061\060\061\070\060  
\060\060\060\060\060\132\027\015\063\067\061\062\060\061\062\063  
\065\071\065\071\132\060\201\224\061\013\060\011\006\003\125\004  
\006\023\002\125\123\061\035\060\033\006\003\125\004\012\023\024  
\123\171\155\141\156\164\145\143\040\103\157\162\160\157\162\141  
\164\151\157\156\061\037\060\035\006\003\125\004\013\023\026\123  
\171\155\141\156\164\145\143\040\124\162\165\163\164\040\116\145  
\164\167\157\162\153\061\105\060\103\006\003\125\004\003\023\074  
\123\171\155\141\156\164\145\143\040\103\154\141\163\163\040\062  
\040\120\165\142\154\151\143\040\120\162\151\155\141\162\171\040  
\103\145\162\164\151\146\151\143\141\164\151\157\156\040\101\165  
\164\150\157\162\151\164\171\040\055\040\107\066\060\202\001\042  
\060\015\006\011\052\206\110\206\367\015\001\001\001\005\000\003  
\202\001\017\000\060\202\001\012\002\202\001\001\000\315\314\351  
\005\310\143\205\313\077\100\143\027\275\030\372\065\346\004\147  
\127\145\230\051\244\117\311\134\217\017\064\322\370\332\250\023  
\142\252\270\036\120\147\170\260\026\114\240\071\251\025\172\256  
\355\322\242\300\360\220\067\051\030\046\134\350\015\074\266\154  
\111\077\301\340\334\331\113\266\024\031\013\246\323\226\341\326  
\011\343\031\046\034\371\037\145\113\371\032\103\034\000\203\326  
\320\252\111\242\324\333\346\142\070\272\120\024\103\155\371\061  
\370\126\026\331\070\002\221\317\353\154\335\273\071\116\231\341

\060\147\105\361\324\360\215\303\337\376\362\070\007\041\175\000  
\136\126\104\263\344\140\275\221\053\234\253\133\004\162\017\262  
\050\331\162\253\005\040\102\045\251\133\003\152\040\020\314\061  
\360\053\332\065\054\320\373\232\227\116\360\202\113\053\330\137  
\066\243\013\055\257\143\015\035\045\177\241\156\134\142\241\215  
\050\076\241\374\034\040\370\001\057\272\125\232\021\260\031\322  
\310\120\171\153\016\152\005\327\252\004\066\262\243\362\341\137  
\167\247\167\234\345\036\334\351\337\152\301\145\135\002\003\001  
\000\001\243\102\060\100\060\016\006\003\125\035\017\001\001\377  
\004\004\003\002\001\006\060\017\006\003\125\035\023\001\001\377  
\004\005\060\003\001\001\377\060\035\006\003\125\035\016\004\026  
\004\024\207\214\040\225\310\230\112\321\326\200\006\112\220\064  
\104\337\034\115\277\260\060\015\006\011\052\206\110\206\367\015  
\001\001\013\005\000\003\202\001\001\000\201\216\262\245\146\226  
\267\041\245\266\357\157\043\132\137\333\201\305\102\245\170\301  
\151\375\364\074\327\371\134\153\160\162\032\374\132\227\115\000  
\200\210\210\202\212\303\161\015\216\305\211\233\054\355\215\013  
\322\162\124\365\175\324\134\103\127\351\363\256\245\002\021\366  
\166\053\201\127\335\175\332\164\060\375\124\107\366\340\026\156  
\246\264\012\110\346\347\165\007\017\051\031\071\316\171\364\266  
\154\305\137\231\325\037\113\372\337\155\054\074\015\124\200\160  
\360\210\013\200\317\306\150\242\270\035\160\331\166\214\374\356  
\245\311\317\255\035\317\231\045\127\132\142\105\313\026\153\275  
\111\315\245\243\214\151\171\045\256\270\114\154\213\100\146\113  
\026\077\317\002\032\335\341\154\153\007\141\152\166\025\051\231  
\177\033\335\210\200\301\277\265\217\163\305\246\226\043\204\246  
\050\206\044\063\152\001\056\127\163\045\266\136\277\217\346\035  
\141\250\100\051\147\035\207\233\035\177\233\237\231\315\061\326  
\124\276\142\273\071\254\150\022\110\221\040\245\313\261\335\376  
\157\374\132\344\202\125\131\257\061\251

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# For Email Distrust After: Wed Aug 31 00:00:00 2022

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER MULTILINE\_OCTAL

\062\062\060\070\063\061\060\060\060\060\060\060\132

END

#

Trust for "Symantec Class 2 Public Primary Certification Authority - G6"

# Issuer: CN=Symantec Class 2 Public Primary Certification Authority - G6,OU=Symantec Trust  
Network,O=Symantec Corporation,C=US

# Serial Number:64:82:9e:fc:37:1e:74:5d:fc:97:ff:97:c8:b1:ff:41

# Subject: CN=Symantec Class 2 Public Primary Certification Authority - G6,OU=Symantec Trust  
Network,O=Symantec Corporation,C=US

# Not Valid Before: Tue Oct 18 00:00:00 2011

# Not Valid After : Tue Dec 01 23:59:59 2037

```

# Fingerprint (SHA-256):
CB:62:7D:18:B5:8A:D5:6D:DE:33:1A:30:45:6B:C6:5C:60:1A:4E:9B:18:DE:DC:EA:08:E7:DA:AA:07:81:5F:F0
# Fingerprint (SHA1): 40:B3:31:A0:E9:BF:E8:55:BC:39:93:CA:70:4F:4E:C2:51:D4:1D:8F
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Symantec Class 2 Public Primary Certification Authority - G6"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\100\263\061\240\351\277\350\125\274\071\223\312\160\117\116\302
\121\324\035\217
END
CKA_CERT_MD5_HASH
MULTILINE_OCTAL
\175\013\203\345\373\174\255\007\117\040\251\265\337\143\355\171
END
CKA_ISSUER MULTILINE_OCTAL
\060\201\224\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\035\060\033\006\003\125\004\012\023\024\123\171\155\141\156
\164\145\143\040\103\157\162\160\157\162\141\164\151\157\156\061
\037\060\035\006\003\125\004\013\023\026\123\171\155\141\156\164
\145\143\040\124\162\165\163\164\040\116\145\164\167\157\162\153
\061\105\060\103\006\003\125\004\003\023\074\123\171\155\141\156
\164\145\143\040\103\154\141\163\163\040\062\040\120\165\142\154
\151\143\040\120\162\151\155\141\162\171\040\103\145\162\164\151
\146\151\143\141\164\151\157\156\040\101\165\164\150\157\162\151
\164\171\040\055\040\107\066
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\020\144\202\236\374\067\036\164\135\374\227\377\227\310\261
\377\101
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING
CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "D-TRUST Root CA 3 2013"
#
# Issuer: CN=D-TRUST Root CA 3 2013,O=D-Trust GmbH,C=DE
# Serial Number: 1039788 (0xfddac)
# Subject: CN=D-TRUST Root CA 3 2013,O=D-Trust GmbH,C=DE
# Not Valid Before: Fri Sep 20 08:25:51 2013
# Not Valid After : Wed Sep 20 08:25:51 2028
# Fingerprint (SHA-256):
A1:A8:6D:04:12:1E:B8:7F:02:7C:66:F5:33:03:C2:8E:57:39:F9:43:FC:84:B3:8A:D6:AF:00:90:35:DD:94:57

```

# Fingerprint (SHA1): 6C:7C:CC:E7:D4:AE:51:5F:99:08:CD:3F:F6:E8:C3:78:DF:6F:EF:97

```
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "D-TRUST Root CA 3 2013"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\105\061\013\060\011\006\003\125\004\006\023\002\104\105\061
\025\060\023\006\003\125\004\012\014\014\104\055\124\162\165\163
\164\040\107\155\142\110\061\037\060\035\006\003\125\004\003\014
\026\104\055\124\122\125\123\124\040\122\157\157\164\040\103\101
\040\063\040\062\060\061\063
END
CKA_ID
UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\105\061\013\060\011\006\003\125\004\006\023\002\104\105\061
\025\060\023\006\003\125\004\012\014\014\104\055\124\162\165\163
\164\040\107\155\142\110\061\037\060\035\006\003\125\004\003\014
\026\104\055\124\122\125\123\124\040\122\157\157\164\040\103\101
\040\063\040\062\060\061\063
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\003\017\335\254
END
CKA_VALUE MULTILINE_OCTAL
\060\202\004\016\060\202\002\366\240\003\002\001\002\002\003\017
\335\254\060\015\006\011\052\206\110\206\367\015\001\001\013\005
\000\060\105\061\013\060\011\006\003\125\004\006\023\002\104\105
\061\025\060\023\006\003\125\004\012\014\014\104\055\124\162\165
\163\164\040\107\155\142\110\061\037\060\035\006\003\125\004\003
\014\026\104\055\124\122\125\123\124\040\122\157\157\164\040\103
\101\040\063\040\062\060\061\063\060\036\027\015\061\063\060\071
\062\060\060\070\062\065\065\061\132\027\015\062\070\060\071\062
\060\060\070\062\065\065\061\132\060\105\061\013\060\011\006\003
\125\004\006\023\002\104\105\061\025\060\023\006\003\125\004\012
\014\014\104\055\124\162\165\163\164\040\107\155\142\110\061\037
\060\035\006\003\125\004\003\014\026\104\055\124\122\125\123\124
\040\122\157\157\164\040\103\101\040\063\040\062\060\061\063\060
\202\001\042\060\015\006\011\052\206\110\206\367\015\001\001\001
\005\000\003\202\001\017\000\060\202\001\012\002\202\001\001\000
\304\173\102\222\202\037\354\355\124\230\216\022\300\312\011\337
\223\156\072\223\134\033\344\020\167\236\116\151\210\154\366\341
\151\362\366\233\242\141\261\275\007\040\164\230\145\361\214\046
\010\315\250\065\312\200\066\321\143\155\350\104\172\202\303\154
\136\336\273\350\066\322\304\150\066\214\237\062\275\204\042\340
\334\302\356\020\106\071\155\257\223\071\256\207\346\303\274\011
```

\311\054\153\147\133\331\233\166\165\114\013\340\273\305\327\274  
\076\171\362\137\276\321\220\127\371\256\366\146\137\061\277\323  
\155\217\247\272\112\363\043\145\273\267\357\243\045\327\012\352  
\130\266\357\210\372\372\171\262\122\130\325\360\254\214\241\121  
\164\051\225\252\121\073\220\062\003\237\034\162\164\220\336\075  
\355\141\322\345\343\375\144\107\345\271\267\112\251\367\037\256  
\226\206\004\254\057\343\244\201\167\267\132\026\377\330\017\077  
\366\267\170\314\244\257\372\133\074\022\133\250\122\211\162\357  
\210\363\325\104\201\206\225\043\237\173\335\274\331\064\357\174  
\224\074\252\300\101\302\343\235\120\032\300\344\031\042\374\263  
\002\003\001\000\001\243\202\001\005\060\202\001\001\060\017\006  
\003\125\035\023\001\001\377\004\005\060\003\001\001\377\060\035  
\006\003\125\035\016\004\026\004\024\077\220\310\175\307\025\157  
\363\044\217\251\303\057\113\242\017\041\262\057\347\060\016\006  
\003\125\035\017\001\001\377\004\004\003\002\001\006\060\201\276  
\006\003\125\035\037\004\201\266\060\201\263\060\164\240\162\240  
\160\206\156\154\144\141\160\072\057\057\144\151\162\145\143\164  
\157\162\171\056\144\055\164\162\165\163\164\056\156\145\164\057  
\103\116\075\104\055\124\122\125\123\124\045\062\060\122\157\157  
\164\045\062\060\103\101\045\062\060\063\045\062\060\062\060\061  
\063\054\117\075\104\055\124\162\165\163\164\045\062\060\107\155  
\142\110\054\103\075\104\105\077\143\145\162\164\151\146\151\143  
\141\164\145\162\145\166\157\143\141\164\151\157\156\154\151\163  
\164\060\073\240\071\240\067\206\065\150\164\164\160\072\057\057  
\143\162\154\056\144\055\164\162\165\163\164\056\156\145\164\057  
\143\162\154\057\144\055\164\162\165\163\164\137\162\157\157\164  
\137\143\141\137\063\137\062\060\061\063\056\143\162\154\060\015  
\006\011\052\206\110\206\367\015\001\001\013\005\000\003\202\001  
\001\000\016\131\016\130\344\164\110\043\104\317\064\041\265\234  
\024\032\255\232\113\267\263\210\155\134\251\027\160\360\052\237  
\215\173\371\173\205\372\307\071\350\020\010\260\065\053\137\317  
\002\322\323\234\310\013\036\356\005\124\256\067\223\004\011\175  
\154\217\302\164\274\370\034\224\276\061\001\100\055\363\044\040  
\267\204\125\054\134\310\365\164\112\020\031\213\243\307\355\065  
\326\011\110\323\016\300\272\071\250\260\106\002\260\333\306\210  
\131\302\276\374\173\261\053\317\176\142\207\125\226\314\001\157  
\233\147\041\225\065\213\370\020\374\161\033\267\113\067\151\246  
\073\326\354\213\356\301\260\363\045\311\217\222\175\241\352\303  
\312\104\277\046\245\164\222\234\343\164\353\235\164\331\313\115  
\207\330\374\264\151\154\213\240\103\007\140\170\227\351\331\223  
\174\302\106\274\233\067\122\243\355\212\074\023\251\173\123\113  
\111\232\021\005\054\013\156\126\254\037\056\202\154\340\151\147  
\265\016\155\055\331\344\300\025\361\077\372\030\162\341\025\155  
\047\133\055\060\050\053\237\110\232\144\053\231\357\362\165\111  
\137\134

END

CKA\_NSS\_MOZILLA\_CA\_POLICY



```

CK_BBOOL CK_TRUE
CKA_NSS_SERVER_DISTRUST_AFTER CK_BBOOL CK_FALSE
CKA_NSS_EMAIL_DISTRUST_AFTER CK_BBOOL CK_FALSE

# Trust for "D-TRUST Root CA 3 2013"
# Issuer: CN=D-TRUST Root
  CA 3 2013,O=D-Trust GmbH,C=DE
# Serial Number: 1039788 (0xfddac)
# Subject: CN=D-TRUST Root CA 3 2013,O=D-Trust GmbH,C=DE
# Not Valid Before: Fri Sep 20 08:25:51 2013
# Not Valid After : Wed Sep 20 08:25:51 2028
# Fingerprint (SHA-256):
A1:A8:6D:04:12:1E:B8:7F:02:7C:66:F5:33:03:C2:8E:57:39:F9:43:FC:84:B3:8A:D6:AF:00:90:35:DD:94:57
# Fingerprint (SHA1): 6C:7C:CC:E7:D4:AE:51:5F:99:08:CD:3F:F6:E8:C3:78:DF:6F:EF:97
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "D-TRUST Root CA 3 2013"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\154\174\314\347\324\256\121\137\231\010\315\077\366\350\303\170
\337\157\357\227
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\267\042\146\230\176\326\003\340\301\161\346\165\315\126\105\277
END
CKA_ISSUER MULTILINE_OCTAL
\060\105\061\013\060\011\006\003\125\004\006\023\002\104\105\061
\025\060\023\006\003\125\004\012\014\014\104\055\124\162\165\163
\164\040\107\155\142\110\061\037\060\035\006\003\125\004\003\014
\026\104\055\124\122\125\123\124\040\122\157\157\164\040\103\101
\040\063\040\062\060\061\063
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\003\017\335\254
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "TUBITAK Kamu SM SSL Kok Sertifikasi - Surum 1"
#
# Issuer: CN=TUBITAK Kamu SM SSL Kok Sertifikasi - Surum 1,OU=Kamu Sertifikasyon Merkezi - Kamu
SM,O=Türkiye Bilimsel ve Teknolojik Arastirma Kurumu - TUBITAK,L=Gebze - Kocaeli,C=TR
# Serial Number: 1 (0x1)

```

# Subject: CN=TUBITAK Kamu SM SSL Kok Sertifikasi - Surum 1,OU=Kamu Sertifikasyon Merkezi - Kamu SM,O=Turkiye Bilimsel ve Teknolojik Arastirma Kurumu - TUBITAK,L=Gebze - Kocaeli,C=TR

# Not Valid Before: Mon Nov 25 08:25:55 2013

# Not Valid After : Sun Oct 25 08:25:55 2013

# Fingerprint (SHA-256):

46:ED:C3:68:90:46:D5:3A:45:3F:B3:10:4A:B8:0D:CA:EC:65:8B:26:60:EA:16:29:DD:7E:86:79:90:64:87:16

#

Fingerprint (SHA1): 31:43:64:9B:EC:CE:27:EC:ED:3A:3F:0B:8F:0D:E4:E8:91:DD:EE:CA

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_CERTIFICATE

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "TUBITAK Kamu SM SSL Kok Sertifikasi - Surum 1"

CKA\_CERTIFICATE\_TYPE CK\_CERTIFICATE\_TYPE CKC\_X\_509

CKA\_SUBJECT MULTILINE\_OCTAL

\060\201\322\061\013\060\011\006\003\125\004\006\023\002\124\122  
\061\030\060\026\006\003\125\004\007\023\017\107\145\142\172\145  
\040\055\040\113\157\143\141\145\154\151\061\102\060\100\006\003  
\125\004\012\023\071\124\165\162\153\151\171\145\040\102\151\154  
\151\155\163\145\154\040\166\145\040\124\145\153\156\157\154\157  
\152\151\153\040\101\162\141\163\164\151\162\155\141\040\113\165  
\162\165\155\165\040\055\040\124\125\102\111\124\101\113\061\055  
\060\053\006\003\125\004\013\023\044\113\141\155\165\040\123\145  
\162\164\151\146\151\153\141\163\171\157\156\040\115\145\162\153  
\145\172\151\040\055\040\113\141\155\165\040\123\115\061\066\060  
\064\006\003\125\004\003\023\055\124\125\102\111\124\101\113\040  
\113\141\155\165\040\123\115\040\123\123\114\040\113\157\153\040  
\123\145\162\164\151\146\151\153\141\163\151\040\055\040\123\165  
\162\165\155\040\061

END

CKA\_ID

UTF8 "0"

CKA\_ISSUER MULTILINE\_OCTAL

\060\201\322\061\013\060\011\006\003\125\004\006\023\002\124\122  
\061\030\060\026\006\003\125\004\007\023\017\107\145\142\172\145  
\040\055\040\113\157\143\141\145\154\151\061\102\060\100\006\003  
\125\004\012\023\071\124\165\162\153\151\171\145\040\102\151\154  
\151\155\163\145\154\040\166\145\040\124\145\153\156\157\154\157  
\152\151\153\040\101\162\141\163\164\151\162\155\141\040\113\165  
\162\165\155\165\040\055\040\124\125\102\111\124\101\113\061\055  
\060\053\006\003\125\004\013\023\044\113\141\155\165\040\123\145  
\162\164\151\146\151\153\141\163\171\157\156\040\115\145\162\153  
\145\172\151\040\055\040\113\141\155\165\040\123\115\061\066\060  
\064\006\003\125\004\003\023\055\124\125\102\111\124\101\113\040  
\113\141\155\165\040\123\115\040\123\123\114\040\113\157\153\040  
\123\145\162\164\151\146\151\153\141\163\151\040\055\040\123\165  
\162\165\155\040\061

END

CKA\_SERIAL\_NUMBER

MULTILINE\_OCTAL

\002\001\001

END

CKA\_VALUE MULTILINE\_OCTAL

\060\202\004\143\060\202\003\113\240\003\002\001\002\002\001\001  
\060\015\006\011\052\206\110\206\367\015\001\001\013\005\000\060  
\201\322\061\013\060\011\006\003\125\004\006\023\002\124\122\061  
\030\060\026\006\003\125\004\007\023\017\107\145\142\172\145\040  
\055\040\113\157\143\141\145\154\151\061\102\060\100\006\003\125  
\004\012\023\071\124\165\162\153\151\171\145\040\102\151\154\151  
\155\163\145\154\040\166\145\040\124\145\153\156\157\154\157\152  
\151\153\040\101\162\141\163\164\151\162\155\141\040\113\165\162  
\165\155\165\040\055\040\124\125\102\111\124\101\113\061\055\060  
\053\006\003\125\004\013\023\044\113\141\155\165\040\123\145\162  
\164\151\146\151\153\141\163\171\157\156\040\115\145\162\153\145  
\172\151\040\055\040\113\141\155\165\040\123\115\061\066\060\064  
\006\003\125\004\003\023\055\124\125\102\111\124\101\113\040\113  
\141\155\165\040\123\115\040\123\123\114\040\113\157\153\040\123  
\145\162\164\151\146\151\153\141\163\151\040\055\040\123\165\162  
\165\155\040\061\060\036\027\015\061\063\061\061\062\065\060\070  
\062\065\065\065\132\027\015\064\063\061\060\062\065\060\070\062  
\065\065\065\132\060\201\322\061\013\060\011\006\003\125\004\006  
\023\002\124\122\061\030\060\026\006\003\125\004\007\023\017\107  
\145\142\172\145\040\055\040\113\157\143\141\145\154\151\061\102  
\060\100\006\003\125\004\012\023\071\124\165\162\153\151\171\145  
\040\102\151\154\151\155\163\145\154\040\166\145\040\124\145\153  
\156\157\154\157\152\151\153\040\101\162\141\163\164\151\162\155  
\141\040\113\165\162\165\155\165\040\055\040\124\125\102\111\124  
\101\113\061\055\060\053\006\003\125\004\013\023\044\113\141\155  
\165\040\123\145\162\164\151\146\151\153\141\163\171\157\156\040  
\115\145\162\153\145\172\151\040\055\040\113\141\155\165\040\123  
\115\061\066\060\064\006\003\125\004\003\023\055\124\125\102\111  
\124\101\113\040\113\141\155\165\040\123\115\040\123\123\114\040  
\113\157\153\040\123\145\162\164\151\146\151\153\141\163\151\040  
\055\040\123\165\162\165\155\040\061\060\202\001\042\060\015\006  
\011\052\206\110\206\367\015\001\001\001\005\000\003\202\001\017  
\000\060\202\001\012\002\202\001\001\000\257\165\060\063\252\273  
\153\323\231\054\022\067\204\331\215\173\227\200\323\156\347\377  
\233\120\225\076\220\225\126\102\327\031\174\046\204\215\222\372  
\001\035\072\017\342\144\070\267\214\274\350\210\371\213\044\253  
\056\243\365\067\344\100\216\030\045\171\203\165\037\073\377\154  
\250\305\306\126\370\264\355\212\104\243\253\154\114\374\035\320  
\334\357\150\275\317\344\252\316\360\125\367\242\064\324\203\153  
\067\174\034\302\376\265\003\354\127\316\274\264\265\305\355\000  
\017\123\067\052\115\364\117\014\203\373\206\317\313\376\214\116  
\275\207\371\247\213\041\127\234\172\337\003\147\211\054\235\227  
\141\247\020\270\125\220\177\016\055\047\070\164\337\347\375\332

\116\022\343\115\025\042\002\310\340\340\374\017\255\212\327\311  
\124\120\314\073\017\312\026\200\204\320\121\126\303\216\126\177  
\211\042\063\057\346\205\012\275\245\250\033\066\336\323\334\054  
\155\073\307\023\275\131\043\054\346\345\244\367\330\013\355\352  
\220\100\104\250\225\273\223\325\320\200\064\266\106\170\016\037  
\000\223\106\341\356\351\371\354\117\027\002\003\001\000\001\243  
\102\060\100\060\035\006\003\125\035\016\004\026\004\024\145\077  
\307\212\206\306\074\335\074\124\134\065\370\072\355\122\014\107  
\127\310\060\016\006\003\125\035\017\001\001\377\004\004\003\002  
\001\006\060\017\006\003\125\035\023\001\001\377\004\005\060\003  
\001\001\377\060\015\006\011\052\206\110\206\367\015\001\001\013  
\005\000\003\202\001\001\000\052\077\341\361\062\216\256\341\230  
\134\113\136\317\153\036\152\011\322\042\251\022\307\136\127\175  
\163\126\144\200\204\172\223\344\011\271\020\315\237\052\047\341  
\000\167\276\110\310\065\250\201\237\344\270\054\311\177\016\260  
\322\113\067\135\352\271\325\013\136\064\275\364\163\051\303\355  
\046\025\234\176\010\123\212\130\215\320\113\050\337\301\263\337  
\040\363\371\343\343\072\337\314\234\224\330\116\117\303\153\027  
\267\367\162\350\255\146\063\265\045\123\253\340\370\114\251\235  
\375\362\015\272\256\271\331\252\306\153\371\223\273\256\253\270  
\227\074\003\032\272\103\306\226\271\105\162\070\263\247\241\226  
\075\221\173\176\300\041\123\114\207\355\362\013\124\225\121\223  
\325\042\245\015\212\361\223\016\076\124\016\260\330\311\116\334  
\362\061\062\126\352\144\371\352\265\235\026\146\102\162\363\177  
\323\261\061\103\374\244\216\027\361\155\043\253\224\146\370\255  
\373\017\010\156\046\055\177\027\007\011\262\214\373\120\300\237  
\226\215\317\266\375\000\235\132\024\232\277\002\104\365\301\302  
\237\042\136\242\017\241\343

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL

CK\_FALSE

# Trust for "TUBITAK Kamu SM SSL Kok Sertifikasi - Surum 1"

# Issuer: CN=TUBITAK Kamu SM SSL Kok Sertifikasi - Surum 1,OU=Kamu Sertifikasyon Merkezi - Kamu SM,O=Turkiye Bilimsel ve Teknolojik Arastirma Kurumu - TUBITAK,L=Gebze - Kocaeli,C=TR

# Serial Number: 1 (0x1)

# Subject: CN=TUBITAK Kamu SM SSL Kok Sertifikasi - Surum 1,OU=Kamu Sertifikasyon Merkezi - Kamu SM,O=Turkiye Bilimsel ve Teknolojik Arastirma Kurumu - TUBITAK,L=Gebze - Kocaeli,C=TR

# Not Valid Before: Mon Nov 25 08:25:55 2013

# Not Valid After : Sun Oct 25 08:25:55 2043

# Fingerprint (SHA-256):

46:ED:C3:68:90:46:D5:3A:45:3F:B3:10:4A:B8:0D:CA:EC:65:8B:26:60:EA:16:29:DD:7E:86:79:90:64:87:16

# Fingerprint (SHA1): 31:43:64:9B:EC:CE:27:EC:ED:3A:3F:0B:8F:0D:E4:E8:91:DD:EE:CA

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

```
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "TUBITAK Kamu SM SSL Kok Sertifikasi - Surum 1"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\061\103\144\233\354\316\047\354\355\072\077\013\217\015\344\350
\221\335\356\312
END
```

```
CKA_CERT_MD5_HASH
MULTILINE_OCTAL
\334\000\201\334\151\057\076\057\260\073\366\075\132\221\216\111
END
```

```
CKA_ISSUER MULTILINE_OCTAL
\060\201\322\061\013\060\011\006\003\125\004\006\023\002\124\122
\061\030\060\026\006\003\125\004\007\023\017\107\145\142\172\145
\040\055\040\113\157\143\141\145\154\151\061\102\060\100\006\003
\125\004\012\023\071\124\165\162\153\151\171\145\040\102\151\154
\151\155\163\145\154\040\166\145\040\124\145\153\156\157\154\157
\152\151\153\040\101\162\141\163\164\151\162\155\141\040\113\165
\162\165\155\165\040\055\040\124\125\102\111\124\101\113\061\055
\060\053\006\003\125\004\013\023\044\113\141\155\165\040\123\145
\162\164\151\146\151\153\141\163\171\157\156\040\115\145\162\153
\145\172\151\040\055\040\113\141\155\165\040\123\115\061\066\060
\064\006\003\125\004\003\023\055\124\125\102\111\124\101\113\040
\113\141\155\165\040\123\115\040\123\123\114\040\113\157\153\040
\123\145\162\164\151\146\151\153\141\163\151\040\055\040\123\165
\162\165\155\040\061
END
```

```
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\001\001
END
```

```
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE
```

```
#
# Certificate "GDCA TrustAUTH R5 ROOT"
#
# Issuer: CN=GDCA TrustAUTH R5 ROOT,O="GUANG DONG CERTIFICATE AUTHORITY
CO.,LTD.",C=CN
# Serial Number:7d:09:97:fe:f0:47:ea:7a
# Subject: CN=GDCA TrustAUTH R5 ROOT,O="GUANG DONG CERTIFICATE AUTHORITY
CO.,LTD.",C=CN
# Not Valid Before: Wed Nov 26 05:13:15 2014
# Not Valid After : Mon Dec 31 15:59:59 2040
# Fingerprint (SHA-256):
BF:FF:8F:D0:44:33:48:7D:6A:8A:A6:0C:1A:29:76:7A:9F:C2:BB:B0:5E:42:0F:71:3A:13:B9:92:89:1D:38:93
```

# Fingerprint (SHA1): 0F:36:38:5B:81:1A:25:C3:9B:31:4E:83:CA:E9:34:66:70:CC:74:B4

```
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE
CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "GDCA TrustAUTH R5 ROOT"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\142\061\013\060\011\006\003\125\004\006\023\002\103\116\061
\062\060\060\006\003\125\004\012\014\051\107\125\101\116\107\040
\104\117\116\107\040\103\105\122\124\111\106\111\103\101\124\105
\040\101\125\124\110\117\122\111\124\131\040\103\117\056\054\114
\124\104\056\061\037\060\035\006\003\125\004\003\014\026\107\104
\103\101\040\124\162\165\163\164\101\125\124\110\040\122\065\040
\122\117\117\124
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\142\061\013\060\011\006\003\125\004\006\023\002\103\116\061
\062\060\060\006\003\125\004\012\014\051\107\125\101\116\107\040
\104\117\116\107\040\103\105\122\124\111\106\111\103\101\124\105
\040\101\125\124\110\117\122\111\124\131\040\103\117\056\054\114
\124\104\056\061\037\060\035\006\003\125\004\003\014\026\107\104
\103\101\040\124\162\165\163\164\101\125\124\110\040\122\065\040
\122\117\117\124
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\010\175\011\227\376\360\107\352\172
END
CKA_VALUE MULTILINE_OCTAL
\060\202\005\210\060\202\003\160\240\003\002\001\002\002\010\175
\011\227\376\360\107\352\172\060\015\006\011\052\206\110\206\367
\015\001\001\013\005\000\060\142\061\013\060\011\006\003\125\004
\006\023\002\103\116\061\062\060\060\006\003\125\004\012\014\051
\107\125\101\116\107\040\104\117\116\107\040\103\105\122\124\111
\106\111\103\101\124\105\040\101\125\124\110\117\122\111\124\131
\040\103\117\056\054\114\124\104\056\061\037\060\035\006\003\125
\004\003\014\026\107\104\103\101\040\124\162\165\163\164\101\125
\124\110\040\122\065\040\122\117\117\124\060\036\027\015\061\064
\061\061\062\066\060\065\061\063\061\065\132\027\015\064\060\061
\062\063\061\061\065\065\071\065\071\132\060\142\061\013\060\011
\006\003\125\004\006\023\002\103\116\061\062\060\060\006\003\125
\004\012\014\051\107\125\101\116\107\040\104\117\116\107\040\103
\105\122\124\111\106\111\103\101\124\105\040\101\125\124\110\117
\122\111\124\131\040\103\117\056\054\114\124\104\056\061\037\060
\035\006\003\125\004\003\014\026\107\104\103\101\040\124\162\165
```

\163\164\101\125\124\110\040\122\065\040\122\117\117\124\060\202  
\002\042\060\015\006\011\052\206\110\206\367\015\001\001\001\005  
\000\003\202\002\017\000\060\202\002\012\002\202\002\001\000\331  
\243\026\360\310\164\164\167\233\357\063\015\073\006\176\125\374  
\265\140\217\166\206\022\102\175\126\146\076\210\202\355\162\143  
\016\236\213\335\064\054\002\121\121\303\031\375\131\124\204\311  
\361\153\263\114\260\351\350\106\135\070\306\242\247\056\021\127  
\272\202\025\242\234\217\155\260\231\112\012\362\353\211\160\143  
\116\171\304\267\133\275\242\135\261\362\101\002\053\255\251\072  
\243\354\171\012\354\137\072\343\375\357\200\074\255\064\233\032  
\253\210\046\173\126\242\202\206\037\353\065\211\203\177\137\256  
\051\116\075\266\156\354\256\301\360\047\233\256\343\364\354\357  
\256\177\367\206\075\162\172\353\245\373\131\116\247\353\225\214  
\042\071\171\341\055\010\217\314\274\221\270\101\367\024\301\043  
\251\303\255\232\105\104\263\262\327\054\315\306\051\342\120\020  
\256\134\313\202\216\027\030\066\175\227\346\210\232\260\115\064  
\011\364\054\271\132\146\052\260\027\233\236\036\166\235\112\146  
\061\101\337\077\373\305\006\357\033\266\176\032\106\066\367\144  
\143\073\343\071\030\043\347\147\165\024\325\165\127\222\067\275  
\276\152\033\046\120\362\066\046\006\220\305\160\001\144\155\166  
\146\341\221\333\156\007\300\141\200\056\262\056\057\214\160\247  
\321\073\074\263\221\344\156\266\304\073\160\362\154\222\227\011  
\315\107\175\030\300\363\273\236\017\326\213\256\007\266\132\017  
\316\013\014\107\247\345\076\270\275\175\307\233\065\240\141\227  
\072\101\165\027\314\053\226\167\052\222\041\036\331\225\166\040  
\147\150\317\015\275\337\326\037\011\152\232\342\314\163\161\244  
\057\175\022\200\267\123\060\106\136\113\124\231\017\147\311\245  
\310\362\040\301\202\354\235\021\337\302\002\373\032\073\321\355  
\040\232\357\145\144\222\020\015\052\342\336\160\361\030\147\202  
\214\141\336\270\274\321\057\234\373\017\320\053\355\033\166\271  
\344\071\125\370\370\241\035\270\252\200\000\114\202\347\262\177  
\011\270\274\060\240\057\015\365\122\236\216\367\222\263\012\000  
\035\000\124\227\006\340\261\007\331\307\017\134\145\175\074\155  
\131\127\344\355\245\215\351\100\123\237\025\113\240\161\366\032  
\041\343\332\160\006\041\130\024\207\205\167\171\252\202\171\002  
\003\001\000\001\243\102\060\100\060\035\006\003\125\035\016\004  
\026\004\024\342\311\100\237\115\316\350\232\241\174\317\016\077  
\145\305\051\210\152\031\121\060\017\006\003\125\035\023\001\001  
\377\004\005\060\003\001\001\377\060\016\006\003\125\035\017\001  
\001\377\004\004\003\002\001\206\060\015\006\011\052\206\110\206  
\367\015\001\001\013\005\000\003\202\002\001\000\321\111\127\340  
\247\314\150\130\272\001\017\053\031\315\215\260\141\105\254\021  
\355\143\120\151\370\037\177\276\026\217\375\235\353\013\252\062  
\107\166\322\147\044\355\275\174\063\062\227\052\307\005\206\146  
\015\027\175\024\025\033\324\353\375\037\232\366\136\227\151\267  
\032\045\244\012\263\221\077\137\066\254\213\354\127\250\076\347  
\201\212\030\127\071\205\164\032\102\307\351\133\023\137\217\371  
\010\351\222\164\215\365\107\322\253\073\326\373\170\146\116\066

\175\371\351\222\351\004\336\375\111\143\374\155\373\024\161\223  
\147\057\107\112\267\271\377\036\052\163\160\106\060\277\132\362  
\057\171\245\341\215\014\331\371\262\143\067\214\067\145\205\160  
\152\134\133\011\162\271\255\143\074\261\335\370\374\062\277\067  
\206\344\273\216\230\047\176\272\037\026\341\160\021\362\003\337  
\045\142\062\047\046\030\062\204\237\377\000\072\023\272\232\115  
\364\117\270\024\160\042\261\312\053\220\316\051\301\160\364\057  
\235\177\362\220\036\326\132\337\267\106\374\346\206\372\313\340  
\040\166\172\272\246\313\365\174\336\142\245\261\213\356\336\202  
\146\212\116\072\060\037\077\200\313\255\047\272\014\136\327\320  
\261\126\312\167\161\262\265\165\241\120\251\100\103\027\302\050  
\331\317\122\213\133\310\143\324\102\076\240\063\172\106\056\367  
\012\040\106\124\176\152\117\061\361\201\176\102\164\070\145\163  
\047\356\306\174\270\216\327\245\072\327\230\241\234\214\020\125  
\323\333\113\354\100\220\362\315\156\127\322\142\016\174\127\223  
\261\247\155\315\235\203\273\052\347\345\266\073\161\130\255\375  
\321\105\274\132\221\356\123\025\157\323\105\011\165\156\272\220  
\135\036\004\317\067\337\036\250\146\261\214\346\040\152\357\374  
\110\116\164\230\102\257\051\157\056\152\307\373\175\321\146\061  
\042\314\206\000\176\146\203\014\102\364\275\064\222\303\032\352  
\117\312\176\162\115\013\160\214\246\110\273\246\241\024\366\373  
\130\104\231\024\256\252\013\223\151\240\051\045\112\245\313\053  
\335\212\146\007\026\170\025\127\161\033\354\365\107\204\363\236  
\061\067\172\325\177\044\255\344\274\375\375\314\156\203\350\014  
\250\267\101\154\007\335\275\074\206\227\057\322

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER

CK\_BBOOL CK\_FALSE

# Trust for "GDCA TrustAUTH R5 ROOT"

# Issuer: CN=GDCA TrustAUTH R5 ROOT,O="GUANG DONG CERTIFICATE AUTHORITY  
CO.,LTD.",C=CN

# Serial Number:7d:09:97:fe:f0:47:ea:7a

# Subject: CN=GDCA TrustAUTH R5 ROOT,O="GUANG DONG CERTIFICATE AUTHORITY  
CO.,LTD.",C=CN

# Not Valid Before: Wed Nov 26 05:13:15 2014

# Not Valid After : Mon Dec 31 15:59:59 2040

# Fingerprint (SHA-256):

BF:FF:8F:D0:44:33:48:7D:6A:8A:A6:0C:1A:29:76:7A:9F:C2:BB:B0:5E:42:0F:71:3A:13:B9:92:89:1D:38:93

# Fingerprint (SHA1): 0F:36:38:5B:81:1A:25:C3:9B:31:4E:83:CA:E9:34:66:70:CC:74:B4

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "GDCA TrustAUTH R5 ROOT"



```
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\017\066\070\133\201\032\045\303\233\061\116\203\312\351\064\146
\160\314\164\264
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\143\314\331\075\064\065\134\157\123\243\342\010\160\110\037\264
END
CKA_ISSUER MULTILINE_OCTAL
\060\142\061\013\060\011\006\003\125\004\006\023\002\103\116\061
\062\060\060\006\003\125\004\012\014\051\107\125\101\116\107\040
\104\117\116\107\040\103\105\122\124\111\106\111\103\101\124\105
\040\101\125\124\110\117\122\111\124\131\040\103\117\056\054\114
\124\104\056\061\037\060\035\006\003\125\004\003\014\026\107\104
\103\101\040\124\162\165\163\164\101\125\124\110\040\122\065\040
\122\117\117\124
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\010\175\011\227\376\360\107\352\172
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "TrustCor RootCert CA-1"
#
# Issuer: CN=TrustCor RootCert CA-1,OU=TrustCor Certificate Authority,O=TrustCor Systems S. de
R.L.,L=Panama City,ST=Panama,C=PA
# Serial Number:00:da:9b:ec:71:f3:03:b0:19
# Subject: CN=TrustCor RootCert CA-1,OU=TrustCor Certificate Authority,O=TrustCor
Systems S. de R.L.,L=Panama City,ST=Panama,C=PA
# Not Valid Before: Thu Feb 04 12:32:16 2016
# Not Valid After : Mon Dec 31 17:23:16 2029
# Fingerprint (SHA-256):
D4:0E:9C:86:CD:8F:E4:68:C1:77:69:59:F4:9E:A7:74:FA:54:86:84:B6:C4:06:F3:90:92:61:F4:DC:E2:57:5C
# Fingerprint (SHA1): FF:BD:CD:E7:82:C8:43:5E:3C:6F:26:86:5C:CA:A8:3A:45:5B:C3:0A
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "TrustCor RootCert CA-1"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\201\244\061\013\060\011\006\003\125\004\006\023\002\120\101
\061\017\060\015\006\003\125\004\010\014\006\120\141\156\141\155
\141\061\024\060\022\006\003\125\004\007\014\013\120\141\156\141
```

\155\141\040\103\151\164\171\061\044\060\042\006\003\125\004\012  
\014\033\124\162\165\163\164\103\157\162\040\123\171\163\164\145  
\155\163\040\123\056\040\144\145\040\122\056\114\056\061\047\060  
\045\006\003\125\004\013\014\036\124\162\165\163\164\103\157\162  
\040\103\145\162\164\151\146\151\143\141\164\145\040\101\165\164  
\150\157\162\151\164\171\061\037\060\035\006\003\125\004\003\014  
\026\124\162\165\163\164\103\157\162\040\122\157\157\164\103\145  
\162\164\040\103\101\055\061

END

CKA\_ID

UTF8 "0"

CKA\_ISSUER MULTILINE\_OCTAL

\060\201\244\061\013\060\011\006\003\125\004\006\023\002\120\101  
\061\017\060\015\006\003\125\004\010\014\006\120\141\156\141\155  
\141\061\024\060\022\006\003\125\004\007\014\013\120\141\156\141  
\155\141\040\103\151\164\171\061\044\060\042\006\003\125\004\012  
\014\033\124\162\165\163\164\103\157\162\040\123\171\163\164\145  
\155\163\040\123\056\040\144\145\040\122\056\114\056\061\047\060  
\045\006\003\125\004\013\014\036\124\162\165\163\164\103\157\162  
\040\103\145\162\164\151\146\151\143\141\164\145\040\101\165\164  
\150\157\162\151\164\171\061\037\060\035\006\003\125\004\003\014  
\026\124\162\165\163\164\103\157\162\040\122\157\157\164\103\145  
\162\164\040\103\101\055\061

END

CKA\_SERIAL\_NUMBER

MULTILINE\_OCTAL

\002\011\000\332\233\354\161\363\003\260\031

END

CKA\_VALUE MULTILINE\_OCTAL

\060\202\004\060\060\202\003\030\240\003\002\001\002\002\011\000  
\332\233\354\161\363\003\260\031\060\015\006\011\052\206\110\206  
\367\015\001\001\013\005\000\060\201\244\061\013\060\011\006\003  
\125\004\006\023\002\120\101\061\017\060\015\006\003\125\004\010  
\014\006\120\141\156\141\155\141\061\024\060\022\006\003\125\004  
\007\014\013\120\141\156\141\155\141\040\103\151\164\171\061\044  
\060\042\006\003\125\004\012\014\033\124\162\165\163\164\103\157  
\162\040\123\171\163\164\145\155\163\040\123\056\040\144\145\040  
\122\056\114\056\061\047\060\045\006\003\125\004\013\014\036\124  
\162\165\163\164\103\157\162\040\103\145\162\164\151\146\151\143  
\141\164\145\040\101\165\164\150\157\162\151\164\171\061\037\060  
\035\006\003\125\004\003\014\026\124\162\165\163\164\103\157\162  
\040\122\157\157\164\103\145\162\164\040\103\101\055\061\060\036  
\027\015\061\066\060\062\060\064\061\062\063\062\061\066\132\027  
\015\062\071\061\062\063\061\061\067\062\063\061\066\132\060\201  
\244\061\013\060\011\006\003\125\004\006\023\002\120\101\061\017  
\060\015\006\003\125\004\010\014\006\120\141\156\141\155\141\061  
\024\060\022\006\003\125\004\007\014\013\120\141\156\141\155\141  
\040\103\151\164\171\061\044\060\042\006\003\125\004\012\014\033

\124\162\165\163\164\103\157\162\040\123\171\163\164\145\155\163  
\040\123\056\040\144\145\040\122\056\114\056\061\047\060\045\006  
\003\125\004\013\014\036\124\162\165\163\164\103\157\162\040\103  
\145\162\164\151\146\151\143\141\164\145\040\101\165\164\150\157  
\162\151\164\171\061\037\060\035\006\003\125\004\003\014\026\124  
\162\165\163\164\103\157\162\040\122\157\157\164\103\145\162\164  
\040\103\101\055\061\060\202\001\042\060\015\006\011\052\206\110  
\206\367\015\001\001\001\005\000\003\202\001\017\000\060\202\001  
\012\002\202\001\001\000\277\216\267\225\342\302\046\022\153\063  
\031\307\100\130\012\253\131\252\215\000\243\374\200\307\120\173  
\216\324\040\046\272\062\022\330\043\124\111\045\020\042\230\235  
\106\322\301\311\236\116\033\056\054\016\070\363\032\045\150\034  
\246\132\005\346\036\213\110\277\230\226\164\076\151\312\351\265  
\170\245\006\274\325\000\136\011\012\362\047\172\122\374\055\325  
\261\352\264\211\141\044\363\032\023\333\251\317\122\355\014\044  
\272\271\236\354\176\000\164\372\223\255\154\051\222\256\121\264  
\273\323\127\277\263\363\250\215\234\364\044\113\052\326\231\236  
\364\236\376\300\176\102\072\347\013\225\123\332\267\150\016\220  
\114\373\160\077\217\112\054\224\363\046\335\143\151\251\224\330  
\020\116\305\107\010\220\231\033\027\115\271\154\156\357\140\225  
\021\216\041\200\265\275\240\163\330\320\262\167\304\105\352\132  
\046\373\146\166\166\370\006\037\141\155\017\125\305\203\267\020  
\126\162\006\007\245\363\261\032\003\005\144\016\235\132\212\326  
\206\160\033\044\336\376\050\212\053\320\152\260\374\172\242\334  
\262\171\016\213\145\017\002\003\001\000\001\243\143\060\141\060  
\035\006\003\125\035\016\004\026\004\024\356\153\111\074\172\077  
\015\343\261\011\267\212\310\253\031\237\163\063\120\347\060\037  
\006\003\125\035\043\004\030\060\026\200\024\356\153\111\074\172  
\077\015\343\261\011\267\212\310\253\031\237\163\063\120\347\060  
\017\006\003\125\035\023\001\001\377\004\005\060\003\001\001\377  
\060\016\006\003\125\035\017\001\001\377\004\004\003\002\001\206  
\060\015\006\011\052\206\110\206\367\015\001\001\013\005\000\003  
\202\001\001\000\045\030\324\221\217\023\356\217\036\035\021\123  
\332\055\104\051\031\240\036\153\061\236\115\016\236\255\075\134  
\101\157\225\053\044\241\171\230\072\070\066\373\273\146\236\110  
\377\220\220\357\075\324\270\233\264\207\165\077\040\233\316\162  
\317\241\125\301\115\144\242\031\006\241\007\063\014\013\051\345  
\361\352\253\243\354\265\012\164\220\307\175\162\362\327\134\237  
\221\357\221\213\267\334\355\146\242\317\216\146\073\274\237\072  
\002\340\047\335\026\230\300\225\324\012\244\344\201\232\165\224  
\065\234\220\137\210\067\006\255\131\225\012\260\321\147\323\031  
\312\211\347\062\132\066\034\076\202\250\132\223\276\306\320\144  
\221\266\317\331\266\030\317\333\176\322\145\243\246\304\216\027  
\061\301\373\176\166\333\323\205\343\130\262\167\172\166\073\154  
\057\120\034\347\333\366\147\171\037\365\202\225\232\007\247\024  
\257\217\334\050\041\147\011\322\326\115\132\034\031\034\216\167  
\134\303\224\044\075\062\153\113\176\324\170\224\203\276\067\115  
\316\137\307\036\116\074\340\211\063\225\013\017\245\062\326\074

```
\132\171\054\031
END
CKA_NSS_Mozilla_CA_POLICY
CK_BBOOL CK_TRUE
# For Server Distrust After: Wed Nov 30 00:00:00 2022
CKA_NSS_SERVER_DISTRUST_AFTER MULTILINE_OCTAL
\062\062\061\061\063\060\060\060\060\060\060\132
END
# For Email Distrust After: Wed Nov 30 00:00:00 2022
CKA_NSS_EMAIL_DISTRUST_AFTER MULTILINE_OCTAL
\062\062\061\061\063\060\060\060\060\060\060\132
END

# Trust for "TrustCor RootCert CA-1"
# Issuer: CN=TrustCor RootCert CA-1,OU=TrustCor Certificate Authority,O=TrustCor Systems S. de
R.L.,L=Panama City,ST=Panama,C=PA
#
Serial Number:00:da:9b:ec:71:f3:03:b0:19
# Subject: CN=TrustCor RootCert CA-1,OU=TrustCor Certificate Authority,O=TrustCor Systems S. de
R.L.,L=Panama City,ST=Panama,C=PA
# Not Valid Before: Thu Feb 04 12:32:16 2016
# Not Valid After : Mon Dec 31 17:23:16 2029
# Fingerprint (SHA-256):
D4:0E:9C:86:CD:8F:E4:68:C1:77:69:59:F4:9E:A7:74:FA:54:86:84:B6:C4:06:F3:90:92:61:F4:DC:E2:57:5C
# Fingerprint (SHA1): FF:BD:CD:E7:82:C8:43:5E:3C:6F:26:86:5C:CA:A8:3A:45:5B:C3:0A
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "TrustCor RootCert CA-1"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\377\275\315\347\202\310\103\136\074\157\046\206\134\312\250\072
\105\133\303\012
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\156\205\361\334\032\000\323\042\325\262\262\254\153\067\005\105
END
CKA_ISSUER MULTILINE_OCTAL
\060\201\244\061\013\060\011\006\003\125\004\006\023\002\120\101
\061\017\060\015\006\003\125\004\010\014\006\120\141\156\141\155
\141\061\024\060\022\006\003\125\004\007\014\013\120\141\156\141
\155\141\040\103\151\164\171\061\044\060\042\006\003\125\004\012
\014\033\124\162\165\163\164\103\157\162\040\123\171\163\164\145
\155\163\040\123\056\040\144\145\040\122\056\114\056\061\047\060
\045\006\003\125\004\013\014\036\124\162\165\163\164\103\157\162
\040\103\145\162\164\151\146\151\143\141\164\145\040\101\165\164
\150\157\162\151\164\171\061\037\060\035\006\003\125\004\003\014
\026\124\162\165\163\164\103\157\162\040\122\157\157\164\103\145
```

```
\162\164\040\103\101\055\061
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\011\000\332\233\354\161\363\003\260\031
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "TrustCor RootCert CA-2"
#
# Issuer: CN=TrustCor RootCert CA-2,OU=TrustCor Certificate Authority,O=TrustCor
Systems S. de R.L.,L=Panama City,ST=Panama,C=PA
# Serial Number:25:a1:df:ca:33:cb:59:02
# Subject: CN=TrustCor RootCert CA-2,OU=TrustCor Certificate Authority,O=TrustCor Systems S. de
R.L.,L=Panama City,ST=Panama,C=PA
# Not Valid Before: Thu Feb 04 12:32:23 2016
# Not Valid After : Sun Dec 31 17:26:39 2034
# Fingerprint (SHA-256):
07:53:E9:40:37:8C:1B:D5:E3:83:6E:39:5D:AE:A5:CB:83:9E:50:46:F1:BD:0E:AE:19:51:CF:10:FE:C7:C9:65
# Fingerprint (SHA1): B8:BE:6D:CB:56:F1:55:B9:63:D4:12:CA:4E:06:34:C7:94:B2:1C:C0
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "TrustCor RootCert CA-2"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\201\244\061\013\060\011\006\003\125\004\006\023\002\120\101
\061\017\060\015\006\003\125\004\010\014\006\120\141\156\141\155
\141\061\024\060\022\006\003\125\004\007\014\013\120\141\156\141
\155\141\040\103\151\164\171\061\044\060\042\006\003\125\004\012
\014\033\124\162\165\163\164\103\157\162\040\123\171\163\164\145
\155\163\040\123\056\040\144\145\040\122\056\114\056\061\047\060
\045\006\003\125\004\013\014\036\124\162\165\163\164\103\157\162
\040\103\145\162\164\151\146\151\143\141\164\145\040\101\165\164
\150\157\162\151\164\171\061\037\060\035\006\003\125\004\003\014
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\162\164\040\103\101\055\062
END
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CKA_ISSUER MULTILINE_OCTAL
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\061\017\060\015\006\003\125\004\010\014\006\120\141\156\141\155
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\141\061\024\060\022\006\003\125\004\007\014\013\120\141\156\141  
\155\141\040\103\151\164\171\061\044\060\042\006\003\125\004\012  
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\155\163\040\123\056\040\144\145\040\122\056\114\056\061\047\060  
\045\006\003\125\004\013\014\036\124\162\165\163\164\103\157\162  
\040\103\145\162\164\151\146\151\143\141\164\145\040\101\165\164  
\150\157\162\151\164\171\061\037\060\035\006\003\125\004\003\014  
\026\124\162\165\163\164\103\157\162\040\122\157\157\164\103\145  
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END

CKA\_SERIAL\_NUMBER

MULTILINE\_OCTAL

\002\010\045\241\337\312\063\313\131\002

END

CKA\_VALUE MULTILINE\_OCTAL

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\056\114\056\061\047\060\045\006\003\125\004\013\014\036\124\162  
\165\163\164\103\157\162\040\103\145\162\164\151\146\151\143\141  
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\015\061\066\060\062\060\064\061\062\063\062\062\063\132\027\015  
\063\064\061\062\063\061\061\067\062\066\063\071\132\060\201\244  
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\015\006\003\125\004\010\014\006\120\141\156\141\155\141\061\024  
\060\022\006\003\125\004\007\014\013\120\141\156\141\155\141\040  
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\310\136\364\121\376\357\016\143\072\073\161\272\317\157\131\312  
\014\343\233\135\111\270\114\342\127\261\230\212\102\127\234\166  
\357\357\275\321\150\250\322\364\011\273\167\065\276\045\202\010  
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\047\307\206\056\152\217\022\306\204\136\103\121\120\234\031\233  
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\203\334\327\020\237\113\375\306\370\102\275\272\174\163\002\340  
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\274\233\075\234\175\230\040\031\345\214\060\142\262\060\037\006  
\003\125\035\043\004\030\060\026\200\024\331\376\041\100\156\224  
\236\274\233\075\234\175\230\040\031\345\214\060\142\262\060\017  
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\016\006\003\125\035\017\001\001\377\004\004\003\002\001\206\060  
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\354\335\371\351\222\227\333\260\106\102\363\323\142\252\225\376  
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\037\351\033\052\306\371\272\001\032\151\277\322\130\307\124\127  
\010\217\341\071\140\167\113\254\131\204\032\210\361\335\313\117  
\170\327\347\341\063\055\374\356\101\372\040\260\276\313\367\070  
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\144\177\133\015\063\011\007\063\173\006\077\021\244\134\160\074
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\147\245\122\055\360\304\231\217\177\277\321\153\342\265\107\326
\331\320\205\231\115\224\233\017\113\215\356\000\132\107\035\021
\003\254\101\030\257\207\267\157\014\072\217\312\317\334\003\301
\242\011\310\345\375\200\136\310\140\102\001\033\032\123\132\273
\067\246\267\274\272\204\351\036\154\032\324\144\332\324\103\376
\223\213\113\362\054\171\026\020\324\223\013\210\217\241\330\206
\024\106\221\107\233\050\044\357\127\122\116\134\102\234\252\367
\111\354\047\350\100\036\263\246\211\042\162\234\365\015\063\264
\130\243\060\073\335\324\152\124\223\276\032\115\363\223\224\367
\374\204\013\077\204\040\134\064\003\104\305\332\255\274\012\301
\002\317\036\345\224\331\363\216\133\330\114\360\235\354\141\027
\273\024\062\124\014\002\051\223\036\222\206\366\177\357\347\222
\005\016\131\335\231\010\056\056\372\234\000\122\323\305\146\051
\344\247\227\104\244\016\050\201\023\065\305\366\157\144\346\101
\304\325\057\314\064\105\045\317\101\000\226\075\112\056\302\226
\230\117\116\112\234\227\267\333\037\222\062\310\377\017\121\156
\326\354\011
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END

CKA\_NSS\_Mozilla\_CA\_POLICY

CK\_BBOOL CK\_TRUE

# For Server Distrust After: Wed Nov 30 00:00:00 2022

CKA\_NSS\_SERVER\_DISTRICT\_AFTER MULTILINE\_OCTAL

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\062\062\061\061\063\060\060\060\060\060\060\132
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END

# For Email Distrust After: Wed Nov 30 00:00:00 2022

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER

MULTILINE\_OCTAL

```
\062\062\061\061\063\060\060\060\060\060\060\132
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END

# Trust for "TrustCor RootCert CA-2"

# Issuer: CN=TrustCor RootCert CA-2,OU=TrustCor Certificate Authority,O=TrustCor Systems S. de R.L.,L=Panama City,ST=Panama,C=PA

# Serial Number:25:a1:df:ca:33:cb:59:02

# Subject: CN=TrustCor RootCert CA-2,OU=TrustCor Certificate Authority,O=TrustCor Systems S. de R.L.,L=Panama City,ST=Panama,C=PA

# Not Valid Before: Thu Feb 04 12:32:23 2016

# Not Valid After : Sun Dec 31 17:26:39 2034

# Fingerprint (SHA-256):

07:53:E9:40:37:8C:1B:D5:E3:83:6E:39:5D:AE:A5:CB:83:9E:50:46:F1:BD:0E:AE:19:51:CF:10:FE:C7:C9:65

# Fingerprint (SHA1): B8:BE:6D:CB:56:F1:55:B9:63:D4:12:CA:4E:06:34:C7:94:B2:1C:C0

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE



```

CKA_LABEL UTF8 "TrustCor RootCert CA-2"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\270\276\155\313\126\361\125\271\143\324\022\312\116\006\064\307
\224\262\034\300
END
CKA_CERT_MD5_HASH
MULTILINE_OCTAL
\242\341\370\030\013\272\105\325\307\101\052\273\067\122\105\144
END
CKA_ISSUER MULTILINE_OCTAL
\060\201\244\061\013\060\011\006\003\125\004\006\023\002\120\101
\061\017\060\015\006\003\125\004\010\014\006\120\141\156\141\155
\141\061\024\060\022\006\003\125\004\007\014\013\120\141\156\141
\155\141\040\103\151\164\171\061\044\060\042\006\003\125\004\012
\014\033\124\162\165\163\164\103\157\162\040\123\171\163\164\145
\155\163\040\123\056\040\144\145\040\122\056\114\056\061\047\060
\045\006\003\125\004\013\014\036\124\162\165\163\164\103\157\162
\040\103\145\162\164\151\146\151\143\141\164\145\040\101\165\164
\150\157\162\151\164\171\061\037\060\035\006\003\125\004\003\014
\026\124\162\165\163\164\103\157\162\040\122\157\157\164\103\145
\162\164\040\103\101\055\062
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\010\045\241\337\312\063\313\131\002
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST
CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "TrustCor ECA-1"
#
# Issuer: CN=TrustCor ECA-1,OU=TrustCor Certificate Authority,O=TrustCor Systems S. de R.L.,L=Panama
City,ST=Panama,C=PA
# Serial Number:00:84:82:2c:5f:1c:62:d0:40
# Subject: CN=TrustCor ECA-1,OU=TrustCor Certificate Authority,O=TrustCor Systems S. de R.L.,L=Panama
City,ST=Panama,C=PA
# Not Valid Before: Thu Feb 04 12:32:33 2016
# Not Valid After : Mon Dec 31 17:28:07 2029
# Fingerprint (SHA-256):
5A:88:5D:B1:9C:01:D9:12:C5:75:93:88:93:8C:AF:BB:DF:03:1A:B2:D4:8E:91:EE:15:58:9B:42:97:1D:03:9C
# Fingerprint (SHA1): 58:D1:DF:95:95:67:6B:63:C0:F0:5B:1C:17:4D:8B:84:0B:C8:78:BD
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE

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CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
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\061\017\060\015\006\003\125\004\010\014\006\120\141\156\141\155
\141\061\024\060\022\006\003\125\004\007\014\013\120\141\156\141
\155\141\040\103\151\164\171\061\044\060\042\006\003\125\004\012
\014\033\124\162\165\163\164\103\157\162\040\123\171\163\164\145
\155\163\040\123\056\040\144\145\040\122\056\114\056\061\047\060
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\040\103\145\162\164\151\146\151\143\141\164\145\040\101\165\164
\150\157\162\151\164\171\061\027\060\025\006\003\125\004\003\014
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END
CKA_ID
UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
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\155\141\040\103\151\164\171\061\044\060\042\006\003\125\004\012
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\040\103\145\162\164\151\146\151\143\141\164\145\040\101\165\164
\150\157\162\151\164\171\061\027\060\025\006\003\125\004\003\014
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END
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MULTILINE_OCTAL
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END
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\125\004\006\023\002\120\101\061\017\060\015\006\003\125\004\010
\014\006\120\141\156\141\155\141\061\024\060\022\006\003\125\004
\007\014\013\120\141\156\141\155\141\040\103\151\164\171\061\044
\060\042\006\003\125\004\012\014\033\124\162\165\163\164\103\157
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\162\165\163\164\103\157\162\040\103\145\162\164\151\146\151\143
\141\164\145\040\101\165\164\150\157\162\151\164\171\061\027\060
\025\006\003\125\004\003\014\016\124\162\165\163\164\103\157\162
\040\105\103\101\055\061\060\036\027\015\061\066\060\062\060\064
\061\062\063\062\063\063\132\027\015\062\071\061\062\063\061\061
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\206\367\015\001\001\001\005\000\003\202\001\017\000\060\202\001  
\012\002\202\001\001\000\317\217\340\021\265\237\250\166\166\333  
\337\017\124\357\163\143\051\202\255\107\306\243\153\355\376\137  
\063\370\103\121\351\032\063\221\061\027\240\164\304\324\247\001  
\346\262\222\076\152\235\355\016\371\164\230\100\323\077\003\200  
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\104\101\352\333\257\260\034\357\201\320\054\305\232\041\233\075  
\355\102\073\120\046\362\354\316\161\141\006\142\041\124\116\177  
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\006\003\125\035\043\004\030\060\026\200\024\104\236\110\365\314  
\155\110\324\240\113\177\376\131\044\057\203\227\231\232\206\060  
\017\006\003\125\035\023\001\001\377\004\005\060\003\001\001\377  
\060\016\006\003\125\035\017\001\001\377\004\004\003\002\001\206  
\060\015\006\011\052\206\110\206\367\015\001\001\013\005\000\003  
\202\001\001\000\005\076\065\134\025\160\233\311\307\163\141\157  
\162\053\324\302\217\362\103\135\002\316\304\224\271\224\021\203  
\147\135\342\147\154\165\166\277\273\014\252\066\306\255\107\223  
\143\334\036\176\326\336\056\376\351\031\062\070\003\177\024\366  
\000\163\054\131\261\041\006\341\373\254\030\225\014\243\377\231  
\226\367\053\047\233\325\044\314\035\335\301\072\340\230\104\260  
\304\344\076\167\261\163\251\144\054\366\034\001\174\077\135\105  
\205\300\205\347\045\217\225\334\027\363\074\237\032\156\260\312  
\343\035\052\351\114\143\372\044\141\142\326\332\176\266\034\154  
\365\002\035\324\052\335\125\220\353\052\021\107\074\056\136\164  
\262\202\042\245\175\123\037\105\354\047\221\175\347\042\026\350  
\300\150\066\330\306\361\117\200\104\062\371\341\321\321\035\252  
\336\250\253\234\004\257\255\040\016\144\230\115\245\153\300\110

```
\130\226\151\115\334\007\214\121\223\242\337\237\017\075\213\140
\264\202\215\252\010\116\142\105\340\371\013\322\340\340\074\133
\336\134\161\047\045\302\346\003\201\213\020\123\343\307\125\242
\264\237\327\346
```

END

CKA\_NSS\_Mozilla\_CA\_POLICY

CK\_BBOOL CK\_TRUE

# For Server Distrust After: Wed Nov 30 00:00:00 2022

CKA\_NSS\_SERVER\_DISTRICT\_AFTER MULTILINE\_OCTAL

```
\062\062\061\061\063\060\060\060\060\060\060\060\132
```

END

# For Email Distrust After: Wed Nov 30 00:00:00

2022

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER MULTILINE\_OCTAL

```
\062\062\061\061\063\060\060\060\060\060\060\060\132
```

END

# Trust for "TrustCor ECA-1"

# Issuer: CN=TrustCor ECA-1,OU=TrustCor Certificate Authority,O=TrustCor Systems S. de R.L.,L=Panama City,ST=Panama,C=PA

# Serial Number:00:84:82:2c:5f:1c:62:d0:40

# Subject: CN=TrustCor ECA-1,OU=TrustCor Certificate Authority,O=TrustCor Systems S. de R.L.,L=Panama City,ST=Panama,C=PA

# Not Valid Before: Thu Feb 04 12:32:33 2016

# Not Valid After : Mon Dec 31 17:28:07 2029

# Fingerprint (SHA-256):

```
5A:88:5D:B1:9C:01:D9:12:C5:75:93:88:93:8C:AF:BB:DF:03:1A:B2:D4:8E:91:EE:15:58:9B:42:97:1D:03:9C
```

# Fingerprint (SHA1): 58:D1:DF:95:95:67:6B:63:C0:F0:5B:1C:17:4D:8B:84:0B:C8:78:BD

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "TrustCor ECA-1"

CKA\_CERT\_SHA1\_HASH MULTILINE\_OCTAL

```
\130\321\337\225\225\147\153\143\300\360\133\034\027\115\213\204
\013\310\170\275
```

END

CKA\_CERT\_MD5\_HASH

MULTILINE\_OCTAL

```
\047\222\043\035\012\365\100\174\351\346\153\235\330\365\347\154
```

END

CKA\_ISSUER MULTILINE\_OCTAL

```
\060\201\234\061\013\060\011\006\003\125\004\006\023\002\120\101
\061\017\060\015\006\003\125\004\010\014\006\120\141\156\141\155
\141\061\024\060\022\006\003\125\004\007\014\013\120\141\156\141
\155\141\040\103\151\164\171\061\044\060\042\006\003\125\004\012
\014\033\124\162\165\163\164\103\157\162\040\123\171\163\164\145
\155\163\040\123\056\040\144\145\040\122\056\114\056\061\047\060
```

```
\045\006\003\125\004\013\014\036\124\162\165\163\164\103\157\162
\040\103\145\162\164\151\146\151\143\141\164\145\040\101\165\164
\150\157\162\151\164\171\061\027\060\025\006\003\125\004\003\014
\016\124\162\165\163\164\103\157\162\040\105\103\101\055\061
```

END

CKA\_SERIAL\_NUMBER MULTILINE\_OCTAL

```
\002\011\000\204\202\054\137\034\142\320\100
```

END

CKA\_TRUST\_SERVER\_AUTH CK\_TRUST CKT\_NSS\_TRUSTED\_DELEGATOR

CKA\_TRUST\_EMAIL\_PROTECTION CK\_TRUST CKT\_NSS\_TRUSTED\_DELEGATOR

CKA\_TRUST\_CODE\_SIGNING

CK\_TRUST CKT\_NSS\_MUST\_VERIFY\_TRUST

CKA\_TRUST\_STEP\_UP\_APPROVED CK\_BBOOL CK\_FALSE

#

# Certificate "SSL.com Root Certification Authority RSA"

#

# Issuer: CN=SSL.com Root Certification Authority RSA,O=SSL Corporation,L=Houston,ST=Texas,C=US

# Serial Number:7b:2c:9b:d3:16:80:32:99

# Subject: CN=SSL.com Root Certification Authority RSA,O=SSL Corporation,L=Houston,ST=Texas,C=US

# Not Valid Before: Fri Feb 12 17:39:39 2016

# Not Valid After : Tue Feb 12 17:39:39 2041

# Fingerprint (SHA-256):

85:66:6A:56:2E:E0:BE:5C:E9:25:C1:D8:89:0A:6F:76:A8:7E:C1:6D:4D:7D:5F:29:EA:74:19:CF:20:12:3B:69

# Fingerprint (SHA1): B7:AB:33:08:D1:EA:44:77:BA:14:80:12:5A:6F:BD:A9:36:49:0C:BB

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_CERTIFICATE

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "SSL.com Root Certification Authority RSA"

CKA\_CERTIFICATE\_TYPE CK\_CERTIFICATE\_TYPE CKC\_X\_509

CKA\_SUBJECT MULTILINE\_OCTAL

```
\060\174\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\016\060\014\006\003\125\004\010\014\005\124\145\170\141\163\061
\020\060\016\006\003\125\004\007\014\007\110\157\165\163\164\157
\156\061\030\060\026\006\003\125\004\012\014\017\123\123\114\040
\103\157\162\160\157\162\141\164\151\157\156\061\061\060\057\006
\003\125\004\003\014\050\123\123\114\056\143\157\155\040\122\157
\157\164\040\103\145\162\164\151\146\151\143\141\164\151\157\156
\040\101\165\164\150\157\162\151\164\171\040\122\123\101
```

END

CKA\_ID

UTF8 "0"

CKA\_ISSUER MULTILINE\_OCTAL

```
\060\174\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\016\060\014\006\003\125\004\010\014\005\124\145\170\141\163\061
\020\060\016\006\003\125\004\007\014\007\110\157\165\163\164\157
\156\061\030\060\026\006\003\125\004\012\014\017\123\123\114\040
```

\103\157\162\160\157\162\141\164\151\157\156\061\061\060\057\006  
\003\125\004\003\014\050\123\123\114\056\143\157\155\040\122\157  
\157\164\040\103\145\162\164\151\146\151\143\141\164\151\157\156  
\040\101\165\164\150\157\162\151\164\171\040\122\123\101

END

CKA\_SERIAL\_NUMBER

MULTILINE\_OCTAL

\002\010\173\054\233\323\026\200\062\231

END

CKA\_VALUE MULTILINE\_OCTAL

\060\202\005\335\060\202\003\305\240\003\002\001\002\002\010\173  
\054\233\323\026\200\062\231\060\015\006\011\052\206\110\206\367  
\015\001\001\013\005\000\060\174\061\013\060\011\006\003\125\004  
\006\023\002\125\123\061\016\060\014\006\003\125\004\010\014\005  
\124\145\170\141\163\061\020\060\016\006\003\125\004\007\014\007  
\110\157\165\163\164\157\156\061\030\060\026\006\003\125\004\012  
\014\017\123\123\114\040\103\157\162\160\157\162\141\164\151\157  
\156\061\061\060\057\006\003\125\004\003\014\050\123\123\114\056  
\143\157\155\040\122\157\157\164\040\103\145\162\164\151\146\151  
\143\141\164\151\157\156\040\101\165\164\150\157\162\151\164\171  
\040\122\123\101\060\036\027\015\061\066\060\062\061\062\061\067  
\063\071\063\071\132\027\015\064\061\060\062\061\062\061\067\063  
\071\063\071\132\060\174\061\013\060\011\006\003\125\004\006\023  
\002\125\123\061\016\060\014\006\003\125\004\010\014\005\124\145  
\170\141\163\061\020\060\016\006\003\125\004\007\014\007\110\157  
\165\163\164\157\156\061\030\060\026\006\003\125\004\012\014\017  
\123\123\114\040\103\157\162\160\157\162\141\164\151\157\156\061  
\061\060\057\006\003\125\004\003\014\050\123\123\114\056\143\157  
\155\040\122\157\157\164\040\103\145\162\164\151\146\151\143\141  
\164\151\157\156\040\101\165\164\150\157\162\151\164\171\040\122  
\123\101\060\202\002\042\060\015\006\011\052\206\110\206\367\015  
\001\001\001\005\000\003\202\002\017\000\060\202\002\012\002\202  
\002\001\000\371\017\335\243\053\175\313\320\052\376\354\147\205  
\246\347\056\033\272\167\341\343\365\257\244\354\372\112\135\221  
\304\127\107\153\030\167\153\166\362\375\223\344\075\017\302\026  
\236\013\146\303\126\224\236\027\203\205\316\126\357\362\026\375  
\000\142\365\042\011\124\350\145\027\116\101\271\340\117\106\227  
\252\033\310\270\156\142\136\151\261\137\333\052\002\176\374\154  
\312\363\101\330\355\320\350\374\077\141\110\355\260\003\024\035  
\020\016\113\031\340\273\116\354\206\145\377\066\363\136\147\002  
\013\235\206\125\141\375\172\070\355\376\342\031\000\267\157\241  
\120\142\165\164\074\240\372\310\045\222\264\156\172\042\307\370  
\036\241\343\262\335\221\061\253\053\035\004\377\245\112\004\067  
\351\205\244\063\053\375\342\326\125\064\174\031\244\112\150\307  
\262\250\323\267\312\241\223\210\353\301\227\274\214\371\035\331  
\042\204\044\164\307\004\075\152\251\051\223\314\353\270\133\341  
\376\137\045\252\064\130\310\301\043\124\235\033\230\021\303\070  
\234\176\075\206\154\245\017\100\206\174\002\364\134\002\117\050

\313\256\161\237\017\072\310\063\376\021\045\065\352\374\272\305  
\140\075\331\174\030\325\262\251\323\165\170\003\162\042\312\072  
\303\037\357\054\345\056\251\372\236\054\266\121\106\375\257\003  
\326\352\140\150\352\205\026\066\153\205\351\036\300\263\335\304  
\044\334\200\052\201\101\155\224\076\310\340\311\201\101\000\236  
\136\277\177\305\010\230\242\030\054\102\100\263\371\157\070\047  
\113\116\200\364\075\201\107\340\210\174\352\034\316\265\165\134  
\121\056\034\053\177\032\162\050\347\000\265\321\164\306\327\344  
\237\255\007\223\266\123\065\065\374\067\344\303\366\135\026\276  
\041\163\336\222\012\370\240\143\152\274\226\222\152\076\370\274  
\145\125\233\336\365\015\211\046\004\374\045\032\246\045\151\313  
\302\155\312\174\342\131\137\227\254\353\357\056\310\274\327\033  
\131\074\053\314\362\031\310\223\153\047\143\031\317\374\351\046  
\370\312\161\233\177\223\376\064\147\204\116\231\353\374\263\170  
\011\063\160\272\146\246\166\355\033\163\353\032\245\015\304\042  
\023\040\224\126\012\116\054\154\116\261\375\317\234\011\272\242  
\063\355\207\002\003\001\000\001\243\143\060\141\060\035\006\003  
\125\035\016\004\026\004\024\335\004\011\007\242\365\172\175\122  
\123\022\222\225\356\070\200\045\015\246\131\060\017\006\003\125  
\035\023\001\001\377\004\005\060\003\001\001\377\060\037\006\003  
\125\035\043\004\030\060\026\200\024\335\004\011\007\242\365\172  
\175\122\123\022\222\225\356\070\200\045\015\246\131\060\016\006  
\003\125\035\017\001\001\377\004\004\003\002\001\206\060\015\006  
\011\052\206\110\206\367\015\001\001\013\005\000\003\202\002\001  
\000\040\030\021\224\051\373\046\235\034\036\036\160\141\361\225  
\162\223\161\044\255\150\223\130\216\062\257\033\263\160\003\374  
\045\053\164\205\220\075\170\152\364\271\213\245\227\073\265\030  
\221\273\036\247\371\100\133\221\371\125\231\257\036\021\320\134  
\035\247\146\343\261\224\007\014\062\071\246\352\033\260\171\330  
\035\234\160\104\343\212\335\304\371\225\037\212\070\103\077\001  
\205\245\107\247\075\106\262\274\345\042\150\367\173\234\330\054  
\076\012\041\310\055\063\254\277\305\201\231\061\164\301\165\161  
\305\276\261\360\043\105\364\235\153\374\031\143\235\243\274\004  
\306\030\013\045\273\123\211\017\263\200\120\336\105\356\104\177  
\253\224\170\144\230\323\366\050\335\207\330\160\145\164\373\016  
\271\023\353\247\017\141\251\062\226\314\336\273\355\143\114\030  
\273\251\100\367\240\124\156\040\210\161\165\030\352\172\264\064  
\162\340\043\047\167\134\266\220\352\206\045\100\253\357\063\017  
\313\237\202\276\242\040\373\366\265\055\032\346\302\205\261\164  
\017\373\310\145\002\244\122\001\107\335\111\042\301\277\330\353  
\153\254\176\336\354\143\063\025\267\043\010\217\306\017\215\101  
\132\335\216\305\271\217\345\105\077\170\333\272\322\033\100\261  
\376\161\115\077\340\201\242\272\136\264\354\025\340\223\335\010  
\037\176\341\125\231\013\041\336\223\236\012\373\346\243\111\275  
\066\060\376\347\167\262\240\165\227\265\055\201\210\027\145\040  
\367\332\220\000\237\311\122\314\062\312\065\174\365\075\017\330  
\053\327\365\046\154\311\006\064\226\026\352\160\131\032\062\171  
\171\013\266\210\177\017\122\110\075\277\154\330\242\104\056\321

```
\116\267\162\130\323\211\023\225\376\104\253\370\327\213\033\156
\234\274\054\240\133\325\152\000\257\137\067\341\325\372\020\013
\230\234\206\347\046\217\316\360\354\156\212\127\013\200\343\116
\262\300\240\143\141\220\272\125\150\067\164\152\266\222\333\237
\241\206\042\266\145\047\016\354\266\237\102\140\344\147\302\265
\332\101\013\304\323\213\141\033\274\372\037\221\053\327\104\007
\136\272\051\254\331\305\351\357\123\110\132\353\200\361\050\130
\041\315\260\006\125\373\047\077\123\220\160\251\004\036\127\047
\271
```

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRUST\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRUST\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "SSL.com Root Certification Authority RSA"

# Issuer: CN=SSL.com Root Certification Authority RSA,O=SSL Corporation,L=Houston,ST=Texas,C=US

# Serial Number:7b:2c:9b:d3:16:80:32:99

# Subject: CN=SSL.com Root Certification Authority RSA,O=SSL Corporation,L=Houston,ST=Texas,C=US

# Not Valid Before: Fri Feb 12 17:39:39 2016

# Not Valid After : Tue Feb 12 17:39:39 2041

# Fingerprint (SHA-256):

85:66:6A:56:2E:E0:BE:5C:E9:25:C1:D8:89:0A:6F:76:A8:7E:C1:6D:4D:7D:5F:29:EA:74:19:CF:20:12:3B:69

# Fingerprint (SHA1): B7:AB:33:08:D1:EA:44:77:BA:14:80:12:5A:6F:BD:A9:36:49:0C:BB

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN

CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "SSL.com Root Certification Authority RSA"

CKA\_CERT\_SHA1\_HASH MULTILINE\_OCTAL

```
\267\253\063\010\321\352\104\167\272\024\200\022\132\157\275\251
\066\111\014\273
```

END

CKA\_CERT\_MD5\_HASH MULTILINE\_OCTAL

```
\206\151\022\300\160\361\354\254\254\302\325\274\245\133\241\051
```

END

CKA\_ISSUER MULTILINE\_OCTAL

```
\060\174\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\016\060\014\006\003\125\004\010\014\005\124\145\170\141\163\061
\020\060\016\006\003\125\004\007\014\007\110\157\165\163\164\157
\156\061\030\060\026\006\003\125\004\012\014\017\123\123\114\040
\103\157\162\160\157\162\141\164\151\157\156\061\061\060\057\006
\003\125\004\003\014\050\123\123\114\056\143\157\155\040\122\157
\157\164\040\103\145\162\164\151\146\151\143\141\164\151\157\156
\040\101\165\164\150\157\162\151\164\171\040\122\123\101
```

END

CKA\_SERIAL\_NUMBER MULTILINE\_OCTAL



```
\002\010\173\054\233\323\026\200\062\231
END
CKA_TRUST_SERVER_AUTH
CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "SSL.com Root Certification Authority ECC"
#
# Issuer: CN=SSL.com Root Certification Authority ECC,O=SSL Corporation,L=Houston,ST=Texas,C=US
# Serial Number:75:e6:df:cb:c1:68:5b:a8
# Subject: CN=SSL.com Root Certification Authority ECC,O=SSL Corporation,L=Houston,ST=Texas,C=US
# Not Valid Before: Fri Feb 12 18:14:03 2016
# Not Valid After : Tue Feb 12 18:14:03 2041
# Fingerprint (SHA-256):
34:17:BB:06:CC:60:07:DA:1B:96:1C:92:0B:8A:B4:CE:3F:AD:82:0E:4A:A3:0B:9A:CB:C4:A7:4E:BD:CE:BC:65
# Fingerprint (SHA1): C3:19:7C:39:24:E6:54:AF:1B:C4:AB:20:95:7A:E2:C3:0E:13:02:6A
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "SSL.com Root Certification Authority ECC"
CKA_CERTIFICATE_TYPE
CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\174\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\016\060\014\006\003\125\004\010\014\005\124\145\170\141\163\061
\020\060\016\006\003\125\004\007\014\007\110\157\165\163\164\157
\156\061\030\060\026\006\003\125\004\012\014\017\123\123\114\040
\103\157\162\160\157\162\141\164\151\157\156\061\061\060\057\006
\003\125\004\003\014\050\123\123\114\056\143\157\155\040\122\157
\157\164\040\103\145\162\164\151\146\151\143\141\164\151\157\156
\040\101\165\164\150\157\162\151\164\171\040\105\103\103
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\174\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\016\060\014\006\003\125\004\010\014\005\124\145\170\141\163\061
\020\060\016\006\003\125\004\007\014\007\110\157\165\163\164\157
\156\061\030\060\026\006\003\125\004\012\014\017\123\123\114\040
\103\157\162\160\157\162\141\164\151\157\156\061\061\060\057\006
\003\125\004\003\014\050\123\123\114\056\143\157\155\040\122\157
\157\164\040\103\145\162\164\151\146\151\143\141\164\151\157\156
\040\101\165\164\150\157\162\151\164\171\040\105\103\103
END
CKA_SERIAL_NUMBER
```

MULTILINE\_OCTAL

\002\010\165\346\337\313\301\150\133\250

END

CKA\_VALUE MULTILINE\_OCTAL

\060\202\002\215\060\202\002\024\240\003\002\001\002\002\010\165  
\346\337\313\301\150\133\250\060\012\006\010\052\206\110\316\075  
\004\003\002\060\174\061\013\060\011\006\003\125\004\006\023\002  
\125\123\061\016\060\014\006\003\125\004\010\014\005\124\145\170  
\141\163\061\020\060\016\006\003\125\004\007\014\007\110\157\165  
\163\164\157\156\061\030\060\026\006\003\125\004\012\014\017\123  
\123\114\040\103\157\162\160\157\162\141\164\151\157\156\061\061  
\060\057\006\003\125\004\003\014\050\123\123\114\056\143\157\155  
\040\122\157\157\164\040\103\145\162\164\151\146\151\143\141\164  
\151\157\156\040\101\165\164\150\157\162\151\164\171\040\105\103  
\103\060\036\027\015\061\066\060\062\061\062\061\070\061\064\060  
\063\132\027\015\064\061\060\062\061\062\061\070\061\064\060\063  
\132\060\174\061\013\060\011\006\003\125\004\006\023\002\125\123  
\061\016\060\014\006\003\125\004\010\014\005\124\145\170\141\163  
\061\020\060\016\006\003\125\004\007\014\007\110\157\165\163\164  
\157\156\061\030\060\026\006\003\125\004\012\014\017\123\123\114  
\040\103\157\162\160\157\162\141\164\151\157\156\061\061\060\057  
\006\003\125\004\003\014\050\123\123\114\056\143\157\155\040\122  
\157\157\164\040\103\145\162\164\151\146\151\143\141\164\151\157  
\156\040\101\165\164\150\157\162\151\164\171\040\105\103\103\060  
\166\060\020\006\007\052\206\110\316\075\002\001\006\005\053\201  
\004\000\042\003\142\000\004\105\156\251\120\304\246\043\066\236  
\137\050\215\027\313\226\042\144\077\334\172\216\035\314\010\263  
\242\161\044\272\216\111\271\004\033\107\226\130\253\055\225\310  
\355\236\010\065\310\047\353\211\214\123\130\353\142\212\376\360  
\133\017\153\061\122\143\101\073\211\315\354\354\266\215\031\323  
\064\007\334\273\306\006\177\302\105\225\354\313\177\250\043\340  
\011\351\201\372\363\107\323\243\143\060\141\060\035\006\003\125  
\035\016\004\026\004\024\202\321\205\163\060\347\065\004\323\216  
\002\222\373\345\244\321\304\041\350\315\060\017\006\003\125\035  
\023\001\001\377\004\005\060\003\001\001\377\060\037\006\003\125  
\035\043\004\030\060\026\200\024\202\321\205\163\060\347\065\004  
\323\216\002\222\373\345\244\321\304\041\350\315\060\016\006\003  
\125\035\017\001\001\377\004\004\003\002\001\206\060\012\006\010  
\052\206\110\316\075\004\003\002\003\147\000\060\144\002\060\157  
\347\353\131\021\244\140\317\141\260\226\173\355\005\371\057\023  
\221\334\355\345\374\120\153\021\106\106\263\034\041\000\142\273  
\276\303\347\350\315\007\231\371\015\013\135\162\076\304\252\002  
\060\037\274\272\013\342\060\044\373\174\155\200\125\012\231\076  
\200\015\063\345\146\243\263\243\273\245\325\213\217\011\054\246  
\135\176\342\360\007\010\150\155\322\174\151\156\137\337\345\152  
\145

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

```

CK_BBOOL CK_TRUE
CKA_NSS_SERVER_DISTRUST_AFTER
CK_BBOOL CK_FALSE
CKA_NSS_EMAIL_DISTRUST_AFTER CK_BBOOL CK_FALSE

# Trust for "SSL.com Root Certification Authority ECC"
# Issuer: CN=SSL.com Root Certification Authority ECC,O=SSL Corporation,L=Houston,ST=Texas,C=US
# Serial Number:75:e6:df:cb:c1:68:5b:a8
# Subject: CN=SSL.com Root Certification Authority ECC,O=SSL Corporation,L=Houston,ST=Texas,C=US
# Not Valid Before: Fri Feb 12 18:14:03 2016
# Not Valid After : Tue Feb 12 18:14:03 2041
# Fingerprint (SHA-256):
34:17:BB:06:CC:60:07:DA:1B:96:1C:92:0B:8A:B4:CE:3F:AD:82:0E:4A:A3:0B:9A:CB:C4:A7:4E:BD:CE:BC:65
# Fingerprint (SHA1): C3:19:7C:39:24:E6:54:AF:1B:C4:AB:20:95:7A:E2:C3:0E:13:02:6A
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "SSL.com Root Certification Authority ECC"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\303\031\174\071\044\346\124\257\033\304\253\040\225\172\342\303
\016\023\002\152
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\056\332\344\071\177\234\217\067\321\160\237\046\027\121\072\216
END
CKA_ISSUER
MULTILINE_OCTAL
\060\174\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\016\060\014\006\003\125\004\010\014\005\124\145\170\141\163\061
\020\060\016\006\003\125\004\007\014\007\110\157\165\163\164\157
\156\061\030\060\026\006\003\125\004\012\014\017\123\123\114\040
\103\157\162\160\157\162\141\164\151\157\156\061\061\060\057\006
\003\125\004\003\014\050\123\123\114\056\143\157\155\040\122\157
\157\164\040\103\145\162\164\151\146\151\143\141\164\151\157\156
\040\101\165\164\150\157\162\151\164\171\040\105\103\103
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\010\165\346\337\313\301\150\133\250
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "SSL.com EV Root Certification Authority RSA R2"
#

```

```

# Issuer: CN=SSL.com EV Root
Certification Authority RSA R2,O=SSL Corporation,L=Houston,ST=Texas,C=US
# Serial Number:56:b6:29:cd:34:bc:78:f6
# Subject: CN=SSL.com EV Root Certification Authority RSA R2,O=SSL
Corporation,L=Houston,ST=Texas,C=US
# Not Valid Before: Wed May 31 18:14:37 2017
# Not Valid After : Fri May 30 18:14:37 2042
# Fingerprint (SHA-256):
2E:7B:F1:6C:C2:24:85:A7:BB:E2:AA:86:96:75:07:61:B0:AE:39:BE:3B:2F:E9:D0:CC:6D:4E:F7:34:91:42:5C
# Fingerprint (SHA1): 74:3A:F0:52:9B:D0:32:A0:F4:4A:83:CD:D4:BA:A9:7B:7C:2E:C4:9A
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "SSL.com EV Root Certification Authority RSA R2"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\201\202\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\016\060\014\006\003\125\004\010\014\005\124\145\170\141\163
\061\020\060\016\006\003\125\004\007\014\007\110\157\165\163\164
\157\156\061\030\060\026\006\003\125\004\012\014\017\123\123\114
\040\103\157\162\160\157\162\141\164\151\157\156\061\067\060\065
\006\003\125\004\003\014\056\123\123\114\056\143\157\155\040\105
\126\040\122\157\157\164\040\103\145\162\164\151\146\151\143\141
\164\151\157\156\040\101\165\164\150\157\162\151\164\171\040\122
\123\101\040\122\062
END
CKA_ID
UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\201\202\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\016\060\014\006\003\125\004\010\014\005\124\145\170\141\163
\061\020\060\016\006\003\125\004\007\014\007\110\157\165\163\164
\157\156\061\030\060\026\006\003\125\004\012\014\017\123\123\114
\040\103\157\162\160\157\162\141\164\151\157\156\061\067\060\065
\006\003\125\004\003\014\056\123\123\114\056\143\157\155\040\105
\126\040\122\157\157\164\040\103\145\162\164\151\146\151\143\141
\164\151\157\156\040\101\165\164\150\157\162\151\164\171\040\122
\123\101\040\122\062
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\010\126\266\051\315\064\274\170\366
END
CKA_VALUE
MULTILINE_OCTAL
\060\202\005\353\060\202\003\323\240\003\002\001\002\002\010\126
\266\051\315\064\274\170\366\060\015\006\011\052\206\110\206\367
\015\001\001\013\005\000\060\201\202\061\013\060\011\006\003\125

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\004\006\023\002\125\123\061\016\060\014\006\003\125\004\010\014  
\005\124\145\170\141\163\061\020\060\016\006\003\125\004\007\014  
\007\110\157\165\163\164\157\156\061\030\060\026\006\003\125\004  
\012\014\017\123\123\114\040\103\157\162\160\157\162\141\164\151  
\157\156\061\067\060\065\006\003\125\004\003\014\056\123\123\114  
\056\143\157\155\040\105\126\040\122\157\157\164\040\103\145\162  
\164\151\146\151\143\141\164\151\157\156\040\101\165\164\150\157  
\162\151\164\171\040\122\123\101\040\122\062\060\036\027\015\061  
\067\060\065\063\061\061\070\061\064\063\067\132\027\015\064\062  
\060\065\063\060\061\070\061\064\063\067\132\060\201\202\061\013  
\060\011\006\003\125\004\006\023\002\125\123\061\016\060\014\006  
\003\125\004\010\014\005\124\145\170\141\163\061\020\060\016\006  
\003\125\004\007\014\007\110\157\165\163\164\157\156\061\030\060  
\026\006\003\125\004\012\014\017\123\123\114\040\103\157\162\160  
\157\162\141\164\151\157\156\061\067\060\065\006\003\125\004\003  
\014\056\123\123\114\056\143\157\155\040\105\126\040\122\157\157  
\164\040\103\145\162\164\151\146\151\143\141\164\151\157\156\040  
\101\165\164\150\157\162\151\164\171\040\122\123\101\040\122\062  
\060\202\002\042\060\015\006\011\052\206\110\206\367\015\001\001  
\001\005\000\003\202\002\017\000\060\202\002\012\002\202\002\001  
\000\217\066\145\100\341\326\115\300\327\264\351\106\332\153\352  
\063\107\315\114\371\175\175\276\275\055\075\360\333\170\341\206  
\245\331\272\011\127\150\355\127\076\240\320\010\101\203\347\050  
\101\044\037\343\162\025\320\001\032\373\136\160\043\262\313\237  
\071\343\317\305\116\306\222\155\046\306\173\273\263\332\047\235  
\012\206\351\201\067\005\376\360\161\161\354\303\034\351\143\242  
\027\024\235\357\033\147\323\205\125\002\002\326\111\311\314\132  
\341\261\367\157\062\237\311\324\073\210\101\250\234\275\313\253  
\333\155\173\011\037\242\114\162\220\332\053\010\374\317\074\124  
\316\147\017\250\317\135\226\031\013\304\343\162\353\255\321\175  
\035\047\357\222\353\020\277\133\353\073\257\317\200\335\301\322  
\226\004\133\172\176\244\251\074\070\166\244\142\216\240\071\136  
\352\167\317\135\000\131\217\146\054\076\007\242\243\005\046\021  
\151\227\352\205\267\017\226\013\113\310\100\341\120\272\056\212  
\313\367\017\232\042\347\177\232\067\023\315\362\115\023\153\041  
\321\300\314\042\362\241\106\366\104\151\234\312\141\065\007\000  
\157\326\141\010\021\352\272\270\366\351\263\140\345\115\271\354  
\237\024\146\311\127\130\333\315\207\151\370\212\206\022\003\107  
\277\146\023\166\254\167\175\064\044\205\203\315\327\252\234\220  
\032\237\041\054\177\170\267\144\270\330\350\246\364\170\263\125  
\313\204\322\062\304\170\256\243\217\141\335\316\010\123\255\354  
\210\374\025\344\232\015\346\237\032\167\316\114\217\270\024\025  
\075\142\234\206\070\006\000\146\022\344\131\166\132\123\300\002  
\230\242\020\053\150\104\173\216\171\316\063\112\166\252\133\201  
\026\033\265\212\330\320\000\173\136\142\264\011\326\206\143\016  
\246\005\225\111\272\050\213\210\223\262\064\034\330\244\125\156  
\267\034\320\336\231\125\073\043\364\042\340\371\051\146\046\354  
\040\120\167\333\112\013\217\276\345\002\140\160\101\136\324\256

\120\071\042\024\046\313\262\073\163\164\125\107\007\171\201\071  
\250\060\023\104\345\004\212\256\226\023\045\102\017\271\123\304  
\233\374\315\344\034\336\074\372\253\326\006\112\037\147\246\230  
\060\034\335\054\333\334\030\225\127\146\306\377\134\213\126\365  
\167\002\003\001\000\001\243\143\060\141\060\017\006\003\125\035  
\023\001\001\377\004\005\060\003\001\001\377\060\037\006\003\125  
\035\043\004\030\060\026\200\024\371\140\273\324\343\325\064\366  
\270\365\006\200\045\247\163\333\106\151\250\236\060\035\006\003  
\125\035\016\004\026\004\024\371\140\273\324\343\325\064\366\270  
\365\006\200\045\247\163\333\106\151\250\236\060\016\006\003\125  
\035\017\001\001\377\004\004\003\002\001\206\060\015\006\011\052  
\206\110\206\367\015\001\001\013\005\000\003\202\002\001\000\126  
\263\216\313\012\235\111\216\277\244\304\221\273\146\027\005\121  
\230\165\373\345\120\054\172\236\361\024\372\253\323\212\076\377  
\221\051\217\143\213\330\264\251\124\001\015\276\223\206\057\371  
\112\155\307\136\365\127\371\312\125\034\022\276\107\017\066\305  
\337\152\267\333\165\302\107\045\177\271\361\143\370\150\055\125  
\004\321\362\215\260\244\317\274\074\136\037\170\347\245\240\040  
\160\260\004\305\267\367\162\247\336\042\015\275\063\045\106\214  
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\357\332\206\237\231\327\353\267\257\150\342\071\046\224\272\150  
\267\277\203\323\352\172\147\075\142\147\256\045\345\162\350\342  
\344\354\256\022\366\113\053\074\237\351\260\100\363\070\124\263  
\375\267\150\310\332\306\217\121\074\262\373\221\334\034\347\233  
\235\341\267\015\162\217\342\244\304\251\170\371\353\024\254\306  
\103\005\302\145\071\050\030\002\303\202\262\235\005\276\145\355  
\226\137\145\164\074\373\011\065\056\173\234\023\375\033\017\135  
\307\155\201\072\126\017\314\073\341\257\002\057\042\254\106\312  
\106\074\240\034\114\326\104\264\136\056\134\025\146\011\341\046  
\051\376\306\122\141\272\261\163\377\303\014\234\345\154\152\224  
\077\024\312\100\026\225\204\363\131\251\254\137\114\141\223\155  
\321\073\314\242\225\014\042\246\147\147\104\056\271\331\322\212  
\101\263\146\013\132\373\175\043\245\362\032\260\377\336\233\203  
\224\056\321\077\337\222\267\221\257\005\073\145\307\240\154\261  
\315\142\022\303\220\033\343\045\316\064\274\157\167\166\261\020  
\303\367\005\032\300\326\257\164\142\110\027\167\222\151\220\141  
\034\336\225\200\164\124\217\030\034\303\363\003\320\277\244\103  
\165\206\123\030\172\012\056\011\034\066\237\221\375\202\212\042  
\113\321\016\120\045\335\313\003\014\027\311\203\000\010\116\065  
\115\212\213\355\360\002\224\146\054\104\177\313\225\047\226\027  
\255\011\060\254\266\161\027\156\213\027\366\034\011\324\055\073  
\230\245\161\323\124\023\331\140\363\365\113\146\117\372\361\356  
\040\022\215\264\254\127\261\105\143\241\254\166\251\302\373

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "SSL.com EV Root Certification Authority RSA R2"

# Issuer: CN=SSL.com EV Root Certification Authority RSA R2,O=SSL Corporation,L=Houston,ST=Texas,C=US

# Serial Number:56:b6:29:cd:34:bc:78:f6

# Subject: CN=SSL.com EV Root Certification Authority RSA R2,O=SSL

Corporation,L=Houston,ST=Texas,C=US

# Not Valid Before: Wed May 31 18:14:37 2017

# Not Valid After : Fri May 30 18:14:37 2042

# Fingerprint (SHA-256):

2E:7B:F1:6C:C2:24:85:A7:BB:E2:AA:86:96:75:07:61:B0:AE:39:BE:3B:2F:E9:D0:CC:6D:4E:F7:34:91:42:5C

# Fingerprint (SHA1): 74:3A:F0:52:9B:D0:32:A0:F4:4A:83:CD:D4:BA:A9:7B:7C:2E:C4:9A

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE

CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "SSL.com EV Root Certification Authority RSA R2"

CKA\_CERT\_SHA1\_HASH MULTILINE\_OCTAL

\164\072\360\122\233\320\062\240\364\112\203\315\324\272\251\173

\174\056\304\232

END

CKA\_CERT\_MD5\_HASH MULTILINE\_OCTAL

\341\036\061\130\032\256\124\123\002\366\027\152\021\173\115\225

END

CKA\_ISSUER MULTILINE\_OCTAL

\060\201\202\061\013\060\011\006\003\125\004\006\023\002\125\123

\061\016\060\014\006\003\125\004\010\014\005\124\145\170\141\163

\061\020\060\016\006\003\125\004\007\014\007\110\157\165\163\164

\157\156\061\030\060\026\006\003\125\004\012\014\017\123\123\114

\040\103\157\162\160\157\162\141\164\151\157\156\061\067\060\065

\006\003\125\004\003\014\056\123\123\114\056\143\157\155\040\105

\126\040\122\157\157\164\040\103\145\162\164\151\146\151\143\141

\164\151\157\156\040\101\165\164\150\157\162\151\164\171\040\122

\123\101\040\122\062

END

CKA\_SERIAL\_NUMBER MULTILINE\_OCTAL

\002\010\126\266\051\315\064\274\170\366

END

CKA\_TRUST\_SERVER\_AUTH

CK\_TRUST CKT\_NSS\_TRUSTED\_DELEGATOR

CKA\_TRUST\_EMAIL\_PROTECTION CK\_TRUST CKT\_NSS\_MUST\_VERIFY\_TRUST

CKA\_TRUST\_CODE\_SIGNING CK\_TRUST CKT\_NSS\_MUST\_VERIFY\_TRUST

CKA\_TRUST\_STEP\_UP\_APPROVED CK\_BBOOL CK\_FALSE

#

# Certificate "SSL.com EV Root Certification Authority ECC"

#

```
# Issuer: CN=SSL.com EV Root Certification Authority ECC,O=SSL Corporation,L=Houston,ST=Texas,C=US
# Serial Number:2c:29:9c:5b:16:ed:05:95
# Subject: CN=SSL.com EV Root Certification Authority ECC,O=SSL Corporation,L=Houston,ST=Texas,C=US
# Not Valid Before: Fri Feb 12 18:15:23 2016
# Not Valid After : Tue Feb 12 18:15:23 2041
# Fingerprint (SHA-256):
22:A2:C1:F7:BD:ED:70:4C:C1:E7:01:B5:F4:08:C3:10:88:0F:E9:56:B5:DE:2A:4A:44:F9:9C:87:3A:25:A7:C8
# Fingerprint (SHA1): 4C:DD:51:A3:D1:F5:20:32:14:B0:C6:C5:32:23:03:91:C7:46:42:6D
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "SSL.com EV Root Certification
Authority ECC"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\177\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\016\060\014\006\003\125\004\010\014\005\124\145\170\141\163\061
\020\060\016\006\003\125\004\007\014\007\110\157\165\163\164\157
\156\061\030\060\026\006\003\125\004\012\014\017\123\123\114\040
\103\157\162\160\157\162\141\164\151\157\156\061\064\060\062\006
\003\125\004\003\014\053\123\123\114\056\143\157\155\040\105\126
\040\122\157\157\164\040\103\145\162\164\151\146\151\143\141\164
\151\157\156\040\101\165\164\150\157\162\151\164\171\040\105\103
\103
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\177\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\016\060\014\006\003\125\004\010\014\005\124\145\170\141\163\061
\020\060\016\006\003\125\004\007\014\007\110\157\165\163\164\157
\156\061\030\060\026\006\003\125\004\012\014\017\123\123\114\040
\103\157\162\160\157\162\141\164\151\157\156\061\064\060\062\006
\003\125\004\003\014\053\123\123\114\056\143\157\155\040\105\126
\040\122\157\157\164\040\103\145\162\164\151\146\151\143\141\164
\151\157\156\040\101\165\164\150\157\162\151\164\171\040\105\103
\103
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\010\054\051\234\133\026\355\005\225
END
CKA_VALUE MULTILINE_OCTAL
\060\202\002\224\060\202\002\032\240\003\002\001\002\002\010\054
\051\234\133\026\355\005\225\060\012\006\010\052\206\110\316\075
\004\003\002\060\177\061\013\060\011\006\003\125\004\006\023\002
\125\123\061\016\060\014\006\003\125\004\010\014\005\124\145\170
\141\163\061\020\060\016\006\003\125\004\007\014\007\110\157\165
```



\163\164\157\156\061\030\060\026\006\003\125\004\012\014\017\123  
\123\114\040\103\157\162\160\157\162\141\164\151\157\156\061\064  
\060\062\006\003\125\004\003\014\053\123\123\114\056\143\157\155  
\040\105\126\040\122\157\157\164\040\103\145\162\164\151\146\151  
\143\141\164\151\157\156\040\101\165\164\150\157\162\151\164\171  
\040\105\103\103\060\036\027\015\061\066\060\062\061\062\061\070  
\061\065\062\063\132\027\015\064\061\060\062\061\062\061\070\061  
\065\062\063\132\060\177\061\013\060\011\006\003\125\004\006\023  
\002\125\123\061\016\060\014\006\003\125\004\010\014\005\124\145  
\170\141\163\061\020\060\016\006\003\125\004\007\014\007\110\157  
\165\163\164\157\156\061\030\060\026\006\003\125\004\012\014\017  
\123\123\114\040\103\157\162\160\157\162\141\164\151\157\156\061  
\064\060\062\006\003\125\004\003\014\053\123\123\114\056\143\157  
\155\040\105\126\040\122\157\157\164\040\103\145\162\164\151\146  
\151\143\141\164\151\157\156\040\101\165\164\150\157\162\151\164  
\171\040\105\103\103\060\166\060\020\006\007\052\206\110\316\075  
\002\001\006\005\053\201\004\000\042\003\142\000\004\252\022\107  
\220\230\033\373\357\303\100\007\203\040\116\361\060\202\242\006  
\321\362\222\206\141\362\366\041\150\312\000\304\307\352\103\000  
\124\206\334\375\037\337\000\270\101\142\134\334\160\026\062\336  
\037\231\324\314\305\007\310\010\037\141\026\007\121\075\175\134  
\007\123\343\065\070\214\337\315\237\331\056\015\112\266\031\056  
\132\160\132\006\355\276\360\241\260\312\320\011\051\243\143\060  
\141\060\035\006\003\125\035\016\004\026\004\024\133\312\136\345  
\336\322\201\252\315\250\055\144\121\266\331\162\233\227\346\117  
\060\017\006\003\125\035\023\001\001\377\004\005\060\003\001\001  
\377\060\037\006\003\125\035\043\004\030\060\026\200\024\133\312  
\136\345\336\322\201\252\315\250\055\144\121\266\331\162\233\227  
\346\117\060\016\006\003\125\035\017\001\001\377\004\004\003\002  
\001\206\060\012\006\010\052\206\110\316\075\004\003\002\003\150  
\000\060\145\002\061\000\212\346\100\211\067\353\351\325\023\331  
\312\324\153\044\363\260\075\207\106\130\032\354\261\337\157\373  
\126\272\160\153\307\070\314\350\261\214\117\017\367\361\147\166  
\016\203\320\036\121\217\002\060\075\366\043\050\046\114\306\140  
\207\223\046\233\262\065\036\272\326\367\074\321\034\316\372\045  
\074\246\032\201\025\133\363\022\017\154\356\145\212\311\207\250  
\371\007\340\142\232\214\134\112

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRUST\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRUST\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "SSL.com EV Root Certification Authority ECC"

# Issuer: CN=SSL.com EV Root Certification Authority ECC,O=SSL Corporation,L=Houston,ST=Texas,C=US

# Serial Number:2c:29:9c:5b:16:ed:05:95

# Subject: CN=SSL.com EV Root Certification Authority ECC,O=SSL Corporation,L=Houston,ST=Texas,C=US

# Not Valid Before: Fri Feb 12 18:15:23 2016

```
# Not Valid After : Tue Feb 12 18:15:23 2041
# Fingerprint (SHA-256):
22:A2:C1:F7:BD:ED:70:4C:C1:E7:01:B5:F4:08:C3:10:88:0F:E9:56:B5:DE:2A:4A:44:F9:9C:87:3A:25:A7:C8
# Fingerprint (SHA1): 4C:DD:51:A3:D1:F5:20:32:14:B0:C6:C5:32:23:03:91:C7:46:42:6D
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "SSL.com EV Root Certification Authority ECC"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\114\335\121\243\321\365\040\062\024\260\306\305\062\043\003\221
\307\106\102\155
END
CKA_CERT_MD5_HASH
MULTILINE_OCTAL
\131\123\042\145\203\102\001\124\300\316\102\271\132\174\362\220
END
CKA_ISSUER MULTILINE_OCTAL
\060\177\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\016\060\014\006\003\125\004\010\014\005\124\145\170\141\163\061
\020\060\016\006\003\125\004\007\014\007\110\157\165\163\164\157
\156\061\030\060\026\006\003\125\004\012\014\017\123\123\114\040
\103\157\162\160\157\162\141\164\151\157\156\061\064\060\062\006
\003\125\004\003\014\053\123\123\114\056\143\157\155\040\105\126
\040\122\157\157\164\040\103\145\162\164\151\146\151\143\141\164
\151\157\156\040\101\165\164\150\157\162\151\164\171\040\105\103
\103
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\010\054\051\234\133\026\355\005\225
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
#
Certificate "GlobalSign Root CA - R6"
#
# Issuer: CN=GlobalSign,O=GlobalSign,OU=GlobalSign Root CA - R6
# Serial Number:45:e6:bb:03:83:33:c3:85:65:48:e6:ff:45:51
# Subject: CN=GlobalSign,O=GlobalSign,OU=GlobalSign Root CA - R6
# Not Valid Before: Wed Dec 10 00:00:00 2014
# Not Valid After : Sun Dec 10 00:00:00 2034
# Fingerprint (SHA-256):
2C:AB:EA:FE:37:D0:6C:A2:2A:BA:73:91:C0:03:3D:25:98:29:52:C4:53:64:73:49:76:3A:3A:B5:AD:6C:CF:69
# Fingerprint (SHA1): 80:94:64:0E:B5:A7:A1:CA:11:9C:1F:DD:D5:9F:81:02:63:A7:FB:D1
```

```
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "GlobalSign Root CA - R6"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\114\061\040\060\036\006\003\125\004\013\023\027\107\154\157
\142\141\154\123\151\147\156\040\122\157\157\164\040\103\101\040
\055\040\122\066\061\023\060\021\006\003\125\004\012\023\012\107
\154\157\142\141\154\123\151\147\156\061\023\060\021\006\003\125
\004\003\023\012\107\154\157\142\141\154\123\151\147\156
END
CKA_ID
UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\114\061\040\060\036\006\003\125\004\013\023\027\107\154\157
\142\141\154\123\151\147\156\040\122\157\157\164\040\103\101\040
\055\040\122\066\061\023\060\021\006\003\125\004\012\023\012\107
\154\157\142\141\154\123\151\147\156\061\023\060\021\006\003\125
\004\003\023\012\107\154\157\142\141\154\123\151\147\156
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\016\105\346\273\003\203\063\303\205\145\110\346\377\105\121
END
CKA_VALUE MULTILINE_OCTAL
\060\202\005\203\060\202\003\153\240\003\002\001\002\002\016\105
\346\273\003\203\063\303\205\145\110\346\377\105\121\060\015\006
\011\052\206\110\206\367\015\001\001\014\005\000\060\114\061\040
\060\036\006\003\125\004\013\023\027\107\154\157\142\141\154\123
\151\147\156\040\122\157\157\164\040\103\101\040\055\040\122\066
\061\023\060\021\006\003\125\004\012\023\012\107\154\157\142\141
\154\123\151\147\156\061\023\060\021\006\003\125\004\003\023\012
\107\154\157\142\141\154\123\151\147\156\060\036\027\015\061\064
\061\062\061\060\060\060\060\060\060\060\132\027\015\063\064\061
\062\061\060\060\060\060\060\060\060\132\060\114\061\040\060\036
\006\003\125\004\013\023\027\107\154\157\142\141\154\123\151\147
\156\040\122\157\157\164\040\103\101\040\055\040\122\066\061\023
\060\021\006\003\125\004\012\023\012\107\154\157\142\141\154\123
\151\147\156\061\023\060\021\006\003\125\004\003\023\012\107\154
\157\142\141\154\123\151\147\156\060\202\002\042\060\015\006\011
\052\206\110\206\367\015\001\001\001\005\000\003\202\002\017\000
\060\202\002\012\002\202\002\001\000\225\007\350\163\312\146\371
\354\024\312\173\074\367\015\010\361\264\105\013\054\202\264\110
\306\353\133\074\256\203\270\101\222\063\024\244\157\177\351\052
\314\306\260\210\153\305\266\211\321\306\262\377\024\316\121\024
\041\354\112\335\033\132\306\326\207\356\115\072\025\006\355\144
\146\013\222\200\312\104\336\163\224\116\363\247\211\177\117\170
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\143\010\310\022\120\155\102\146\057\115\271\171\050\115\122\032  
\212\032\200\267\031\201\016\176\304\212\274\144\114\041\034\103  
\150\327\075\074\212\305\262\146\325\220\232\267\061\006\305\276  
\342\155\062\006\246\036\371\271\353\252\243\270\277\276\202\143  
\120\320\360\030\211\337\344\017\171\365\352\242\037\052\322\160  
\056\173\347\274\223\273\155\123\342\110\174\214\020\007\070\377  
\146\262\167\141\176\340\352\214\074\252\264\244\366\363\225\112  
\022\007\155\375\214\262\211\317\320\240\141\167\310\130\164\260  
\324\043\072\367\135\072\312\242\333\235\011\336\135\104\055\220  
\361\201\315\127\222\372\176\274\120\004\143\064\337\153\223\030  
\276\153\066\262\071\344\254\044\066\267\360\357\266\034\023\127  
\223\266\336\262\370\342\205\267\163\242\270\065\252\105\362\340  
\235\066\241\157\124\212\361\162\126\156\056\210\305\121\102\104  
\025\224\356\243\305\070\226\233\116\116\132\013\107\363\006\066  
\111\167\060\274\161\067\345\246\354\041\010\165\374\346\141\026  
\077\167\325\331\221\227\204\012\154\324\002\115\164\300\024\355  
\375\071\373\203\362\136\024\241\004\260\013\351\376\356\217\341  
\156\013\262\010\263\141\146\011\152\261\006\072\145\226\131\300  
\360\065\375\311\332\050\215\032\021\207\160\201\012\250\232\165  
\035\236\072\206\005\000\236\333\200\326\045\371\334\005\236\047  
\131\114\166\071\133\352\371\245\241\330\203\017\321\377\337\060  
\021\371\205\317\063\110\365\312\155\144\024\054\172\130\117\323  
\113\010\111\305\225\144\032\143\016\171\075\365\263\214\312\130  
\255\234\102\105\171\156\016\207\031\134\124\261\145\266\277\214  
\233\334\023\351\015\157\270\056\334\147\156\311\213\021\265\204  
\024\212\000\031\160\203\171\221\227\221\324\032\047\277\067\036  
\062\007\330\024\143\074\050\114\257\002\003\001\000\001\243\143  
\060\141\060\016\006\003\125\035\017\001\001\377\004\004\003\002  
\001\006\060\017\006\003\125\035\023\001\001\377\004\005\060\003  
\001\001\377\060\035\006\003\125\035\016\004\026\004\024\256\154  
\005\243\223\023\342\242\347\342\327\034\326\307\360\177\310\147  
\123\240\060\037\006\003\125\035\043\004\030\060\026\200\024\256  
\154\005\243\223\023\342\242\347\342\327\034\326\307\360\177\310  
\147\123\240\060\015\006\011\052\206\110\206\367\015\001\001\014  
\005\000\003\202\002\001\000\203\045\355\350\321\375\225\122\315  
\236\300\004\240\221\151\346\134\320\204\336\334\255\242\117\350  
\107\170\326\145\230\251\133\250\074\207\174\002\212\321\156\267  
\026\163\346\137\300\124\230\325\164\276\301\315\342\021\221\255  
\043\030\075\335\341\162\104\226\264\225\136\300\173\216\231\170  
\026\103\023\126\127\263\242\263\073\265\167\334\100\162\254\243  
\353\233\065\076\261\010\041\241\347\304\103\067\171\062\276\265  
\347\234\054\114\274\103\051\231\216\060\323\254\041\340\343\035  
\372\330\007\063\166\124\000\042\052\271\115\040\056\160\150\332  
\345\123\374\203\134\323\235\362\377\104\014\104\146\362\322\343  
\275\106\000\032\155\002\272\045\135\215\241\061\121\335\124\106  
\034\115\333\231\226\357\032\034\004\134\246\025\357\170\340\171  
\376\135\333\076\252\114\125\375\232\025\251\157\341\246\373\337  
\160\060\351\303\356\102\106\355\302\223\005\211\372\175\143\173

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\077\320\161\201\174\000\350\230\256\016\170\064\303\045\373\257
\012\237\040\153\335\073\023\217\022\214\342\101\032\110\172\163
\240\167\151\307\266\134\177\202\310\036\376\130\033\050\053\250
\154\255\136\155\300\005\322\173\267\353\200\376\045\067\376\002
\233\150\254\102\135\303\356\365\314\334\360\120\165\322\066\151
\234\346\173\004\337\156\006\151\266\336\012\011\110\131\207\353
\173\024\140\172\144\252\151\103\357\221\307\114\354\030\335\154
\357\123\055\214\231\341\136\362\162\076\317\124\310\275\147\354
\244\017\114\105\377\323\271\060\043\007\114\217\020\277\206\226
\331\231\132\264\231\127\034\244\314\273\025\211\123\272\054\005
\017\344\304\236\031\261\030\064\325\114\235\272\355\367\037\257
\044\225\004\170\250\003\273\356\201\345\332\137\174\213\112\241
\220\164\045\247\263\076\113\310\054\126\275\307\310\357\070\342
\134\222\360\171\367\234\204\272\164\055\141\001\040\176\176\321
\362\117\007\131\137\213\055\103\122\353\106\014\224\341\365\146
\107\171\167\325\124\133\037\255\044\067\313\105\132\116\240\104
\110\310\330\260\231\305\025\204\011\366\326\111\111\300\145\270
\346\032\161\156\240\250\361\202\350\105\076\154\326\002\327\012
\147\203\005\132\311\244\020
```

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRUST\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRUST\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "GlobalSign Root CA - R6"

# Issuer: CN=GlobalSign,O=GlobalSign,OU=GlobalSign Root CA - R6

# Serial Number:45:e6:bb:03:83:33:c3:85:65:48:e6:ff:45:51

# Subject: CN=GlobalSign,O=GlobalSign,OU=GlobalSign Root CA - R6

# Not Valid Before: Wed Dec 10 00:00:00 2014

# Not Valid After : Sun Dec 10 00:00:00 2034

# Fingerprint (SHA-256):

2C:AB:EA:FE:37:D0:6C:A2:2A:BA:73:91:C0:03:3D:25:98:29:52:C4:53:64:73:49:76:3A:3A:B5:AD:6C:CF:69

# Fingerprint (SHA1): 80:94:64:0E:B5:A7:A1:CA:11:9C:1F:DD:D5:9F:81:02:63:A7:FB:D1

CKA\_CLASS

CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "GlobalSign Root CA - R6"

CKA\_CERT\_SHA1\_HASH MULTILINE\_OCTAL

```
\200\224\144\016\265\247\241\312\021\234\037\335\325\237\201\002
\143\247\373\321
```

END

CKA\_CERT\_MD5\_HASH MULTILINE\_OCTAL

```
\117\335\007\344\324\042\144\071\036\014\067\102\352\321\306\256
```

END

CKA\_ISSUER MULTILINE\_OCTAL

```
\060\114\061\040\060\036\006\003\125\004\013\023\027\107\154\157
\142\141\154\123\151\147\156\040\122\157\157\164\040\103\101\040
\055\040\122\066\061\023\060\021\006\003\125\004\012\023\012\107
\154\157\142\141\154\123\151\147\156\061\023\060\021\006\003\125
\004\003\023\012\107\154\157\142\141\154\123\151\147\156
```

END

CKA\_SERIAL\_NUMBER MULTILINE\_OCTAL

```
\002\016\105\346\273\003\203\063\303\205\145\110\346\377\105\121
```

END

CKA\_TRUST\_SERVER\_AUTH CK\_TRUST CKT\_NSS\_TRUSTED\_DELEGATOR

CKA\_TRUST\_EMAIL\_PROTECTION CK\_TRUST CKT\_NSS\_TRUSTED\_DELEGATOR

CKA\_TRUST\_CODE\_SIGNING CK\_TRUST

CKT\_NSS\_MUST\_VERIFY\_TRUST

CKA\_TRUST\_STEP\_UP\_APPROVED CK\_BBOOL CK\_FALSE

#

# Certificate "OISTE WISEKey Global Root GC CA"

#

# Issuer: CN=OISTE WISEKey Global Root GC CA,OU=OISTE Foundation Endorsed,O=WISEKey,C=CH

# Serial Number:21:2a:56:0c:ae:da:0c:ab:40:45:bf:2b:a2:2d:3a:ea

# Subject: CN=OISTE WISEKey Global Root GC CA,OU=OISTE Foundation Endorsed,O=WISEKey,C=CH

# Not Valid Before: Tue May 09 09:48:34 2017

# Not Valid After : Fri May 09 09:58:33 2042

# Fingerprint (SHA-256):

85:60:F9:1C:36:24:DA:BA:95:70:B5:FE:A0:DB:E3:6F:F1:1A:83:23:BE:94:86:85:4F:B3:F3:4A:55:71:19:8D

# Fingerprint (SHA1): E0:11:84:5E:34:DE:BE:88:81:B9:9C:F6:16:26:D1:96:1F:C3:B9:31

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_CERTIFICATE

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "OISTE WISEKey Global Root GC CA"

CKA\_CERTIFICATE\_TYPE CK\_CERTIFICATE\_TYPE CKC\_X\_509

CKA\_SUBJECT MULTILINE\_OCTAL

```
\060\155\061\013\060\011\006\003\125\004\006\023\002\103\110\061
\020\060\016\006\003\125\004\012\023\007\127\111\123\145\113\145
\171\061\042\060\040\006\003\125\004\013\023\031\117\111\123\124
\105\040\106\157\165\156\144\141\164\151\157\156\040\105\156\144
\157\162\163\145\144\061\050\060\046\006\003\125\004\003\023\037
\117\111\123\124\105\040\127\111\123\145\113\145\171\040\107\154
\157\142\141\154\040\122\157\157\164\040\107\103\040\103\101
```

END

CKA\_ID

UTF8 "0"

CKA\_ISSUER MULTILINE\_OCTAL

```
\060\155\061\013\060\011\006\003\125\004\006\023\002\103\110\061
\020\060\016\006\003\125\004\012\023\007\127\111\123\145\113\145
\171\061\042\060\040\006\003\125\004\013\023\031\117\111\123\124
\105\040\106\157\165\156\144\141\164\151\157\156\040\105\156\144
```

\157\162\163\145\144\061\050\060\046\006\003\125\004\003\023\037  
\117\111\123\124\105\040\127\111\123\145\113\145\171\040\107\154  
\157\142\141\154\040\122\157\157\164\040\107\103\040\103\101  
END  
CKA\_SERIAL\_NUMBER MULTILINE\_OCTAL  
\002\020\041\052\126\014\256\332\014\253\100\105\277\053\242\055  
\072\352  
END  
CKA\_VALUE  
MULTILINE\_OCTAL  
\060\202\002\151\060\202\001\357\240\003\002\001\002\002\020\041  
\052\126\014\256\332\014\253\100\105\277\053\242\055\072\352\060  
\012\006\010\052\206\110\316\075\004\003\003\060\155\061\013\060  
\011\006\003\125\004\006\023\002\103\110\061\020\060\016\006\003  
\125\004\012\023\007\127\111\123\145\113\145\171\061\042\060\040  
\006\003\125\004\013\023\031\117\111\123\124\105\040\106\157\165  
\156\144\141\164\151\157\156\040\105\156\144\157\162\163\145\144  
\061\050\060\046\006\003\125\004\003\023\037\117\111\123\124\105  
\040\127\111\123\145\113\145\171\040\107\154\157\142\141\154\040  
\122\157\157\164\040\107\103\040\103\101\060\036\027\015\061\067  
\060\065\060\071\060\071\064\070\063\064\132\027\015\064\062\060  
\065\060\071\060\071\065\070\063\063\132\060\155\061\013\060\011  
\006\003\125\004\006\023\002\103\110\061\020\060\016\006\003\125  
\004\012\023\007\127\111\123\145\113\145\171\061\042\060\040\006  
\003\125\004\013\023\031\117\111\123\124\105\040\106\157\165\156  
\144\141\164\151\157\156\040\105\156\144\157\162\163\145\144\061  
\050\060\046\006\003\125\004\003\023\037\117\111\123\124\105\040  
\127\111\123\145\113\145\171\040\107\154\157\142\141\154\040\122  
\157\157\164\040\107\103\040\103\101\060\166\060\020\006\007\052  
\206\110\316\075\002\001\006\005\053\201\004\000\042\003\142\000  
\004\114\351\120\300\306\017\162\030\274\330\361\272\263\211\342  
\171\112\243\026\247\153\124\044\333\121\377\352\364\011\044\303  
\013\042\237\313\152\047\202\201\015\322\300\257\061\344\164\202  
\156\312\045\331\214\165\235\361\333\320\232\242\113\041\176\026  
\247\143\220\322\071\324\261\207\170\137\030\226\017\120\033\065  
\067\017\152\306\334\331\023\115\244\216\220\067\346\275\133\061  
\221\243\124\060\122\060\016\006\003\125\035\017\001\001\377\004  
\004\003\002\001\006\060\017\006\003\125\035\023\001\001\377\004  
\005\060\003\001\001\377\060\035\006\003\125\035\016\004\026\004  
\024\110\207\024\254\343\303\236\220\140\072\327\312\211\356\323  
\255\214\264\120\146\060\020\006\011\053\006\001\004\001\202\067  
\025\001\004\003\002\001\000\060\012\006\010\052\206\110\316\075  
\004\003\003\003\150\000\060\145\002\060\046\307\151\133\334\325  
\347\262\347\310\014\214\214\303\335\171\214\033\143\325\311\122  
\224\116\115\202\112\163\036\262\200\204\251\045\300\114\132\155  
\111\051\140\170\023\342\176\110\353\144\002\061\000\333\064\040  
\062\010\377\232\111\002\266\210\336\024\257\135\154\231\161\215  
\032\077\213\327\340\242\066\206\034\007\202\072\166\123\375\302

\242\355\357\173\260\200\117\130\017\113\123\071\275

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRUST\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRUST\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "OISTE WISeKey Global Root GC CA"

# Issuer: CN=OISTE WISeKey Global Root GC CA,OU=OISTE Foundation Endorsed,O=WISeKey,C=CH

# Serial Number:21:2a:56:0c:ae:da:0c:ab:40:45:bf:2b:a2:2d:3a:ea

# Subject: CN=OISTE WISeKey Global Root GC CA,OU=OISTE Foundation Endorsed,O=WISeKey,C=CH

# Not Valid Before: Tue May 09

09:48:34 2017

# Not Valid After : Fri May 09 09:58:33 2042

# Fingerprint (SHA-256):

85:60:F9:1C:36:24:DA:BA:95:70:B5:FE:A0:DB:E3:6F:F1:1A:83:23:BE:94:86:85:4F:B3:F3:4A:55:71:19:8D

# Fingerprint (SHA1): E0:11:84:5E:34:DE:BE:88:81:B9:9C:F6:16:26:D1:96:1F:C3:B9:31

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "OISTE WISeKey Global Root GC CA"

CKA\_CERT\_SHA1\_HASH MULTILINE\_OCTAL

\340\021\204\136\064\336\276\210\201\271\234\366\026\046\321\226

\037\303\271\061

END

CKA\_CERT\_MD5\_HASH MULTILINE\_OCTAL

\251\326\271\055\057\223\144\370\245\151\312\221\351\150\007\043

END

CKA\_ISSUER MULTILINE\_OCTAL

\060\155\061\013\060\011\006\003\125\004\006\023\002\103\110\061

\020\060\016\006\003\125\004\012\023\007\127\111\123\145\113\145

\171\061\042\060\040\006\003\125\004\013\023\031\117\111\123\124

\105\040\106\157\165\156\144\141\164\151\157\156\040\105\156\144

\157\162\163\145\144\061\050\060\046\006\003\125\004\003\023\037

\117\111\123\124\105\040\127\111\123\145\113\145\171\040\107\154

\157\142\141\154\040\122\157\157\164\040\107\103\040\103\101

END

CKA\_SERIAL\_NUMBER

MULTILINE\_OCTAL

\002\020\041\052\126\014\256\332\014\253\100\105\277\053\242\055

\072\352

END

CKA\_TRUST\_SERVER\_AUTH CK\_TRUST CKT\_NSS\_TRUSTED\_DELEGATOR

CKA\_TRUST\_EMAIL\_PROTECTION CK\_TRUST CKT\_NSS\_TRUSTED\_DELEGATOR

CKA\_TRUST\_CODE\_SIGNING CK\_TRUST CKT\_NSS\_MUST\_VERIFY\_TRUST

CKA\_TRUST\_STEP\_UP\_APPROVED CK\_BBOOL CK\_FALSE



```

#
# Certificate "UCA Global G2 Root"
#
# Issuer: CN=UCA Global G2 Root,O=UniTrust,C=CN
# Serial Number:5d:df:b1:da:5a:a3:ed:5d:be:5a:65:20:65:03:90:ef
# Subject: CN=UCA Global G2 Root,O=UniTrust,C=CN
# Not Valid Before: Fri Mar 11 00:00:00 2016
# Not Valid After : Mon Dec 31 00:00:00 2040
# Fingerprint (SHA-256):
9B:EA:11:C9:76:FE:01:47:64:C1:BE:56:A6:F9:14:B5:A5:60:31:7A:BD:99:88:39:33:82:E5:16:1A:A0:49:3C
# Fingerprint (SHA1): 28:F9:78:16:19:7A:FF:18:25:18:AA:44:FE:C1:A0:CE:5C:B6:4C:8A
CKA_CLASS CK_OBJECT_CLASS
CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "UCA Global G2 Root"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\075\061\013\060\011\006\003\125\004\006\023\002\103\116\061
\021\060\017\006\003\125\004\012\014\010\125\156\151\124\162\165
\163\164\061\033\060\031\006\003\125\004\003\014\022\125\103\101
\040\107\154\157\142\141\154\040\107\062\040\122\157\157\164
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\075\061\013\060\011\006\003\125\004\006\023\002\103\116\061
\021\060\017\006\003\125\004\012\014\010\125\156\151\124\162\165
\163\164\061\033\060\031\006\003\125\004\003\014\022\125\103\101
\040\107\154\157\142\141\154\040\107\062\040\122\157\157\164
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\020\135\337\261\332\132\243\355\135\276\132\145\040\145\003
\220\357
END
CKA_VALUE MULTILINE_OCTAL
\060\202\005\106\060\202\003\056\240\003\002\001\002\002\020\135
\337\261\332\132\243\355\135\276\132\145\040\145\003\220\357\060
\015\006\011\052\206\110\206\367\015\001\001\013\005\000\060\075
\061\013\060\011\006\003\125\004\006\023\002\103\116\061\021\060
\017\006\003\125\004\012\014\010\125\156\151\124\162\165\163\164
\061\033\060\031\006\003\125\004\003\014\022\125\103\101\040\107
\154\157\142\141\154\040\107\062\040\122\157\157\164\060\036\027
\015\061\066\060\063\061\061\060\060\060\060\060\060\132\027\015
\064\060\061\062\063\061\060\060\060\060\060\060\132\060\075\061
\013\060\011\006\003\125\004\006\023\002\103\116\061\021\060\017
\006\003\125\004\012\014\010\125\156\151\124\162\165\163\164\061
\033\060\031\006\003\125\004\003\014\022\125\103\101\040\107\154

```

\157\142\141\154\040\107\062\040\122\157\157\164\060\202\002\042  
\060\015\006\011\052\206\110\206\367\015\001\001\001\005\000\003  
\202\002\017\000\060\202\002\012\002\202\002\001\000\305\346\053  
\157\174\357\046\005\047\243\201\044\332\157\313\001\371\231\232  
\251\062\302\042\207\141\101\221\073\313\303\150\033\006\305\114  
\251\053\301\147\027\042\035\053\355\371\051\211\223\242\170\275  
\222\153\240\243\015\242\176\312\223\263\246\321\214\065\325\165  
\371\027\366\317\105\305\345\172\354\167\223\240\217\043\256\016  
\032\003\177\276\324\320\355\056\173\253\106\043\133\377\054\346  
\124\172\224\300\052\025\360\311\215\260\172\073\044\341\327\150  
\342\061\074\006\063\106\266\124\021\246\245\057\042\124\052\130  
\015\001\002\361\372\025\121\147\154\300\372\327\266\033\177\321  
\126\210\057\032\072\215\073\273\202\021\340\107\000\320\122\207  
\253\373\206\176\017\044\153\100\235\064\147\274\215\307\055\206  
\157\171\076\216\251\074\027\113\177\260\231\343\260\161\140\334  
\013\365\144\303\316\103\274\155\161\271\322\336\047\133\212\350  
\330\306\256\341\131\175\317\050\055\065\270\225\126\032\361\262  
\130\113\267\022\067\310\174\263\355\113\200\341\215\372\062\043  
\266\157\267\110\225\010\261\104\116\205\214\072\002\124\040\057  
\337\277\127\117\073\072\220\041\327\301\046\065\124\040\354\307  
\077\107\354\357\132\277\113\172\301\255\073\027\120\134\142\330  
\017\113\112\334\053\372\156\274\163\222\315\354\307\120\350\101  
\226\327\251\176\155\330\351\035\217\212\265\271\130\222\272\112  
\222\053\014\126\375\200\353\010\360\136\051\156\033\034\014\257  
\217\223\211\255\333\275\243\236\041\312\211\031\354\337\265\303  
\032\353\026\376\170\066\114\326\156\320\076\027\034\220\027\153  
\046\272\373\172\057\277\021\034\030\016\055\163\003\217\240\345  
\065\240\132\342\114\165\035\161\341\071\070\123\170\100\314\203  
\223\327\012\236\235\133\217\212\344\345\340\110\344\110\262\107  
\315\116\052\165\052\173\362\042\366\311\276\011\221\226\127\172  
\210\210\254\356\160\254\371\334\051\343\014\034\073\022\116\104  
\326\247\116\260\046\310\363\331\032\227\221\150\352\357\215\106  
\006\322\126\105\130\232\074\014\017\203\270\005\045\303\071\317  
\073\244\064\211\267\171\022\057\107\305\347\251\227\151\374\246  
\167\147\265\337\173\361\172\145\025\344\141\126\145\002\003\001  
\000\001\243\102\060\100\060\016\006\003\125\035\017\001\001\377  
\004\004\003\002\001\006\060\017\006\003\125\035\023\001\001\377  
\004\005\060\003\001\001\377\060\035\006\003\125\035\016\004\026  
\004\024\201\304\214\314\365\344\060\377\245\014\010\137\214\025  
\147\041\164\001\337\337\060\015\006\011\052\206\110\206\367\015  
\001\001\013\005\000\003\202\002\001\000\023\145\042\365\216\053  
\255\104\344\313\377\271\150\346\303\200\110\075\004\173\372\043  
\057\172\355\066\332\262\316\155\366\346\236\345\137\130\217\313  
\067\062\241\310\145\266\256\070\075\065\033\076\274\073\266\004  
\320\274\371\111\365\233\367\205\305\066\266\313\274\370\310\071  
\325\344\137\007\275\025\124\227\164\312\312\355\117\272\272\144  
\166\237\201\270\204\105\111\114\215\157\242\353\261\314\321\303  
\224\332\104\302\346\342\352\030\350\242\037\047\005\272\327\345

\326\251\315\335\357\166\230\215\000\016\315\033\372\003\267\216  
\200\130\016\047\077\122\373\224\242\312\136\145\311\326\204\332  
\271\065\161\363\046\300\117\167\346\201\047\322\167\073\232\024  
\157\171\364\366\320\341\323\224\272\320\127\121\275\047\005\015  
\301\375\310\022\060\356\157\215\021\053\010\235\324\324\277\200  
\105\024\232\210\104\332\060\352\264\247\343\356\357\133\202\325  
\076\326\255\170\222\333\134\074\363\330\255\372\270\153\177\304  
\066\050\266\002\025\212\124\054\234\260\027\163\216\320\067\243  
\024\074\230\225\000\014\051\005\133\236\111\111\261\137\307\343  
\313\317\047\145\216\065\027\267\127\310\060\331\101\133\271\024  
\266\350\302\017\224\061\247\224\230\314\152\353\265\341\047\365  
\020\250\001\350\216\022\142\350\210\314\265\177\106\227\300\233  
\020\146\070\032\066\106\137\042\150\075\337\311\306\023\047\253  
\123\006\254\242\074\206\006\145\157\261\176\261\051\104\232\243  
\272\111\151\050\151\217\327\345\137\255\004\206\144\157\032\240  
\014\305\010\142\316\200\243\320\363\354\150\336\276\063\307\027  
\133\177\200\304\114\114\261\246\204\212\303\073\270\011\315\024  
\201\272\030\343\124\127\066\376\333\057\174\107\241\072\063\310  
\371\130\073\104\117\261\312\002\211\004\226\050\150\305\113\270  
\046\211\273\326\063\057\120\325\376\232\211\272\030\062\222\124  
\306\133\340\235\371\136\345\015\042\233\366\332\342\310\041\262  
\142\041\252\206\100\262\056\144\323\137\310\343\176\021\147\105  
\037\005\376\343\242\357\263\250\263\363\175\217\370\014\037\042  
\037\055\160\264\270\001\064\166\060\000\345\043\170\247\126\327  
\120\037\212\373\006\365\302\031\360\320

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "UCA Global G2 Root"

# Issuer: CN=UCA Global G2 Root,O=UniTrust,C=CN

# Serial Number:5d:df:b1:da:5a:a3:ed:5d:be:5a:65:20:65:03:90:ef

# Subject: CN=UCA Global G2 Root,O=UniTrust,C=CN

# Not Valid Before: Fri Mar 11 00:00:00 2016

# Not Valid After : Mon Dec 31 00:00:00 2040

# Fingerprint (SHA-256):

9B:EA:11:C9:76:FE:01:47:64:C1:BE:56:A6:F9:14:B5:A5:60:31:7A:BD:99:88:39:33:82:E5:16:1A:A0:49:3C

# Fingerprint (SHA1): 28:F9:78:16:19:7A:FF:18:25:18:AA:44:FE:C1:A0:CE:5C:B6:4C:8A

CKA\_CLASS

CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "UCA Global G2 Root"

CKA\_CERT\_SHA1\_HASH MULTILINE\_OCTAL

\050\371\170\026\031\172\377\030\045\030\252\104\376\301\240\316

```

\134\266\114\212
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\200\376\360\304\112\360\134\142\062\237\034\272\170\251\120\370
END
CKA_ISSUER MULTILINE_OCTAL
\060\075\061\013\060\011\006\003\125\004\006\023\002\103\116\061
\021\060\017\006\003\125\004\012\014\010\125\156\151\124\162\165
\163\164\061\033\060\031\006\003\125\004\003\014\022\125\103\101
\040\107\154\157\142\141\154\040\107\062\040\122\157\157\164
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\020\135\337\261\332\132\243\355\135\276\132\145\040\145\003
\220\357
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED
CK_BBOOL CK_FALSE

#
# Certificate "UCA Extended Validation Root"
#
# Issuer: CN=UCA Extended Validation Root,O=UniTrust,C=CN
# Serial Number:4f:d2:2b:8f:f5:64:c8:33:9e:4f:34:58:66:23:70:60
# Subject: CN=UCA Extended Validation Root,O=UniTrust,C=CN
# Not Valid Before: Fri Mar 13 00:00:00 2015
# Not Valid After : Fri Dec 31 00:00:00 2038
# Fingerprint (SHA-256):
D4:3A:F9:B3:54:73:75:5C:96:84:FC:06:D7:D8:CB:70:EE:5C:28:E7:73:FB:29:4E:B4:1E:E7:17:22:92:4D:24
# Fingerprint (SHA1): A3:A1:B0:6F:24:61:23:4A:E3:36:A5:C2:37:FC:A6:FF:DD:F0:D7:3A
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "UCA Extended Validation Root"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\107\061\013\060\011\006\003\125\004\006\023\002\103\116\061
\021\060\017\006\003\125\004\012\014\010\125\156\151\124\162\165
\163\164\061\045\060\043\006\003\125\004\003\014\034\125\103\101
\040\105\170\164\145\156\144\145\144\040\126\141\154\151\144\141
\164\151\157\156\040\122\157\157\164
END
CKA_ID
UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL

```

\060\107\061\013\060\011\006\003\125\004\006\023\002\103\116\061  
\021\060\017\006\003\125\004\012\014\010\125\156\151\124\162\165  
\163\164\061\045\060\043\006\003\125\004\003\014\034\125\103\101  
\040\105\170\164\145\156\144\145\144\040\126\141\154\151\144\141  
\164\151\157\156\040\122\157\157\164

END

CKA\_SERIAL\_NUMBER MULTILINE\_OCTAL

\002\020\117\322\053\217\365\144\310\063\236\117\064\130\146\043  
\160\140

END

CKA\_VALUE MULTILINE\_OCTAL

\060\202\005\132\060\202\003\102\240\003\002\001\002\002\020\117  
\322\053\217\365\144\310\063\236\117\064\130\146\043\160\140\060  
\015\006\011\052\206\110\206\367\015\001\001\013\005\000\060\107  
\061\013\060\011\006\003\125\004\006\023\002\103\116\061\021\060  
\017\006\003\125\004\012\014\010\125\156\151\124\162\165\163\164  
\061\045\060\043\006\003\125\004\003\014\034\125\103\101\040\105  
\170\164\145\156\144\145\144\040\126\141\154\151\144\141\164\151  
\157\156\040\122\157\157\164\060\036\027\015\061\065\060\063\061  
\063\060\060\060\060\060\132\027\015\063\070\061\062\063\061  
\060\060\060\060\060\060\132\060\107\061\013\060\011\006\003\125  
\004\006\023\002\103\116\061\021\060\017\006\003\125\004\012\014  
\010\125\156\151\124\162\165\163\164\061\045\060\043\006\003\125  
\004\003\014\034\125\103\101\040\105\170\164\145\156\144\145\144  
\040\126\141\154\151\144\141\164\151\157\156\040\122\157\157\164  
\060\202\002\042\060\015\006\011\052\206\110\206\367\015\001\001  
\001\005\000\003\202\002\017\000\060\202\002\012\002\202\002\001  
\000\251\011\007\050\023\002\260\231\340\144\252\036\103\026\172  
\163\261\221\240\165\076\250\372\343\070\000\172\354\211\152\040  
\017\213\305\260\233\063\003\132\206\306\130\206\325\301\205\273  
\117\306\234\100\115\312\276\356\151\226\270\255\201\060\232\174  
\222\005\353\005\053\232\110\320\270\166\076\226\310\040\273\322  
\260\361\217\330\254\105\106\377\252\147\140\264\167\176\152\037  
\074\032\122\172\004\075\007\074\205\015\204\320\037\166\012\367  
\152\024\337\162\343\064\174\127\116\126\001\076\171\361\252\051  
\073\154\372\370\217\155\115\310\065\337\256\353\334\044\356\171  
\105\247\205\266\005\210\336\210\135\045\174\227\144\147\011\331  
\277\132\025\005\206\363\011\036\354\130\062\063\021\363\167\144  
\260\166\037\344\020\065\027\033\362\016\261\154\244\052\243\163  
\374\011\037\036\062\031\123\021\347\331\263\054\056\166\056\241  
\243\336\176\152\210\011\350\362\007\212\370\262\315\020\347\342  
\163\100\223\273\010\321\077\341\374\013\224\263\045\357\174\246  
\327\321\257\237\377\226\232\365\221\173\230\013\167\324\176\350  
\007\322\142\265\225\071\343\363\361\155\017\016\145\204\212\143  
\124\305\200\266\340\236\113\175\107\046\247\001\010\135\321\210  
\236\327\303\062\104\372\202\112\012\150\124\177\070\123\003\314  
\244\000\063\144\121\131\013\243\202\221\172\136\354\026\302\363  
\052\346\142\332\052\333\131\142\020\045\112\052\201\013\107\007

\103\006\160\207\322\372\223\021\051\172\110\115\353\224\307\160  
\115\257\147\325\121\261\200\040\001\001\264\172\010\246\220\177  
\116\340\357\007\101\207\257\152\245\136\213\373\317\120\262\232  
\124\257\303\211\272\130\055\365\060\230\261\066\162\071\176\111  
\004\375\051\247\114\171\344\005\127\333\224\271\026\123\215\106  
\263\035\225\141\127\126\177\257\360\026\133\141\130\157\066\120  
\021\013\330\254\053\225\026\032\016\037\010\315\066\064\145\020  
\142\146\325\200\137\024\040\137\055\014\240\170\012\150\326\054  
\327\351\157\053\322\112\005\223\374\236\157\153\147\377\210\361  
\116\245\151\112\122\067\005\352\306\026\215\322\304\231\321\202  
\053\073\272\065\165\367\121\121\130\363\310\007\335\344\264\003  
\177\002\003\001\000\001\243\102\060\100\060\035\006\003\125\035  
\016\004\026\004\024\331\164\072\344\060\075\015\367\022\334\176  
\132\005\237\036\064\232\367\341\024\060\017\006\003\125\035\023  
\001\001\377\004\005\060\003\001\001\377\060\016\006\003\125\035  
\017\001\001\377\004\004\003\002\001\206\060\015\006\011\052\206  
\110\206\367\015\001\001\013\005\000\003\202\002\001\000\066\215  
\227\314\102\025\144\051\067\233\046\054\326\373\256\025\151\054  
\153\032\032\367\137\266\371\007\114\131\352\363\311\310\271\256  
\314\272\056\172\334\300\365\260\055\300\073\257\237\160\005\021  
\152\237\045\117\001\051\160\343\345\014\341\352\132\174\334\111  
\273\301\036\052\201\365\026\113\162\221\310\242\061\271\252\332  
\374\235\037\363\135\100\002\023\374\116\034\006\312\263\024\220  
\124\027\031\022\032\361\037\327\014\151\132\366\161\170\364\224  
\175\221\013\216\354\220\124\216\274\157\241\114\253\374\164\144  
\375\161\232\370\101\007\241\315\221\344\074\232\340\233\062\071  
\163\253\052\325\151\310\170\221\046\061\175\342\307\060\361\374  
\024\170\167\022\016\023\364\335\026\224\277\113\147\173\160\123  
\205\312\260\273\363\070\115\054\220\071\300\015\302\135\153\351  
\342\345\325\210\215\326\054\277\253\033\276\265\050\207\022\027  
\164\156\374\175\374\217\320\207\046\260\033\373\271\154\253\342  
\236\075\025\301\073\056\147\002\130\221\237\357\370\102\037\054  
\267\150\365\165\255\317\265\366\377\021\175\302\360\044\245\255  
\323\372\240\074\251\372\135\334\245\240\357\104\244\276\326\350  
\345\344\023\226\027\173\006\076\062\355\307\267\102\274\166\243  
\330\145\070\053\070\065\121\041\016\016\157\056\064\023\100\341  
\053\147\014\155\112\101\060\030\043\132\062\125\231\311\027\340  
\074\336\366\354\171\255\053\130\031\242\255\054\042\032\225\216  
\276\226\220\135\102\127\304\371\024\003\065\053\034\055\121\127  
\010\247\072\336\077\344\310\264\003\163\302\301\046\200\273\013  
\102\037\255\015\257\046\162\332\314\276\263\243\203\130\015\202  
\305\037\106\121\343\234\030\314\215\233\215\354\111\353\165\120  
\325\214\050\131\312\164\064\332\214\013\041\253\036\352\033\345  
\307\375\025\076\300\027\252\373\043\156\046\106\313\372\371\261  
\162\153\151\317\042\204\013\142\017\254\331\031\000\224\242\166  
\074\324\055\232\355\004\236\055\006\142\020\067\122\034\205\162  
\033\047\345\314\306\061\354\067\354\143\131\233\013\035\166\314  
\176\062\232\210\225\010\066\122\273\336\166\137\166\111\111\255

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\177\275\145\040\262\311\301\053\166\030\166\237\126\261
END
CKA_NSS_MOZILLA_CA_POLICY
CK_BBOOL CK_TRUE
CKA_NSS_SERVER_DISTRUST_AFTER CK_BBOOL CK_FALSE
CKA_NSS_EMAIL_DISTRUST_AFTER CK_BBOOL CK_FALSE

# Trust for "UCA Extended Validation Root"
# Issuer: CN=UCA Extended Validation Root,O=UniTrust,C=CN
# Serial Number:4f:d2:2b:8f:f5:64:c8:33:9e:4f:34:58:66:23:70:60
# Subject: CN=UCA Extended Validation Root,O=UniTrust,C=CN
# Not Valid Before: Fri Mar 13 00:00:00 2015
# Not Valid After : Fri Dec 31 00:00:00 2038
# Fingerprint (SHA-256):
D4:3A:F9:B3:54:73:75:5C:96:84:FC:06:D7:D8:CB:70:EE:5C:28:E7:73:FB:29:4E:B4:1E:E7:17:22:92:4D:24
# Fingerprint (SHA1): A3:A1:B0:6F:24:61:23:4A:E3:36:A5:C2:37:FC:A6:FF:DD:F0:D7:3A
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL
UTF8 "UCA Extended Validation Root"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\243\241\260\157\044\141\043\112\343\066\245\302\067\374\246\377
\335\360\327\072
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\241\363\137\103\306\064\233\332\277\214\176\005\123\255\226\342
END
CKA_ISSUER MULTILINE_OCTAL
\060\107\061\013\060\011\006\003\125\004\006\023\002\103\116\061
\021\060\017\006\003\125\004\012\014\010\125\156\151\124\162\165
\163\164\061\045\060\043\006\003\125\004\003\014\034\125\103\101
\040\105\170\164\145\156\144\145\144\040\126\141\154\151\144\141
\164\151\157\156\040\122\157\157\164
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\020\117\322\053\217\365\144\310\063\236\117\064\130\146\043
\160\140
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "Certigna Root CA"
#

```

```
# Issuer: CN=Certigna Root
CA,OU=0002 48146308100036,O=Dhimyotis,C=FR
# Serial Number:00:ca:e9:1b:89:f1:55:03:0d:a3:e6:41:6d:c4:e3:a6:e1
# Subject: CN=Certigna Root CA,OU=0002 48146308100036,O=Dhimyotis,C=FR
# Not Valid Before: Tue Oct 01 08:32:27 2013
# Not Valid After : Sat Oct 01 08:32:27 2033
# Fingerprint (SHA-256):
D4:8D:3D:23:EE:DB:50:A4:59:E5:51:97:60:1C:27:77:4B:9D:7B:18:C9:4D:5A:05:95:11:A1:02:50:B9:31:68
# Fingerprint (SHA1): 2D:0D:52:14:FF:9E:AD:99:24:01:74:20:47:6E:6C:85:27:27:F5:43
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Certigna Root CA"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\132\061\013\060\011\006\003\125\004\006\023\002\106\122\061
\022\060\020\006\003\125\004\012\014\011\104\150\151\155\171\157
\164\151\163\061\034\060\032\006\003\125\004\013\014\023\060\060
\060\062\040\064\070\061\064\066\063\060\070\061\060\060\060\063
\066\061\031\060\027\006\003\125\004\003\014\020\103\145\162\164
\151\147\156\141\040\122\157\157\164\040\103\101
END
CKA_ID
UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\132\061\013\060\011\006\003\125\004\006\023\002\106\122\061
\022\060\020\006\003\125\004\012\014\011\104\150\151\155\171\157
\164\151\163\061\034\060\032\006\003\125\004\013\014\023\060\060
\060\062\040\064\070\061\064\066\063\060\070\061\060\060\060\063
\066\061\031\060\027\006\003\125\004\003\014\020\103\145\162\164
\151\147\156\141\040\122\157\157\164\040\103\101
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\021\000\312\351\033\211\361\125\003\015\243\346\101\155\304
\343\246\341
END
CKA_VALUE MULTILINE_OCTAL
\060\202\006\133\060\202\004\103\240\003\002\001\002\002\021\000
\312\351\033\211\361\125\003\015\243\346\101\155\304\343\246\341
\060\015\006\011\052\206\110\206\367\015\001\001\013\005\000\060
\132\061\013\060\011\006\003\125\004\006\023\002\106\122\061\022
\060\020\006\003\125\004\012\014\011\104\150\151\155\171\157\164
\151\163\061\034\060\032\006\003\125\004\013\014\023\060\060\060
\062\040\064\070\061\064\066\063\060\070\061\060\060\060\063\066
\061\031\060\027\006\003\125\004\003\014\020\103\145\162\164\151
\147\156\141\040\122\157\157\164\040\103\101\060\036\027\015\061
\063\061\060\060\061\060\070\063\062\062\067\132\027\015\063\063
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\061\060\060\061\060\070\063\062\062\067\132\060\132\061\013\060  
\011\006\003\125\004\006\023\002\106\122\061\022\060\020\006\003  
\125\004\012\014\011\104\150\151\155\171\157\164\151\163\061\034  
\060\032\006\003\125\004\013\014\023\060\060\060\062\040\064\070  
\061\064\066\063\060\070\061\060\060\060\063\066\061\031\060\027  
\006\003\125\004\003\014\020\103\145\162\164\151\147\156\141\040  
\122\157\157\164\040\103\101\060\202\002\042\060\015\006\011\052  
\206\110\206\367\015\001\001\001\005\000\003\202\002\017\000\060  
\202\002\012\002\202\002\001\000\315\030\071\145\032\131\261\352  
\144\026\016\214\224\044\225\174\203\323\305\071\046\334\014\357  
\026\127\215\327\330\254\243\102\177\202\312\355\315\133\333\016  
\267\055\355\105\010\027\262\331\263\313\326\027\122\162\050\333  
\216\116\236\212\266\013\371\236\204\232\115\166\336\042\051\134  
\322\263\322\006\076\060\071\251\164\243\222\126\034\241\157\114  
\012\040\155\237\043\172\264\306\332\054\344\035\054\334\263\050  
\320\023\362\114\116\002\111\241\124\100\236\346\345\005\240\055  
\204\310\377\230\154\320\353\212\032\204\010\036\267\150\043\356  
\043\325\160\316\155\121\151\020\356\241\172\302\321\042\061\302  
\202\205\322\362\125\166\120\174\045\172\311\204\134\013\254\335  
\102\116\053\347\202\242\044\211\313\220\262\320\356\043\272\146  
\114\273\142\244\371\123\132\144\173\174\230\372\243\110\236\017  
\225\256\247\030\364\152\354\056\003\105\257\360\164\370\052\315  
\172\135\321\276\104\046\062\051\361\361\365\154\314\176\002\041  
\013\237\157\244\077\276\235\123\342\317\175\251\054\174\130\032  
\227\341\075\067\067\030\146\050\322\100\305\121\212\214\303\055  
\316\123\210\044\130\144\060\026\305\252\340\326\012\246\100\337  
\170\366\365\004\174\151\023\204\274\321\321\247\006\317\001\367  
\150\300\250\127\273\072\141\255\004\214\223\343\255\374\360\333  
\104\155\131\334\111\131\256\254\232\231\066\060\101\173\166\063  
\042\207\243\302\222\206\156\371\160\356\256\207\207\225\033\304  
\172\275\061\363\324\322\345\231\377\276\110\354\165\365\170\026  
\035\246\160\301\177\074\033\241\222\373\317\310\074\326\305\223  
\012\217\365\125\072\166\225\316\131\230\212\011\225\167\062\232  
\203\272\054\004\072\227\275\324\057\276\327\154\233\242\312\175  
\155\046\311\125\325\317\303\171\122\010\011\231\007\044\055\144  
\045\153\246\041\151\233\152\335\164\115\153\227\172\101\275\253  
\027\371\220\027\110\217\066\371\055\325\305\333\356\252\205\105  
\101\372\315\072\105\261\150\346\066\114\233\220\127\354\043\271  
\207\010\302\304\011\361\227\206\052\050\115\342\164\300\332\304  
\214\333\337\342\241\027\131\316\044\131\164\061\332\177\375\060  
\155\331\334\341\152\341\374\137\002\003\001\000\001\243\202\001  
\032\060\202\001\026\060\017\006\003\125\035\023\001\001\377\004  
\005\060\003\001\001\377\060\016\006\003\125\035\017\001\001\377  
\004\004\003\002\001\006\060\035\006\003\125\035\016\004\026\004  
\024\030\207\126\340\156\167\356\044\065\074\116\163\232\037\326  
\341\342\171\176\053\060\037\006\003\125\035\043\004\030\060\026  
\200\024\030\207\126\340\156\167\356\044\065\074\116\163\232\037  
\326\341\342\171\176\053\060\104\006\003\125\035\040\004\075\060

\073\060\071\006\004\125\035\040\000\060\061\060\057\006\010\053  
\006\001\005\005\007\002\001\026\043\150\164\164\160\163\072\057  
\057\167\167\167\167\056\143\145\162\164\151\147\156\141\056\146  
\162\057\141\165\164\157\162\151\164\145\163\057\060\155\006\003  
\125\035\037\004\146\060\144\060\057\240\055\240\053\206\051\150  
\164\164\160\072\057\057\143\162\154\056\143\145\162\164\151\147  
\156\141\056\146\162\057\143\145\162\164\151\147\156\141\162\157  
\157\164\143\141\056\143\162\154\060\061\240\057\240\055\206\053  
\150\164\164\160\072\057\057\143\162\154\056\144\150\151\155\171  
\157\164\151\163\056\143\157\155\057\143\145\162\164\151\147\156  
\141\162\157\157\164\143\141\056\143\162\154\060\015\006\011\052  
\206\110\206\367\015\001\001\013\005\000\003\202\002\001\000\224  
\270\236\117\360\343\225\010\042\347\315\150\101\367\034\125\325  
\174\000\342\055\072\211\135\150\070\057\121\042\013\112\215\313  
\351\273\135\076\273\134\075\261\050\376\344\123\125\023\317\241  
\220\033\002\035\137\146\106\011\063\050\341\015\044\227\160\323  
\020\037\352\144\127\226\273\135\332\347\304\214\117\114\144\106  
\035\134\207\343\131\336\102\321\233\250\176\246\211\335\217\034  
\311\060\202\355\073\234\315\300\351\031\340\152\330\002\165\067  
\253\367\064\050\050\221\362\004\012\117\065\343\140\046\001\372  
\320\021\214\371\021\152\356\257\075\303\120\323\217\137\063\171  
\074\206\250\163\105\220\214\040\266\162\163\027\043\276\007\145  
\345\170\222\015\272\001\300\353\214\034\146\277\254\206\167\001  
\224\015\234\346\351\071\215\037\246\121\214\231\014\071\167\341  
\264\233\372\034\147\127\157\152\152\216\251\053\114\127\171\172  
\127\042\317\315\137\143\106\215\134\131\072\206\370\062\107\142  
\243\147\015\030\221\334\373\246\153\365\110\141\163\043\131\216  
\002\247\274\104\352\364\111\235\361\124\130\371\140\257\332\030  
\244\057\050\105\334\172\240\210\206\135\363\073\347\377\051\065  
\200\374\144\103\224\346\343\034\157\276\255\016\052\143\231\053  
\311\176\205\366\161\350\006\003\225\376\336\217\110\034\132\324  
\222\350\053\356\347\061\333\272\004\152\207\230\347\305\137\357  
\175\247\042\367\001\330\115\371\211\320\016\232\005\131\244\236  
\230\331\157\053\312\160\276\144\302\125\243\364\351\257\303\222  
\051\334\210\026\044\231\074\215\046\230\266\133\267\314\316\267  
\067\007\375\046\331\230\205\044\377\131\043\003\232\355\235\235  
\250\344\136\070\316\327\122\015\157\322\077\155\261\005\153\111  
\316\212\221\106\163\364\366\057\360\250\163\167\016\145\254\241  
\215\146\122\151\176\113\150\014\307\036\067\047\203\245\214\307  
\002\344\024\315\111\001\260\163\263\375\306\220\072\157\322\154  
\355\073\356\354\221\276\242\103\135\213\000\112\146\045\104\160  
\336\100\017\370\174\025\367\242\316\074\327\136\023\214\201\027  
\030\027\321\275\361\167\020\072\324\145\071\301\047\254\127\054  
\045\124\377\242\332\117\212\141\071\136\256\075\112\214\275

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRUST\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "Certigna Root CA"

# Issuer: CN=Certigna Root CA,OU=0002 48146308100036,O=Dhimyotis,C=FR

# Serial Number:00:ca:e9:1b:89:f1:55:03:0d:a3:e6:41:6d:c4:e3:a6:e1

# Subject: CN=Certigna Root CA,OU=0002 48146308100036,O=Dhimyotis,C=FR

# Not Valid Before: Tue Oct 01 08:32:27 2013

# Not Valid After : Sat Oct 01 08:32:27 2033

# Fingerprint (SHA-256):

D4:8D:3D:23:EE:DB:50:A4:59:E5:51:97:60:1C:27:77:4B:9D:7B:18:C9:4D:5A:05:95:11:A1:02:50:B9:31:68

# Fingerprint (SHA1): 2D:0D:52:14:FF:9E:AD:99:24:01:74:20:47:6E:6C:85:27:27:F5:43

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN

CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "Certigna Root CA"

CKA\_CERT\_SHA1\_HASH MULTILINE\_OCTAL

\05\015\122\024\377\236\255\231\044\001\164\040\107\156\154\205

\047\047\365\103

END

CKA\_CERT\_MD5\_HASH MULTILINE\_OCTAL

\016\134\060\142\047\353\133\274\327\256\142\272\351\325\337\167

END

CKA\_ISSUER MULTILINE\_OCTAL

\060\132\061\013\060\011\006\003\125\004\006\023\002\106\122\061

\022\060\020\006\003\125\004\012\014\011\104\150\151\155\171\157

\164\151\163\061\034\060\032\006\003\125\004\013\014\023\060\060

\060\062\040\064\070\061\064\066\063\060\070\061\060\060\060\063

\066\061\031\060\027\006\003\125\004\003\014\020\103\145\162\164

\151\147\156\141\040\122\157\157\164\040\103\101

END

CKA\_SERIAL\_NUMBER MULTILINE\_OCTAL

\002\021\000\312\351\033\211\361\125\003\015\243\346\101\155\304

\343\246\341

END

CKA\_TRUST\_SERVER\_AUTH CK\_TRUST CKT\_NSS\_TRUSTED\_DELEGATOR

CKA\_TRUST\_EMAIL\_PROTECTION CK\_TRUST CKT\_NSS\_TRUSTED\_DELEGATOR

CKA\_TRUST\_CODE\_SIGNING

CK\_TRUST CKT\_NSS\_MUST\_VERIFY\_TRUST

CKA\_TRUST\_STEP\_UP\_APPROVED CK\_BBOOL CK\_FALSE

#

# Certificate "emSign Root CA - G1"

#

# Issuer: CN=emSign Root CA - G1,O=eMudhra Technologies Limited,OU=emSign PKI,C=IN

# Serial Number:31:f5:e4:62:0c:6c:58:ed:d6:d8

# Subject: CN=emSign Root CA - G1,O=eMudhra Technologies Limited,OU=emSign PKI,C=IN

```
# Not Valid Before: Sun Feb 18 18:30:00 2018
# Not Valid After : Wed Feb 18 18:30:00 2043
# Fingerprint (SHA-256):
40:F6:AF:03:46:A9:9A:A1:CD:1D:55:5A:4E:9C:CE:62:C7:F9:63:46:03:EE:40:66:15:83:3D:C8:C8:D0:03:67
# Fingerprint (SHA1): 8A:C7:AD:8F:73:AC:4E:C1:B5:75:4D:A5:40:F4:FC:CF:7C:B5:8E:8C
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "emSign Root CA - G1"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\147\061\013\060\011\006\003\125\004\006\023\002\111\116\061
\023\060\021\006\003\125\004\013\023\012\145\155\123\151\147\156
\040\120\113\111\061\045\060\043\006\003\125\004\012\023\034\145
\115\165\144\150\162\141\040\124\145\143\150\156\157\154\157\147
\151\145\163\040\114\151\155\151\164\145\144\061\034\060\032\006
\003\125\004\003\023\023\145\155\123\151\147\156\040\122\157\157
\164\040\103\101\040\055\040\107\061
END
CKA_ID
UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\147\061\013\060\011\006\003\125\004\006\023\002\111\116\061
\023\060\021\006\003\125\004\013\023\012\145\155\123\151\147\156
\040\120\113\111\061\045\060\043\006\003\125\004\012\023\034\145
\115\165\144\150\162\141\040\124\145\143\150\156\157\154\157\147
\151\145\163\040\114\151\155\151\164\145\144\061\034\060\032\006
\003\125\004\003\023\023\145\155\123\151\147\156\040\122\157\157
\164\040\103\101\040\055\040\107\061
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\012\061\365\344\142\014\154\130\355\326\330
END
CKA_VALUE MULTILINE_OCTAL
\060\202\003\224\060\202\002\174\240\003\002\001\002\002\012\061
\365\344\142\014\154\130\355\326\330\060\015\006\011\052\206\110
\206\367\015\001\001\013\005\000\060\147\061\013\060\011\006\003
\125\004\006\023\002\111\116\061\023\060\021\006\003\125\004\013
\023\012\145\155\123\151\147\156\040\120\113\111\061\045\060\043
\006\003\125\004\012\023\034\145\115\165\144\150\162\141\040\124
\145\143\150\156\157\154\157\147\151\145\163\040\114\151\155\151
\164\145\144\061\034\060\032\006\003\125\004\003\023\023\145\155
\123\151\147\156\040\122\157\157\164\040\103\101\040\055\040\107
\061\060\036\027\015\061\070\060\062\061\070\061\070\063\060\060
\060\132\027\015\064\063\060\062\061\070\061\070\063\060\060\060
\132\060\147\061\013\060\011\006\003\125\004\006\023\002\111\116
\061\023\060\021\006\003\125\004\013\023\012\145\155\123\151\147
```

\156\040\120\113\111\061\045\060\043\006\003\125\004\012\023\034  
\145\115\165\144\150\162\141\040\124\145\143\150\156\157\154\157  
\147\151\145\163\040\114\151\155\151\164\145\144\061\034\060\032  
\006\003\125\004\003\023\023\145\155\123\151\147\156\040\122\157  
\157\164\040\103\101\040\055\040\107\061\060\202\001\042\060\015  
\006\011\052\206\110\206\367\015\001\001\001\005\000\003\202\001  
\017\000\060\202\001\012\002\202\001\001\000\223\113\273\351\146  
\212\356\235\133\325\064\223\320\033\036\303\347\236\270\144\063  
\177\143\170\150\264\315\056\161\165\327\233\040\306\115\051\274  
\266\150\140\212\367\041\232\126\065\132\363\166\275\330\315\232  
\377\223\126\113\245\131\006\241\223\064\051\335\026\064\165\116  
\362\201\264\307\226\116\255\031\025\122\112\376\074\160\165\160  
\315\257\053\253\025\232\063\074\252\263\213\252\315\103\375\365  
\352\160\377\355\317\021\073\224\316\116\062\026\323\043\100\052  
\167\263\257\074\001\054\154\355\231\054\213\331\116\151\230\262  
\367\217\101\260\062\170\141\326\015\137\303\372\242\100\222\035  
\134\027\346\160\076\065\347\242\267\302\142\342\253\244\070\114  
\265\071\065\157\352\003\151\372\072\124\150\205\155\326\362\057  
\103\125\036\221\015\016\330\325\152\244\226\321\023\074\054\170  
\120\350\072\222\322\027\126\345\065\032\100\034\076\215\054\355  
\071\337\102\340\203\101\164\337\243\315\302\206\140\110\150\343  
\151\013\124\000\213\344\166\151\041\015\171\116\064\010\136\024  
\302\314\261\267\255\327\174\160\212\307\205\002\003\001\000\001  
\243\102\060\100\060\035\006\003\125\035\016\004\026\004\024\373  
\357\015\206\236\260\343\335\251\271\361\041\027\177\076\374\360  
\167\053\032\060\016\006\003\125\035\017\001\001\377\004\004\003  
\002\001\006\060\017\006\003\125\035\023\001\001\377\004\005\060  
\003\001\001\377\060\015\006\011\052\206\110\206\367\015\001\001  
\013\005\000\003\202\001\001\000\131\377\362\214\365\207\175\161  
\075\243\237\033\133\321\332\370\323\234\153\066\275\233\251\141  
\353\336\026\054\164\075\236\346\165\332\327\272\247\274\102\027  
\347\075\221\353\345\175\335\076\234\361\317\222\254\154\110\314  
\302\042\077\151\073\305\266\025\057\243\065\306\150\052\034\127  
\257\071\357\215\320\065\303\030\014\173\000\126\034\315\213\031  
\164\336\276\017\022\340\320\252\241\077\002\064\261\160\316\235  
\030\326\010\003\011\106\356\140\340\176\266\304\111\004\121\175  
\160\140\274\252\262\377\171\162\172\246\035\075\137\052\370\312  
\342\375\071\267\107\271\353\176\337\004\043\257\372\234\006\007  
\351\373\143\223\200\100\265\306\154\012\061\050\316\014\237\317  
\263\043\065\200\101\215\154\304\067\173\201\057\200\241\100\102  
\205\351\331\070\215\350\241\123\315\001\277\151\350\132\006\362  
\105\013\220\372\256\341\277\235\362\256\127\074\245\256\262\126  
\364\213\145\100\351\375\061\201\054\364\071\011\330\356\153\247  
\264\246\035\025\245\230\367\001\201\330\205\175\363\121\134\161  
\210\336\272\314\037\200\176\112

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

```

CK_BBOOL CK_TRUE
CKA_NSS_SERVER_DISTRUST_AFTER CK_BBOOL CK_FALSE
CKA_NSS_EMAIL_DISTRUST_AFTER CK_BBOOL CK_FALSE

# Trust for "emSign Root CA - G1"
# Issuer: CN=emSign Root CA - G1,O=eMudhra Technologies Limited,OU=emSign PKI,C=IN
# Serial Number:31:f5:e4:62:0c:6c:58:ed:d6:d8
# Subject: CN=emSign Root CA - G1,O=eMudhra Technologies
  Limited,OU=emSign PKI,C=IN
# Not Valid Before: Sun Feb 18 18:30:00 2018
# Not Valid After : Wed Feb 18 18:30:00 2043
# Fingerprint (SHA-256):
40:F6:AF:03:46:A9:9A:A1:CD:1D:55:5A:4E:9C:CE:62:C7:F9:63:46:03:EE:40:66:15:83:3D:C8:C8:D0:03:67
# Fingerprint (SHA1): 8A:C7:AD:8F:73:AC:4E:C1:B5:75:4D:A5:40:F4:FC:CF:7C:B5:8E:8C
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "emSign Root CA - G1"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\212\307\255\217\163\254\116\301\265\165\115\245\100\364\374\317
\174\265\216\214
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\234\102\204\127\335\313\013\247\056\225\255\266\363\332\274\254
END
CKA_ISSUER MULTILINE_OCTAL
\060\147\061\013\060\011\006\003\125\004\006\023\002\111\116\061
\023\060\021\006\003\125\004\013\023\012\145\155\123\151\147\156
\040\120\113\111\061\045\060\043\006\003\125\004\012\023\034\145
\115\165\144\150\162\141\040\124\145\143\150\156\157\154\157\147
\151\145\163\040\114\151\155\151\164\145\144\061\034\060\032\006
\003\125\004\003\023\023\145\155\123\151\147\156\040\122\157\157
\164\040\103\101\040\055\040\107\061
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\012\061\365\344\142\014\154\130\355\326\330
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "emSign ECC Root CA - G3"
#
# Issuer: CN=emSign ECC Root CA - G3,O=eMudhra Technologies Limited,OU=emSign PKI,C=IN

```

```
# Serial Number:3c:f6:07:a9:68:70:0e:da:8b:84
# Subject: CN=emSign ECC Root CA - G3,O=eMudhra Technologies Limited,OU=emSign PKI,C=IN
# Not Valid Before: Sun Feb 18 18:30:00 2018
# Not Valid After : Wed Feb 18 18:30:00 2043
# Fingerprint (SHA-256):
86:A1:EC:BA:08:9C:4A:8D:3B:BE:27:34:C6:12:BA:34:1D:81:3E:04:3C:F9:E8:A8:62:CD:5C:57:A3:6B:BE:6B
# Fingerprint (SHA1): 30:43:FA:4F:F2:57:DC:A0:C3:80:EE:2E:58:EA:78:B2:3F:E6:BB:C1
CKA_CLASS
CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "emSign ECC Root CA - G3"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\153\061\013\060\011\006\003\125\004\006\023\002\111\116\061
\023\060\021\006\003\125\004\013\023\012\145\155\123\151\147\156
\040\120\113\111\061\045\060\043\006\003\125\004\012\023\034\145
\115\165\144\150\162\141\040\124\145\143\150\156\157\154\157\147
\151\145\163\040\114\151\155\151\164\145\144\061\040\060\036\006
\003\125\004\003\023\027\145\155\123\151\147\156\040\105\103\103
\040\122\157\157\164\040\103\101\040\055\040\107\063
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\153\061\013\060\011\006\003\125\004\006\023\002\111\116\061
\023\060\021\006\003\125\004\013\023\012\145\155\123\151\147\156
\040\120\113\111\061\045\060\043\006\003\125\004\012\023\034\145
\115\165\144\150\162\141\040\124\145\143\150\156\157\154\157\147
\151\145\163\040\114\151\155\151\164\145\144\061\040\060\036\006
\003\125\004\003\023\027\145\155\123\151\147\156\040\105\103\103
\040\122\157\157\164\040\103\101\040\055\040\107\063
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\012\074\366\007\251\150\160\016\332\213\204
END
CKA_VALUE MULTILINE_OCTAL
\060\202\002\116\060\202\001\323\240\003\002\001\002\002\012\074
\366\007\251\150\160\016\332\213\204\060\012\006\010\052\206\110
\316\075\004\003\003\060\153\061\013\060\011\006\003\125\004\006
\023\002\111\116\061\023\060\021\006\003\125\004\013\023\012\145
\155\123\151\147\156\040\120\113\111\061\045\060\043\006\003\125
\004\012\023\034\145\115\165\144\150\162\141\040\124\145\143\150
\156\157\154\157\147\151\145\163\040\114\151\155\151\164\145\144
\061\040\060\036\006\003\125\004\003\023\027\145\155\123\151\147
\156\040\105\103\103\040\122\157\157\164\040\103\101\040\055\040
\107\063\060\036\027\015\061\070\060\062\061\070\061\070\063\060
```

\060\060\132\027\015\064\063\060\062\061\070\061\070\063\060\060  
\060\132\060\153\061\013\060\011\006\003\125\004\006\023\002\111  
\116\061\023\060\021\006\003\125\004\013\023\012\145\155\123\151  
\147\156\040\120\113\111\061\045\060\043\006\003\125\004\012\023  
\034\145\115\165\144\150\162\141\040\124\145\143\150\156\157\154  
\157\147\151\145\163\040\114\151\155\151\164\145\144\061\040\060  
\036\006\003\125\004\003\023\027\145\155\123\151\147\156\040\105  
\103\103\040\122\157\157\164\040\103\101\040\055\040\107\063\060  
\166\060\020\006\007\052\206\110\316\075\002\001\006\005\053\201  
\004\000\042\003\142\000\004\043\245\014\270\055\022\365\050\363  
\261\262\335\342\002\022\200\236\071\137\111\115\237\311\045\064  
\131\164\354\273\006\034\347\300\162\257\350\256\057\341\101\124  
\207\024\250\112\262\350\174\202\346\133\152\265\334\263\165\316  
\213\006\320\206\043\277\106\325\216\017\077\004\364\327\034\222  
\176\366\245\143\302\365\137\216\056\117\241\030\031\002\053\062  
\012\202\144\175\026\223\321\243\102\060\100\060\035\006\003\125  
\035\016\004\026\004\024\174\135\002\204\023\324\314\212\233\201  
\316\027\034\056\051\036\234\110\143\102\060\016\006\003\125\035  
\017\001\001\377\004\004\003\002\001\006\060\017\006\003\125\035  
\023\001\001\377\004\005\060\003\001\001\377\060\012\006\010\052  
\206\110\316\075\004\003\003\003\151\000\060\146\002\061\000\276  
\363\141\317\002\020\035\144\225\007\270\030\156\210\205\005\057  
\203\010\027\220\312\037\212\114\350\015\033\172\261\255\325\201  
\011\107\357\073\254\010\004\174\134\231\261\355\107\007\322\002  
\061\000\235\272\125\374\251\112\350\355\355\346\166\001\102\173  
\310\370\140\331\215\121\213\125\073\373\214\173\353\145\011\303  
\370\226\315\107\250\202\362\026\125\167\044\176\022\020\225\004  
\054\243

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "emSign ECC Root CA - G3"

# Issuer: CN=emSign ECC Root CA - G3,O=eMudhra Technologies

Limited,OU=emSign PKI,C=IN

# Serial Number:3c:f6:07:a9:68:70:0e:da:8b:84

# Subject: CN=emSign ECC Root CA - G3,O=eMudhra Technologies Limited,OU=emSign PKI,C=IN

# Not Valid Before: Sun Feb 18 18:30:00 2018

# Not Valid After : Wed Feb 18 18:30:00 2043

# Fingerprint (SHA-256):

86:A1:EC:BA:08:9C:4A:8D:3B:BE:27:34:C6:12:BA:34:1D:81:3E:04:3C:F9:E8:A8:62:CD:5C:57:A3:6B:BE:6B

# Fingerprint (SHA1): 30:43:FA:4F:F2:57:DC:A0:C3:80:EE:2E:58:EA:78:B2:3F:E6:BB:C1

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE



```

CKA_LABEL UTF8 "emSign ECC Root CA - G3"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\060\103\372\117\362\127\334\240\303\200\356\056\130\352\170\262
\077\346\273\301
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\316\013\162\321\237\210\216\320\120\003\350\343\270\213\147\100
END
CKA_ISSUER MULTILINE_OCTAL
\060\153\061\013\060\011\006\003\125\004\006\023\002\111\116\061
\023\060\021\006\003\125\004\013\023\012\145\155\123\151\147\156
\040\120\113\111\061\045\060\043\006\003\125\004\012\023\034\145
\115\165\144\150\162\141\040\124\145\143\150\156\157\154\157\147
\151\145\163\040\114\151\155\151\164\145\144\061\040\060\036\006
\003\125\004\003\023\027\145\155\123\151\147\156\040\105\103\103
\040\122\157\157\164\040\103\101\040\055\040\107\063
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\012\074\366\007\251\150\160\016\332\213\204
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "emSign Root CA - C1"
#
# Issuer: CN=emSign Root CA - C1,O=eMudhra Inc,OU=emSign PKI,C=US
# Serial Number:00:ae:cf:00:ba:c4:cf:32:f8:43:b2
# Subject: CN=emSign Root CA - C1,O=eMudhra Inc,OU=emSign PKI,C=US
# Not Valid Before: Sun Feb 18 18:30:00 2018
# Not Valid After : Wed Feb 18 18:30:00 2043
# Fingerprint (SHA-256):
12:56:09:AA:30:1D:A0:A2:49:B9:7A:82:39:CB:6A:34:21:6F:44:DC:AC:9F:39:54:B1:42:92:F2:E8:C8:60:8F
#
Fingerprint (SHA1): E7:2E:F1:DF:FC:B2:09:28:CF:5D:D4:D5:67:37:B1:51:CB:86:4F:01
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "emSign Root CA - C1"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\126\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\023\060\021\006\003\125\004\013\023\012\145\155\123\151\147\156
\040\120\113\111\061\024\060\022\006\003\125\004\012\023\013\145

```

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\115\165\144\150\162\141\040\111\156\143\061\034\060\032\006\003
\125\004\003\023\023\145\155\123\151\147\156\040\122\157\157\164
\040\103\101\040\055\040\103\061
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\126\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\023\060\021\006\003\125\004\013\023\012\145\155\123\151\147\156
\040\120\113\111\061\024\060\022\006\003\125\004\012\023\013\145
\115\165\144\150\162\141\040\111\156\143\061\034\060\032\006\003
\125\004\003\023\023\145\155\123\151\147\156\040\122\157\157\164
\040\103\101\040\055\040\103\061
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\013\000\256\317\000\272\304\317\062\370\103\262
END
CKA_VALUE MULTILINE_OCTAL
\060\202\003\163\060\202\002\133\240\003\002\001\002\002\013\000
\256\317\000\272\304\317\062\370\103\262\060\015\006\011\052\206
\110\206\367\015\001\001\013\005\000\060\126\061\013\060\011\006
\003\125\004\006\023\002\125\123\061\023\060\021\006\003\125\004
\013\023\012\145\155\123\151\147\156\040\120\113\111\061\024\060
\022\006\003\125\004\012\023\013\145\115\165\144\150\162\141\040
\111\156\143\061\034\060\032\006\003\125\004\003\023\023\145\155
\123\151\147\156\040\122\157\157\164\040\103\101\040\055\040\103
\061\060\036\027\015\061\070\060\062\061\070\061\070\063\060\060
\060\132\027\015\064\063\060\062\061\070\061\070\063\060\060\060
\132\060\126\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\023\060\021\006\003\125\004\013\023\012\145\155\123\151\147
\156\040\120\113\111\061\024\060\022\006\003\125\004\012\023\013
\145\115\165\144\150\162\141\040\111\156\143\061\034\060\032\006
\003\125\004\003\023\023\145\155\123\151\147\156\040\122\157\157
\164\040\103\101\040\055\040\103\061\060\202\001\042\060\015\006
\011\052\206\110\206\367\015\001\001\001\005\000\003\202\001\017
\000\060\202\001\012\002\202\001\001\000\317\353\251\271\361\231
\005\314\330\050\041\112\363\163\064\121\204\126\020\365\240\117
\054\022\343\372\023\232\047\320\317\371\171\032\164\137\035\171
\071\374\133\370\160\216\340\222\122\367\344\045\371\124\203\331
\035\323\310\132\205\077\136\307\266\007\356\076\300\316\232\257
\254\126\102\052\071\045\160\326\277\265\173\066\255\254\366\163
\334\315\327\035\212\203\245\373\053\220\025\067\153\034\046\107
\334\073\051\126\223\152\263\301\152\072\235\075\365\301\227\070
\130\005\213\034\021\343\344\264\270\135\205\035\203\376\170\137
\013\105\150\030\110\245\106\163\064\073\376\017\310\166\273\307
\030\363\005\321\206\363\205\355\347\271\331\062\255\125\210\316
\246\266\221\260\117\254\176\025\043\226\366\077\360\040\064\026
\336\012\306\304\004\105\171\177\247\375\276\322\251\245\257\234
```

\305\043\052\367\074\041\154\275\257\217\116\305\072\262\363\064  
\022\374\337\200\032\111\244\324\251\225\367\236\211\136\242\211  
\254\224\313\250\150\233\257\212\145\047\315\211\356\335\214\265  
\153\051\160\103\240\151\013\344\271\017\002\003\001\000\001\243  
\102\060\100\060\035\006\003\125\035\016\004\026\004\024\376\241  
\340\160\036\052\003\071\122\132\102\276\134\221\205\172\030\252  
\115\265\060\016\006\003\125\035\017\001\001\377\004\004\003\002  
\001\006\060\017\006\003\125\035\023\001\001\377\004\005\060\003  
\001\001\377\060\015\006\011\052\206\110\206\367\015\001\001\013  
\005\000\003\202\001\001\000\302\112\126\372\025\041\173\050\242  
\351\345\035\373\370\055\304\071\226\101\114\073\047\054\304\154  
\030\025\200\306\254\257\107\131\057\046\013\343\066\260\357\073  
\376\103\227\111\062\231\022\025\133\337\021\051\377\253\123\370  
\273\301\170\017\254\234\123\257\127\275\150\214\075\151\063\360  
\243\240\043\143\073\144\147\042\104\255\325\161\313\126\052\170  
\222\243\117\022\061\066\066\342\336\376\000\304\243\140\017\047  
\255\240\260\212\265\066\172\122\241\275\047\364\040\047\142\350  
\115\224\044\023\344\012\004\351\074\253\056\310\103\011\112\306  
\141\004\345\111\064\176\323\304\310\365\017\300\252\351\272\124  
\136\363\143\053\117\117\120\324\376\271\173\231\214\075\300\056  
\274\002\053\323\304\100\344\212\007\061\036\233\316\046\231\023  
\373\021\352\232\042\014\021\031\307\136\033\201\120\060\310\226  
\022\156\347\313\101\177\221\073\242\107\267\124\200\033\334\000  
\314\232\220\352\303\303\120\006\142\014\060\300\025\110\247\250  
\131\174\341\256\042\242\342\012\172\017\372\142\253\122\114\341  
\361\337\312\276\203\015\102

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER

CK\_BBOOL CK\_FALSE

# Trust for "emSign Root CA - C1"

# Issuer: CN=emSign Root CA - C1,O=eMudhra Inc,OU=emSign PKI,C=US

# Serial Number:00:ae:cf:00:ba:c4:cf:32:f8:43:b2

# Subject: CN=emSign Root CA - C1,O=eMudhra Inc,OU=emSign PKI,C=US

# Not Valid Before: Sun Feb 18 18:30:00 2018

# Not Valid After : Wed Feb 18 18:30:00 2043

# Fingerprint (SHA-256):

12:56:09:AA:30:1D:A0:A2:49:B9:7A:82:39:CB:6A:34:21:6F:44:DC:AC:9F:39:54:B1:42:92:F2:E8:C8:60:8F

# Fingerprint (SHA1): E7:2E:F1:DF:FC:B2:09:28:CF:5D:D4:D5:67:37:B1:51:CB:86:4F:01

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "emSign Root CA - C1"

CKA\_CERT\_SHA1\_HASH MULTILINE\_OCTAL

\347\056\361\337\374\262\011\050\317\135\324\325\147\067\261\121  
\313\206\117\001

END

CKA\_CERT\_MD5\_HASH MULTILINE\_OCTAL

\330\343\135\001\041\372\170\132\260\337\272\322\356\052\137\150  
END

CKA\_ISSUER MULTILINE\_OCTAL

\060\126\061\013\060\011\006\003\125\004\006\023\002\125\123\061  
\023\060\021\006\003\125\004\013\023\012\145\155\123\151\147\156  
\040\120\113\111\061\024\060\022\006\003\125\004\012\023\013\145  
\115\165\144\150\162\141\040\111\156\143\061\034\060\032\006\003  
\125\004\003\023\023\145\155\123\151\147\156\040\122\157\157\164  
\040\103\101\040\055\040\103\061

END

CKA\_SERIAL\_NUMBER

MULTILINE\_OCTAL

\002\013\000\256\317\000\272\304\317\062\370\103\262

END

CKA\_TRUST\_SERVER\_AUTH CK\_TRUST CKT\_NSS\_TRUSTED\_DELEGATOR

CKA\_TRUST\_EMAIL\_PROTECTION CK\_TRUST CKT\_NSS\_TRUSTED\_DELEGATOR

CKA\_TRUST\_CODE\_SIGNING CK\_TRUST CKT\_NSS\_MUST\_VERIFY\_TRUST

CKA\_TRUST\_STEP\_UP\_APPROVED CK\_BBOOL CK\_FALSE

#

# Certificate "emSign ECC Root CA - C3"

#

# Issuer: CN=emSign ECC Root CA - C3,O=eMudhra Inc,OU=emSign PKI,C=US

# Serial Number:7b:71:b6:82:56:b8:12:7c:9c:a8

# Subject: CN=emSign ECC Root CA - C3,O=eMudhra Inc,OU=emSign PKI,C=US

# Not Valid Before: Sun Feb 18 18:30:00 2018

# Not Valid After : Wed Feb 18 18:30:00 2043

# Fingerprint (SHA-256):

BC:4D:80:9B:15:18:9D:78:DB:3E:1D:8C:F4:F9:72:6A:79:5D:A1:64:3C:A5:F1:35:8E:1D:DB:0E:DC:0D:7E:B3

#

Fingerprint (SHA1): B6:AF:43:C2:9B:81:53:7D:F6:EF:6B:C3:1F:1F:60:15:0C:EE:48:66

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_CERTIFICATE

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "emSign ECC Root CA - C3"

CKA\_CERTIFICATE\_TYPE CK\_CERTIFICATE\_TYPE CKC\_X\_509

CKA\_SUBJECT MULTILINE\_OCTAL

\060\132\061\013\060\011\006\003\125\004\006\023\002\125\123\061  
\023\060\021\006\003\125\004\013\023\012\145\155\123\151\147\156  
\040\120\113\111\061\024\060\022\006\003\125\004\012\023\013\145  
\115\165\144\150\162\141\040\111\156\143\061\040\060\036\006\003  
\125\004\003\023\027\145\155\123\151\147\156\040\105\103\103\040  
\122\157\157\164\040\103\101\040\055\040\103\063

END

CKA\_ID UTF8 "0"

CKA\_ISSUER MULTILINE\_OCTAL

\060\132\061\013\060\011\006\003\125\004\006\023\002\125\123\061  
\023\060\021\006\003\125\004\013\023\012\145\155\123\151\147\156  
\040\120\113\111\061\024\060\022\006\003\125\004\012\023\013\145  
\115\165\144\150\162\141\040\111\156\143\061\040\060\036\006\003  
\125\004\003\023\027\145\155\123\151\147\156\040\105\103\103\040  
\122\157\157\164\040\103\101\040\055\040\103\063

END

CKA\_SERIAL\_NUMBER

MULTILINE\_OCTAL

\002\012\173\161\266\202\126\270\022\174\234\250

END

CKA\_VALUE MULTILINE\_OCTAL

\060\202\002\053\060\202\001\261\240\003\002\001\002\002\012\173  
\161\266\202\126\270\022\174\234\250\060\012\006\010\052\206\110  
\316\075\004\003\003\060\132\061\013\060\011\006\003\125\004\006  
\023\002\125\123\061\023\060\021\006\003\125\004\013\023\012\145  
\155\123\151\147\156\040\120\113\111\061\024\060\022\006\003\125  
\004\012\023\013\145\115\165\144\150\162\141\040\111\156\143\061  
\040\060\036\006\003\125\004\003\023\027\145\155\123\151\147\156  
\040\105\103\103\040\122\157\157\164\040\103\101\040\055\040\103  
\063\060\036\027\015\061\070\060\062\061\070\061\070\063\060\060\060  
\060\132\027\015\064\063\060\062\061\070\061\070\063\060\060\060  
\132\060\132\061\013\060\011\006\003\125\004\006\023\002\125\123  
\061\023\060\021\006\003\125\004\013\023\012\145\155\123\151\147  
\156\040\120\113\111\061\024\060\022\006\003\125\004\012\023\013  
\145\115\165\144\150\162\141\040\111\156\143\061\040\060\036\006  
\003\125\004\003\023\027\145\155\123\151\147\156\040\105\103\103  
\040\122\157\157\164\040\103\101\040\055\040\103\063\060\166\060  
\020\006\007\052\206\110\316\075\002\001\006\005\053\201\004\000  
\042\003\142\000\004\375\245\141\256\173\046\020\035\351\267\042  
\060\256\006\364\201\263\261\102\161\225\071\274\323\122\343\257  
\257\371\362\227\065\222\066\106\016\207\225\215\271\071\132\351  
\273\337\320\376\310\007\101\074\273\125\157\203\243\152\373\142  
\260\201\211\002\160\175\110\305\112\343\351\042\124\042\115\223  
\273\102\014\257\167\234\043\246\175\327\141\021\316\145\307\370  
\177\376\365\362\251\243\102\060\100\060\035\006\003\125\035\016  
\004\026\004\024\373\132\110\320\200\040\100\362\250\351\000\007  
\151\031\167\247\346\303\364\317\060\016\006\003\125\035\017\001  
\001\377\004\004\003\002\001\006\060\017\006\003\125\035\023\001  
\001\377\004\005\060\003\001\001\377\060\012\006\010\052\206\110  
\316\075\004\003\003\003\150\000\060\145\002\061\000\264\330\057  
\002\211\375\266\114\142\272\103\116\023\204\162\265\256\335\034  
\336\326\265\334\126\217\130\100\132\055\336\040\114\042\203\312  
\223\250\176\356\022\100\307\326\207\117\370\337\205\002\060\034  
\024\144\344\174\226\203\021\234\260\321\132\141\113\246\017\111

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\323\000\374\241\374\344\245\377\177\255\327\060\320\307\167\177
\276\201\007\125\060\120\040\024\365\127\070\012\250\061\121
END
CKA_NSS_MOZILLA_CA_POLICY
CK_BBOOL CK_TRUE
CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE
CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

# Trust for "emSign ECC Root CA - C3"
# Issuer: CN=emSign ECC Root CA - C3,O=eMudhra Inc,OU=emSign PKI,C=US
# Serial Number:7b:71:b6:82:56:b8:12:7c:9c:a8
# Subject: CN=emSign ECC Root CA - C3,O=eMudhra Inc,OU=emSign PKI,C=US
# Not Valid Before: Sun Feb 18 18:30:00 2018
#
# Not Valid After : Wed Feb 18 18:30:00 2043
# Fingerprint (SHA-256):
BC:4D:80:9B:15:18:9D:78:DB:3E:1D:8C:F4:F9:72:6A:79:5D:A1:64:3C:A5:F1:35:8E:1D:DB:0E:DC:0D:7E:B3
# Fingerprint (SHA1): B6:AF:43:C2:9B:81:53:7D:F6:EF:6B:C3:1F:60:15:0C:EE:48:66
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "emSign ECC Root CA - C3"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\266\257\103\302\233\201\123\175\366\357\153\303\037\037\140\025
\014\356\110\146
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\076\123\263\243\201\356\327\020\370\323\260\035\027\222\365\325
END
CKA_ISSUER MULTILINE_OCTAL
\060\132\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\023\060\021\006\003\125\004\013\023\012\145\155\123\151\147\156
\040\120\113\111\061\024\060\022\006\003\125\004\012\023\013\145
\115\165\144\150\162\141\040\111\156\143\061\040\060\036\006\003
\125\004\003\023\027\145\155\123\151\147\156\040\105\103\103\040
\122\157\157\164\040\103\101\040\055\040\103\063
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\012\173\161\266\202\126\270\022\174\234\250
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
```

```
# Certificate "Hongkong Post Root CA 3"
#
# Issuer: CN=Hongkong Post Root CA 3,O=Hongkong Post,L=Hong Kong,ST=Hong Kong,C=HK
# Serial Number:08:16:5f:8a:4c:a5:ec:00:c9:93:40:df:c4:c6:ae:23:b8:1c:5a:a4
# Subject: CN=Hongkong Post Root CA 3,O=Hongkong Post,L=Hong Kong,ST=Hong Kong,C=HK
# Not Valid Before: Sat Jun 03 02:29:46 2017
# Not Valid After : Tue Jun 03 02:29:46 2042
# Fingerprint (SHA-256):
5A:2F:C0:3F:0C:83:B0:90:BB:FA:40:60:4B:09:88:44:6C:76:36:18:3D:F9:84:6E:17:10:1A:44:7F:B8:EF:D6
# Fingerprint (SHA1): 58:A2:D0:EC:20:52:81:5B:C1:F3:F8:64:02:24:4E:C2:8E:02:4B:02
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL
CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Hongkong Post Root CA 3"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\157\061\013\060\011\006\003\125\004\006\023\002\110\113\061
\022\060\020\006\003\125\004\010\023\011\110\157\156\147\040\113
\157\156\147\061\022\060\020\006\003\125\004\007\023\011\110\157
\156\147\040\113\157\156\147\061\026\060\024\006\003\125\004\012
\023\015\110\157\156\147\153\157\156\147\040\120\157\163\164\061
\040\060\036\006\003\125\004\003\023\027\110\157\156\147\153\157
\156\147\040\120\157\163\164\040\122\157\157\164\040\103\101\040
\063
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\157\061\013\060\011\006\003\125\004\006\023\002\110\113\061
\022\060\020\006\003\125\004\010\023\011\110\157\156\147\040\113
\157\156\147\061\022\060\020\006\003\125\004\007\023\011\110\157
\156\147\040\113\157\156\147\061\026\060\024\006\003\125\004\012
\023\015\110\157\156\147\153\157\156\147\040\120\157\163\164\061
\040\060\036\006\003\125\004\003\023\027\110\157\156\147\153\157
\156\147\040\120\157\163\164\040\122\157\157\164\040\103\101\040
\063
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\024\010\026\137\212\114\245\354\000\311\223\100\337\304\306
\256\043\270\034\132\244
END
CKA_VALUE MULTILINE_OCTAL
\060\202\005\317\060\202\003\267\240\003\002\001\002\002\024\010
\026\137\212\114\245\354\000\311\223\100\337\304\306\256\043\270
\034\132\244\060\015\006\011\052\206\110\206\367\015\001\001\013
\005\000\060\157\061\013\060\011\006\003\125\004\006\023\002\110
```

\113\061\022\060\020\006\003\125\004\010\023\011\110\157\156\147  
\040\113\157\156\147\061\022\060\020\006\003\125\004\007\023\011  
\110\157\156\147\040\113\157\156\147\061\026\060\024\006\003\125  
\004\012\023\015\110\157\156\147\153\157\156\147\040\120\157\163  
\164\061\040\060\036\006\003\125\004\003\023\027\110\157\156\147  
\153\157\156\147\040\120\157\163\164\040\122\157\157\164\040\103  
\101\040\063\060\036\027\015\061\067\060\066\060\063\060\062\062  
\071\064\066\132\027\015\064\062\060\066\060\063\060\062\062\071  
\064\066\132\060\157\061\013\060\011\006\003\125\004\006\023\002  
\110\113\061\022\060\020\006\003\125\004\010\023\011\110\157\156  
\147\040\113\157\156\147\061\022\060\020\006\003\125\004\007\023  
\011\110\157\156\147\040\113\157\156\147\061\026\060\024\006\003  
\125\004\012\023\015\110\157\156\147\153\157\156\147\040\120\157  
\163\164\061\040\060\036\006\003\125\004\003\023\027\110\157\156  
\147\153\157\156\147\040\120\157\163\164\040\122\157\157\164\040  
\103\101\040\063\060\202\002\042\060\015\006\011\052\206\110\206  
\367\015\001\001\001\005\000\003\202\002\017\000\060\202\002\012  
\002\202\002\001\000\263\210\327\352\316\017\040\116\276\346\326  
\003\155\356\131\374\302\127\337\051\150\241\203\016\076\150\307  
\150\130\234\034\140\113\211\103\014\271\324\025\262\356\301\116  
\165\351\265\247\357\345\351\065\231\344\314\034\347\113\137\215  
\063\060\040\063\123\331\246\273\325\076\023\216\351\037\207\111  
\255\120\055\120\312\030\276\001\130\242\023\160\226\273\211\210  
\126\200\134\370\275\054\074\341\114\127\210\273\323\271\225\357  
\313\307\366\332\061\164\050\246\346\124\211\365\101\061\312\345  
\046\032\315\202\340\160\332\073\051\273\325\003\365\231\272\125  
\365\144\321\140\016\263\211\111\270\212\057\005\322\204\105\050  
\174\217\150\120\022\170\374\013\265\123\313\302\230\034\204\243  
\236\260\276\043\244\332\334\310\053\036\332\156\105\036\211\230  
\332\371\000\056\006\351\014\073\160\325\120\045\210\231\313\315  
\163\140\367\325\377\065\147\305\241\274\136\253\315\112\270\105  
\353\310\150\036\015\015\024\106\022\343\322\144\142\212\102\230  
\274\264\306\010\010\370\375\250\114\144\234\166\001\275\057\251  
\154\063\017\330\077\050\270\074\151\001\102\206\176\151\301\311  
\006\312\345\172\106\145\351\302\326\120\101\056\077\267\344\355  
\154\327\277\046\001\021\242\026\051\112\153\064\006\220\354\023  
\322\266\373\152\166\322\074\355\360\326\055\335\341\025\354\243  
\233\057\054\311\076\053\344\151\073\377\162\045\261\066\206\133  
\307\177\153\213\125\033\112\305\040\141\075\256\313\120\341\010  
\072\276\260\217\143\101\123\060\010\131\074\230\035\167\272\143  
\221\172\312\020\120\140\277\360\327\274\225\207\217\227\305\376  
\227\152\001\224\243\174\133\205\035\052\071\072\320\124\241\321  
\071\161\235\375\041\371\265\173\360\342\340\002\217\156\226\044  
\045\054\240\036\054\250\304\211\247\357\355\231\006\057\266\012  
\114\117\333\242\314\067\032\257\107\205\055\212\137\304\064\064  
\114\000\375\030\223\147\023\321\067\346\110\264\213\006\305\127  
\173\031\206\012\171\313\000\311\122\257\102\377\067\217\341\243  
\036\172\075\120\253\143\006\347\025\265\077\266\105\067\224\067



\261\176\362\110\303\177\305\165\376\227\215\105\217\032\247\032  
\162\050\032\100\017\002\003\001\000\001\243\143\060\141\060\017  
\006\003\125\035\023\001\001\377\004\005\060\003\001\001\377\060  
\016\006\003\125\035\017\001\001\377\004\004\003\002\001\006\060  
\037\006\003\125\035\043\004\030\060\026\200\024\027\235\315\036  
\213\326\071\053\160\323\134\324\240\270\037\260\000\374\305\141  
\060\035\006\003\125\035\016\004\026\004\024\027\235\315\036\213  
\326\071\053\160\323\134\324\240\270\037\260\000\374\305\141\060  
\015\006\011\052\206\110\206\367\015\001\001\013\005\000\003\202  
\002\001\000\126\325\173\156\346\042\001\322\102\233\030\325\016  
\327\146\043\134\343\376\240\307\222\322\351\224\255\113\242\306  
\354\022\174\164\325\110\322\131\024\231\300\353\271\321\353\364  
\110\060\133\255\247\127\163\231\251\323\345\267\321\056\131\044  
\130\334\150\056\056\142\330\152\344\160\013\055\040\120\040\244  
\062\225\321\000\230\273\323\375\367\062\362\111\256\306\172\340  
\107\276\156\316\313\243\162\072\055\151\135\313\310\350\105\071  
\324\372\102\301\021\114\167\135\222\373\152\377\130\104\345\353  
\201\236\257\240\231\255\276\251\001\146\313\070\035\074\337\103  
\037\364\115\156\264\272\027\106\374\175\375\207\201\171\152\015  
\063\017\372\057\370\024\271\200\263\135\115\252\227\341\371\344  
\030\305\370\325\070\214\046\074\375\362\050\342\356\132\111\210  
\054\337\171\075\216\236\220\074\275\101\112\072\335\133\366\232  
\264\316\077\045\060\177\062\175\242\003\224\320\334\172\241\122  
\336\156\223\215\030\046\375\125\254\275\217\233\322\317\257\347  
\206\054\313\037\011\157\243\157\251\204\324\163\277\115\241\164  
\033\116\043\140\362\314\016\252\177\244\234\114\045\250\262\146  
\073\070\377\331\224\060\366\162\204\276\150\125\020\017\306\163  
\054\026\151\223\007\376\261\105\355\273\242\125\152\260\332\265  
\112\002\045\047\205\327\267\267\206\104\026\211\154\200\053\076  
\227\251\234\325\176\125\114\306\336\105\020\034\352\351\073\237  
\003\123\356\356\172\001\002\026\170\324\350\302\276\106\166\210  
\023\077\042\273\110\022\035\122\000\264\002\176\041\032\036\234  
\045\364\363\075\136\036\322\034\371\263\055\266\367\067\134\306  
\313\041\116\260\367\231\107\030\205\301\053\272\125\256\006\352  
\320\007\262\334\253\320\202\226\165\316\322\120\376\231\347\317  
\057\237\347\166\321\141\052\373\041\273\061\320\252\237\107\244  
\262\042\312\026\072\120\127\304\133\103\147\305\145\142\003\111  
\001\353\103\331\330\370\236\255\317\261\143\016\105\364\240\132  
\054\233\055\305\246\300\255\250\107\364\047\114\070\015\056\033  
\111\073\122\364\350\210\203\053\124\050\324\362\065\122\264\062  
\203\142\151\144\014\221\234\237\227\352\164\026\375\037\021\006  
\232\233\364

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

```

# Trust for "Hongkong Post Root CA 3"
# Issuer: CN=Hongkong Post Root CA 3,O=Hongkong Post,L=Hong Kong,ST=Hong Kong,C=HK
# Serial Number:08:16:5f:8a:4c:a5:ec:00:c9:93:40:df:c4:c6:ae:23:b8:1c:5a:a4
# Subject: CN=Hongkong Post Root CA 3,O=Hongkong Post,L=Hong Kong,ST=Hong Kong,C=HK
# Not Valid Before: Sat Jun 03 02:29:46 2017
# Not Valid After : Tue Jun 03 02:29:46 2042
# Fingerprint (SHA-256):
5A:2F:C0:3F:0C:83:B0:90:BB:FA:40:60:4B:09:88:44:6C:76:36:18:3D:F9:84:6E:17:10:1A:44:7F:B8:EF:D6
#
Fingerprint (SHA1): 58:A2:D0:EC:20:52:81:5B:C1:F3:F8:64:02:24:4E:C2:8E:02:4B:02
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Hongkong Post Root CA 3"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\130\242\320\354\040\122\201\133\301\363\370\144\002\044\116\302
\216\002\113\002
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\021\374\237\275\163\060\002\212\375\077\363\130\271\313\040\360
END
CKA_ISSUER MULTILINE_OCTAL
\060\157\061\013\060\011\006\003\125\004\006\023\002\110\113\061
\022\060\020\006\003\125\004\010\023\011\110\157\156\147\040\113
\157\156\147\061\022\060\020\006\003\125\004\007\023\011\110\157
\156\147\040\113\157\156\147\061\026\060\024\006\003\125\004\012
\023\015\110\157\156\147\153\157\156\147\040\120\157\163\164\061
\040\060\036\006\003\125\004\003\023\027\110\157\156\147\153\157
\156\147\040\120\157\163\164\040\122\157\157\164\040\103\101\040
\063
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\024\010\026\137\212\114\245\354\000\311\223\100\337\304\306
\256\043\270\034\132\244
END
CKA_TRUST_SERVER_AUTH
CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "Entrust Root Certification Authority - G4"
#
# Issuer: CN=Entrust Root Certification Authority - G4,OU="(c) 2015 Entrust, Inc. - for authorized use
only",OU=See www.entrust.net/legal-terms,O="Entrust, Inc.",C=US
# Serial Number:00:d9:b5:43:7f:af:a9:39:0f:00:00:00:00:55:65:ad:58

```

```
# Subject: CN=Entrust Root Certification Authority - G4,OU="(c) 2015 Entrust, Inc. - for authorized use
only",OU=See www.entrust.net/legal-terms,O="Entrust, Inc.",C=US
# Not Valid Before: Wed May 27 11:11:16 2015
# Not Valid After : Sun Dec 27 11:41:16 2037
# Fingerprint (SHA-256):
DB:35:17:D1:F6:73:2A:2D:5A:B9:7C:53:3E:C7:07:79:EE:32:70:A6:2F:B4:AC:42:38:37:24:60:E6:F0:1E:88
#
Fingerprint (SHA1): 14:88:4E:86:26:37:B0:26:AF:59:62:5C:40:77:EC:35:29:BA:96:01
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Entrust Root Certification Authority - G4"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\201\276\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\026\060\024\006\003\125\004\012\023\015\105\156\164\162\165
\163\164\054\040\111\156\143\056\061\050\060\046\006\003\125\004
\013\023\037\123\145\145\040\167\167\167\056\145\156\164\162\165
\163\164\056\156\145\164\057\154\145\147\141\154\055\164\145\162
\155\163\061\071\060\067\006\003\125\004\013\023\060\050\143\051
\040\062\060\061\065\040\105\156\164\162\165\163\164\054\040\111
\156\143\056\040\055\040\146\157\162\040\141\165\164\150\157\162
\151\172\145\144\040\165\163\145\040\157\156\154\171\061\062\060
\060\006\003\125\004\003\023\051\105\156\164\162\165\163\164\040
\122\157\157\164\040\103\145\162\164\151\146\151\143\141\164\151
\157\156\040\101\165\164\150\157\162\151\164\171\040\055\040\107
\064
END
CKA_ID
UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\201\276\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\026\060\024\006\003\125\004\012\023\015\105\156\164\162\165
\163\164\054\040\111\156\143\056\061\050\060\046\006\003\125\004
\013\023\037\123\145\145\040\167\167\167\056\145\156\164\162\165
\163\164\056\156\145\164\057\154\145\147\141\154\055\164\145\162
\155\163\061\071\060\067\006\003\125\004\013\023\060\050\143\051
\040\062\060\061\065\040\105\156\164\162\165\163\164\054\040\111
\156\143\056\040\055\040\146\157\162\040\141\165\164\150\157\162
\151\172\145\144\040\165\163\145\040\157\156\154\171\061\062\060
\060\006\003\125\004\003\023\051\105\156\164\162\165\163\164\040
\122\157\157\164\040\103\145\162\164\151\146\151\143\141\164\151
\157\156\040\101\165\164\150\157\162\151\164\171\040\055\040\107
\064
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\021\000\331\265\103\177\257\251\071\017\000\000\000\000\125
```

\145\255\130

END

CKA\_VALUE

MULTILINE\_OCTAL

\060\202\006\113\060\202\004\063\240\003\002\001\002\002\021\000  
\331\265\103\177\257\251\071\017\000\000\000\000\125\145\255\130  
\060\015\006\011\052\206\110\206\367\015\001\001\013\005\000\060  
\201\276\061\013\060\011\006\003\125\004\006\023\002\125\123\061  
\026\060\024\006\003\125\004\012\023\015\105\156\164\162\165\163  
\164\054\040\111\156\143\056\061\050\060\046\006\003\125\004\013  
\023\037\123\145\145\040\167\167\167\056\145\156\164\162\165\163  
\164\056\156\145\164\057\154\145\147\141\154\055\164\145\162\155  
\163\061\071\060\067\006\003\125\004\013\023\060\050\143\051\040  
\062\060\061\065\040\105\156\164\162\165\163\164\054\040\111\156  
\143\056\040\055\040\146\157\162\040\141\165\164\150\157\162\151  
\172\145\144\040\165\163\145\040\157\156\154\171\061\062\060\060  
\006\003\125\004\003\023\051\105\156\164\162\165\163\164\040\122  
\157\157\164\040\103\145\162\164\151\146\151\143\141\164\151\157  
\156\040\101\165\164\150\157\162\151\164\171\040\055\040\107\064  
\060\036\027\015\061\065\060\065\062\067\061\061\061\061\061\066  
\132\027\015\063\067\061\062\062\067\061\061\064\061\061\066\132  
\060\201\276\061\013\060\011\006\003\125\004\006\023\002\125\123  
\061\026\060\024\006\003\125\004\012\023\015\105\156\164\162\165  
\163\164\054\040\111\156\143\056\061\050\060\046\006\003\125\004  
\013\023\037\123\145\145\040\167\167\167\056\145\156\164\162\165  
\163\164\056\156\145\164\057\154\145\147\141\154\055\164\145\162  
\155\163\061\071\060\067\006\003\125\004\013\023\060\050\143\051  
\040\062\060\061\065\040\105\156\164\162\165\163\164\054\040\111  
\156\143\056\040\055\040\146\157\162\040\141\165\164\150\157\162  
\151\172\145\144\040\165\163\145\040\157\156\154\171\061\062\060  
\060\006\003\125\004\003\023\051\105\156\164\162\165\163\164\040  
\122\157\157\164\040\103\145\162\164\151\146\151\143\141\164\151  
\157\156\040\101\165\164\150\157\162\151\164\171\040\055\040\107  
\064\060\202\002\042\060\015\006\011\052\206\110\206\367\015\001  
\001\001\005\000\003\202\002\017\000\060\202\002\012\002\202\002  
\001\000\261\354\054\102\356\342\321\060\377\245\222\107\342\055  
\303\272\144\227\155\312\367\015\265\131\301\263\313\250\150\031  
\330\257\204\155\060\160\135\176\363\056\322\123\231\341\376\037  
\136\331\110\257\135\023\215\333\377\143\063\115\323\000\002\274  
\304\370\321\006\010\224\171\130\212\025\336\051\263\375\375\304  
\117\350\252\342\240\073\171\315\277\153\103\062\335\331\164\020  
\271\367\364\150\324\273\320\207\325\252\113\212\052\157\052\004  
\265\262\246\307\240\172\346\110\253\322\321\131\314\326\176\043  
\346\227\154\360\102\345\334\121\113\025\101\355\111\112\311\336  
\020\227\326\166\301\357\245\265\066\024\227\065\330\170\042\065  
\122\357\103\275\333\047\333\141\126\202\064\334\313\210\140\014  
\013\132\345\054\001\306\124\257\327\252\301\020\173\322\005\132  
\270\100\236\206\247\303\220\206\002\126\122\011\172\234\322\047

\202\123\112\145\122\152\365\074\347\250\362\234\257\213\275\323  
\016\324\324\136\156\207\236\152\075\105\035\321\135\033\364\351  
\012\254\140\231\373\211\264\377\230\054\317\174\035\351\002\252  
\004\232\036\270\334\210\156\045\263\154\146\367\074\220\363\127  
\301\263\057\365\155\362\373\312\241\370\051\235\106\213\263\152  
\366\346\147\007\276\054\147\012\052\037\132\262\076\127\304\323  
\041\041\143\145\122\221\033\261\231\216\171\176\346\353\215\000  
\331\132\252\352\163\350\244\202\002\107\226\376\133\216\124\141  
\243\353\057\113\060\260\213\043\165\162\174\041\074\310\366\361  
\164\324\034\173\243\005\125\356\273\115\073\062\276\232\167\146  
\236\254\151\220\042\007\037\141\072\226\276\345\232\117\314\005  
\074\050\131\323\301\014\124\250\131\141\275\310\162\114\350\334  
\237\207\177\275\234\110\066\136\225\243\016\271\070\044\125\374  
\165\146\353\002\343\010\064\051\112\306\343\053\057\063\240\332  
\243\206\245\022\227\375\200\053\332\024\102\343\222\275\076\362  
\135\136\147\164\056\034\210\107\051\064\137\342\062\250\234\045  
\067\214\272\230\000\227\213\111\226\036\375\045\212\254\334\332  
\330\135\164\156\146\260\377\104\337\241\030\306\276\110\057\067  
\224\170\370\225\112\077\177\023\136\135\131\375\164\206\103\143  
\163\111\002\003\001\000\001\243\102\060\100\060\017\006\003\125  
\035\023\001\001\377\004\005\060\003\001\001\377\060\016\006\003  
\125\035\017\001\001\377\004\004\003\002\001\006\060\035\006\003  
\125\035\016\004\026\004\024\237\070\304\126\043\303\071\350\240  
\161\154\350\124\114\344\350\072\261\277\147\060\015\006\011\052  
\206\110\206\367\015\001\001\013\005\000\003\202\002\001\000\022  
\345\102\246\173\213\017\014\344\106\245\266\140\100\207\214\045  
\176\255\270\150\056\133\306\100\166\074\003\370\311\131\364\363  
\253\142\316\020\215\264\132\144\214\150\300\260\162\103\064\322  
\033\013\366\054\123\322\312\220\113\206\146\374\252\203\042\364  
\213\032\157\046\110\254\166\167\010\277\305\230\134\364\046\211  
\236\173\303\271\144\062\001\177\323\303\335\130\155\354\261\253  
\204\125\164\167\204\004\047\122\153\206\114\316\335\271\145\377  
\326\306\136\237\232\020\231\113\165\152\376\152\351\227\040\344  
\344\166\172\306\320\044\252\220\315\040\220\272\107\144\373\177  
\007\263\123\170\265\012\142\362\163\103\316\101\053\201\152\056  
\205\026\224\123\324\153\137\162\042\253\121\055\102\325\000\234  
\231\277\336\273\224\073\127\375\232\365\206\313\126\073\133\210  
\001\345\174\050\113\003\371\111\203\174\262\177\174\343\355\216  
\241\177\140\123\216\125\235\120\064\022\017\267\227\173\154\207  
\112\104\347\365\155\354\200\067\360\130\031\156\112\150\166\360  
\037\222\344\352\265\222\323\141\121\020\013\255\247\331\137\307  
\137\334\037\243\134\214\241\176\233\267\236\323\126\157\146\136  
\007\226\040\355\013\164\373\146\116\213\021\025\351\201\111\176  
\157\260\324\120\177\042\327\137\145\002\015\246\364\205\036\330  
\256\006\113\112\247\322\061\146\302\370\316\345\010\246\244\002  
\226\104\150\127\304\325\063\317\031\057\024\304\224\034\173\244  
\331\360\237\016\261\200\342\321\236\021\144\251\210\021\072\166  
\202\345\142\302\200\330\244\203\355\223\357\174\057\220\260\062

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\114\226\025\150\110\122\324\231\010\300\044\350\034\343\263\245
\041\016\222\300\220\037\317\040\137\312\073\070\307\267\155\072
\363\346\104\270\016\061\153\210\216\160\353\234\027\122\250\101
\224\056\207\266\347\246\022\305\165\337\133\300\012\156\173\244
\344\136\206\371\066\224\337\167\303\351\015\300\071\361\171\273
\106\216\253\103\131\047\267\040\273\043\351\126\100\041\354\061
\075\145\252\103\362\075\337\160\104\341\272\115\046\020\073\230
\237\363\310\216\033\070\126\041\152\121\223\323\221\312\106\332
\211\267\075\123\203\054\010\037\213\217\123\335\377\254\037
```

END

CKA\_NSS\_Mozilla\_CA\_POLICY

CK\_BBOOL CK\_TRUE

# Trust for "Entrust Root Certification Authority - G4"

# Issuer: CN=Entrust Root Certification Authority - G4,OU="(c) 2015 Entrust, Inc. - for authorized use only",OU=See www.entrust.net/legal-terms,O="Entrust, Inc.",C=US

# Serial Number:00:d9:b5:43:7f:af:a9:39:0f:00:00:00:00:55:65:ad:58

#

Subject: CN=Entrust Root Certification Authority - G4,OU="(c) 2015 Entrust, Inc. - for authorized use only",OU=See www.entrust.net/legal-terms,O="Entrust, Inc.",C=US

# Not Valid Before: Wed May 27 11:11:16 2015

# Not Valid After : Sun Dec 27 11:41:16 2037

# Fingerprint (SHA-256):

DB:35:17:D1:F6:73:2A:2D:5A:B9:7C:53:3E:C7:07:79:EE:32:70:A6:2F:B4:AC:42:38:37:24:60:E6:F0:1E:88

# Fingerprint (SHA1): 14:88:4E:86:26:37:B0:26:AF:59:62:5C:40:77:EC:35:29:BA:96:01

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "Entrust Root Certification Authority - G4"

CKA\_CERT\_SHA1\_HASH MULTILINE\_OCTAL

```
\024\210\116\206\046\067\260\046\257\131\142\134\100\167\354\065
\051\272\226\001
```

END

CKA\_CERT\_MD5\_HASH MULTILINE\_OCTAL

```
\211\123\361\203\043\267\174\216\005\361\214\161\070\116\037\210
```

END

CKA\_ISSUER MULTILINE\_OCTAL

```
\060\201\276\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\026\060\024\006\003\125\004\012\023\015\105\156\164\162\165
\163\164\054\040\111\156\143\056\061\050\060\046\006\003\125\004
\013\023\037\123\145\145\040\167\167\167\056\145\156\164\162\165
\163\164\056\156\145\164\057\154\145\147\141\154\055\164\145\162
\155\163\061\071\060\067\006\003\125\004\013\023\060\050\143\051
\040\062\060\061\065\040\105\156\164\162\165\163\164\054\040\111
\156\143\056\040\055\040\146\157\162\040\141\165\164\150\157\162
\151\172\145\144\040\165\163\145\040\157\156\154\171\061\062\060
\060\006\003\125\004\003\023\051\105\156\164\162\165\163\164\040
```

```

\122\157\157\164\040\103\145\162\164\151\146\151\143\141\164\151
\157\156\040\101\165\164\150\157\162\151\164\171\040\055\040\107
\064
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\021\000\331\265\103\177\257\251\071\017\000\000\000\000\125
\145\255\130
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED
CK_BBOOL CK_FALSE

#
# Certificate "Microsoft ECC Root Certificate Authority 2017"
#
# Issuer: CN=Microsoft ECC Root Certificate Authority 2017,O=Microsoft Corporation,C=US
# Serial Number:66:f2:3d:af:87:de:8b:b1:4a:ea:0c:57:31:01:c2:ec
# Subject: CN=Microsoft ECC Root Certificate Authority 2017,O=Microsoft Corporation,C=US
# Not Valid Before: Wed Dec 18 23:06:45 2019
# Not Valid After : Fri Jul 18 23:16:04 2042
# Fingerprint (SHA-256):
35:8D:F3:9D:76:4A:F9:E1:B7:66:E9:C9:72:DF:35:2E:E1:5C:FA:C2:27:AF:6A:D1:D7:0E:8E:4A:6E:DC:BA:02
# Fingerprint (SHA1): 99:9A:64:C3:7F:F4:7D:9F:AB:95:F1:47:69:89:14:60:EE:C4:C3:C5
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Microsoft ECC Root Certificate Authority 2017"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\145\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\036\060\034\006\003\125\004\012\023\025\115\151\143\162\157\163
\157\146\164\040\103\157\162\160\157\162\141\164\151\157\156\061
\066\060\064\006\003\125\004\003\023\055\115\151\143\162\157\163
\157\146\164\040\105\103\103\040\122\157\157\164\040\103\145\162
\164\151\146\151\143\141\164\145\040\101\165\164\150\157\162\151
\164\171\040\062\060\061\067
END
CKA_ID
UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\145\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\036\060\034\006\003\125\004\012\023\025\115\151\143\162\157\163
\157\146\164\040\103\157\162\160\157\162\141\164\151\157\156\061
\066\060\064\006\003\125\004\003\023\055\115\151\143\162\157\163

```

\157\146\164\040\105\103\103\040\122\157\157\164\040\103\145\162  
\164\151\146\151\143\141\164\145\040\101\165\164\150\157\162\151  
\164\171\040\062\060\061\067

END

CKA\_SERIAL\_NUMBER MULTILINE\_OCTAL

\002\020\146\362\075\257\207\336\213\261\112\352\014\127\061\001  
\302\354

END

CKA\_VALUE MULTILINE\_OCTAL

\060\202\002\131\060\202\001\337\240\003\002\001\002\002\020\146  
\362\075\257\207\336\213\261\112\352\014\127\061\001\302\354\060  
\012\006\010\052\206\110\316\075\004\003\003\060\145\061\013\060  
\011\006\003\125\004\006\023\002\125\123\061\036\060\034\006\003  
\125\004\012\023\025\115\151\143\162\157\163\157\146\164\040\103  
\157\162\160\157\162\141\164\151\157\156\061\066\060\064\006\003  
\125\004\003\023\055\115\151\143\162\157\163\157\146\164\040\105  
\103\103\040\122\157\157\164\040\103\145\162\164\151\146\151\143  
\141\164\145\040\101\165\164\150\157\162\151\164\171\040\062\060  
\061\067\060\036\027\015\061\071\061\062\061\070\062\063\060\066  
\064\065\132\027\015\064\062\060\067\061\070\062\063\061\066\060  
\064\132\060\145\061\013\060\011\006\003\125\004\006\023\002\125  
\123\061\036\060\034\006\003\125\004\012\023\025\115\151\143\162  
\157\163\157\146\164\040\103\157\162\160\157\162\141\164\151\157  
\156\061\066\060\064\006\003\125\004\003\023\055\115\151\143\162  
\157\163\157\146\164\040\105\103\103\040\122\157\157\164\040\103  
\145\162\164\151\146\151\143\141\164\145\040\101\165\164\150\157  
\162\151\164\171\040\062\060\061\067\060\166\060\020\006\007\052  
\206\110\316\075\002\001\006\005\053\201\004\000\042\003\142\000  
\004\324\274\075\002\102\165\101\023\043\315\200\004\206\002\121  
\057\152\250\201\142\013\145\314\366\312\235\036\157\112\146\121  
\242\003\331\235\221\372\266\026\261\214\156\336\174\315\333\171  
\246\057\316\273\316\161\057\345\245\253\050\354\143\004\146\231  
\370\372\362\223\020\005\341\201\050\102\343\306\150\364\346\033  
\204\140\112\211\257\355\171\017\073\316\361\366\104\365\001\170  
\300\243\124\060\122\060\016\006\003\125\035\017\001\001\377\004  
\004\003\002\001\206\060\017\006\003\125\035\023\001\001\377\004  
\005\060\003\001\001\377\060\035\006\003\125\035\016\004\026\004  
\024\310\313\231\162\160\122\014\370\346\276\262\004\127\051\052  
\317\102\020\355\065\060\020\006\011\053\006\001\004\001\202\067  
\025\001\004\003\002\001\000\060\012\006\010\052\206\110\316\075  
\004\003\003\003\150\000\060\145\002\060\130\362\115\352\014\371  
\137\136\356\140\051\313\072\362\333\326\062\204\031\077\174\325  
\057\302\261\314\223\256\120\273\011\062\306\306\355\176\311\066  
\224\022\344\150\205\006\242\033\320\057\002\061\000\231\351\026  
\264\016\372\126\110\324\244\060\026\221\170\333\124\214\145\001  
\212\347\120\146\302\061\267\071\272\270\032\042\007\116\374\153  
\124\026\040\377\053\265\347\114\014\115\246\117\163

END



```

CKA_NSS_MOZILLA_CA_POLICY
CK_BBOOL CK_TRUE
CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE
CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

# Trust for "Microsoft ECC Root Certificate Authority 2017"
# Issuer: CN=Microsoft ECC Root Certificate Authority 2017,O=Microsoft Corporation,C=US
# Serial Number:66:f2:3d:af:87:de:8b:b1:4a:ea:0c:57:31:01:c2:ec
# Subject: CN=Microsoft ECC Root Certificate Authority 2017,O=Microsoft Corporation,C=US
# Not Valid Before: Wed Dec 18 23:06:45 2019
# Not Valid After : Fri Jul 18 23:16:04 2042
# Fingerprint (SHA-256):
35:8D:F3:9D:76:4A:F9:E1:B7:66:E9:C9:72:DF:35:2E:E1:5C:FA:C2:27:AF:6A:D1:D7:0E:8E:4A:6E:DC:BA:02
#
Fingerprint (SHA1): 99:9A:64:C3:7F:F4:7D:9F:AB:95:F1:47:69:89:14:60:EE:C4:C3:C5
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Microsoft ECC Root Certificate Authority 2017"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\231\232\144\303\177\364\175\237\253\225\361\107\151\211\024\140
\356\304\303\305
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\335\241\003\346\112\223\020\321\277\360\031\102\313\376\355\147
END
CKA_ISSUER MULTILINE_OCTAL
\060\145\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\036\060\034\006\003\125\004\012\023\025\115\151\143\162\157\163
\157\146\164\040\103\157\162\160\157\162\141\164\151\157\156\061
\066\060\064\006\003\125\004\003\023\055\115\151\143\162\157\163
\157\146\164\040\105\103\103\040\122\157\157\164\040\103\145\162
\164\151\146\151\143\141\164\145\040\101\165\164\150\157\162\151
\164\171\040\062\060\061\067
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\020\146\362\075\257\207\336\213\261\112\352\014\127\061\001
\302\354
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "Microsoft RSA Root Certificate Authority 2017"

```

```
#
# Issuer: CN=Microsoft RSA Root Certificate Authority 2017,O=Microsoft Corporation,C=US
# Serial Number:1e:d3:97:09:5f:d8:b4:b3:47:70:1e:aa:be:7f:45:b3
# Subject: CN=Microsoft RSA Root Certificate Authority 2017,O=Microsoft Corporation,C=US
# Not Valid Before: Wed Dec 18 22:51:22 2019
# Not Valid After : Fri Jul 18 23:00:23 2042
# Fingerprint (SHA-256):
C7:41:F7:0F:4B:2A:8D:88:BF:2E:71:C1:41:22:EF:53:EF:10:EB:A0:CF:A5:E6:4C:FA:20:F4:18:85:30:73:E0
# Fingerprint (SHA1): 73:A5:E6:4A:3B:FF:83:16:FF:0E:DC:CC:61:8A:90:6E:4E:AE:4D:74
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL
CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Microsoft RSA Root Certificate Authority 2017"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\145\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\036\060\034\006\003\125\004\012\023\025\115\151\143\162\157\163
\157\146\164\040\103\157\162\160\157\162\141\164\151\157\156\061
\066\060\064\006\003\125\004\003\023\055\115\151\143\162\157\163
\157\146\164\040\122\123\101\040\122\157\157\164\040\103\145\162
\164\151\146\151\143\141\164\145\040\101\165\164\150\157\162\151
\164\171\040\062\060\061\067
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\145\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\036\060\034\006\003\125\004\012\023\025\115\151\143\162\157\163
\157\146\164\040\103\157\162\160\157\162\141\164\151\157\156\061
\066\060\064\006\003\125\004\003\023\055\115\151\143\162\157\163
\157\146\164\040\122\123\101\040\122\157\157\164\040\103\145\162
\164\151\146\151\143\141\164\145\040\101\165\164\150\157\162\151
\164\171\040\062\060\061\067
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\020\036\323\227\011\137\330\264\263\107\160\036\252\276\177
\105\263
END
CKA_VALUE MULTILINE_OCTAL
\060\202\005\250\060\202\003\220\240\003\002\001\002\002\020\036
\323\227\011\137\330\264\263\107\160\036\252\276\177\105\263\060
\015\006\011\052\206\110\206\367\015\001\001\014\005\000\060\145
\061\013\060\011\006\003\125\004\006\023\002\125\123\061\036\060
\034\006\003\125\004\012\023\025\115\151\143\162\157\163\157\146
\164\040\103\157\162\160\157\162\141\164\151\157\156\061\066\060
\064\006\003\125\004\003\023\055\115\151\143\162\157\163\157\146
```

\164\040\122\123\101\040\122\157\157\164\040\103\145\162\164\151  
\146\151\143\141\164\145\040\101\165\164\150\157\162\151\164\171  
\040\062\060\061\067\060\036\027\015\061\071\061\062\061\070\062  
\062\065\061\062\062\132\027\015\064\062\060\067\061\070\062\063  
\060\060\062\063\132\060\145\061\013\060\011\006\003\125\004\006  
\023\002\125\123\061\036\060\034\006\003\125\004\012\023\025\115  
\151\143\162\157\163\157\146\164\040\103\157\162\160\157\162\141  
\164\151\157\156\061\066\060\064\006\003\125\004\003\023\055\115  
\151\143\162\157\163\157\146\164\040\122\123\101\040\122\157\157  
\164\040\103\145\162\164\151\146\151\143\141\164\145\040\101\165  
\164\150\157\162\151\164\171\040\062\060\061\067\060\202\002\042  
\060\015\006\011\052\206\110\206\367\015\001\001\001\005\000\003  
\202\002\017\000\060\202\002\012\002\202\002\001\000\312\133\276  
\224\063\214\051\225\221\026\012\225\275\107\142\301\211\363\231  
\066\337\106\220\311\245\355\170\152\157\107\221\150\370\047\147  
\120\063\035\241\246\373\340\345\103\243\204\002\127\001\135\234  
\110\100\202\123\020\274\277\307\073\150\220\266\202\055\345\364  
\145\320\314\155\031\314\225\371\173\254\112\224\255\016\336\113  
\103\035\207\007\222\023\220\200\203\144\065\071\004\374\345\351  
\154\263\266\037\120\224\070\145\120\134\027\106\271\266\205\265  
\034\265\027\350\326\105\235\330\262\046\260\312\304\160\112\256  
\140\244\335\263\331\354\374\073\325\127\162\274\077\310\311\262  
\336\113\153\370\043\154\003\300\005\275\225\307\315\163\073\146  
\200\144\343\032\254\056\371\107\005\362\006\266\233\163\365\170  
\063\133\307\241\373\047\052\241\264\232\221\214\221\323\072\202  
\076\166\100\264\315\122\141\121\160\050\077\305\305\132\362\311  
\214\111\273\024\133\115\310\377\147\115\114\022\226\255\365\376  
\170\250\227\207\327\375\136\040\200\334\241\113\042\373\324\211  
\255\272\316\107\227\107\125\173\217\105\310\147\050\204\225\034  
\150\060\357\357\111\340\065\173\144\347\230\260\224\332\115\205  
\073\076\125\304\050\257\127\363\236\023\333\106\047\237\036\242  
\136\104\203\244\245\312\325\023\263\113\077\304\343\302\346\206  
\141\244\122\060\271\172\040\117\157\017\070\123\313\063\014\023  
\053\217\326\232\275\052\310\055\261\034\175\113\121\312\107\321  
\110\047\162\135\207\353\325\105\346\110\145\235\257\122\220\272  
\133\242\030\145\127\022\237\150\271\324\025\153\224\304\151\042  
\230\364\063\340\355\371\121\216\101\120\311\064\117\166\220\254  
\374\070\301\330\341\173\271\343\343\224\341\106\151\313\016\012  
\120\153\023\272\254\017\067\132\267\022\265\220\201\036\126\256  
\127\042\206\331\311\322\321\327\121\343\253\073\306\125\375\036  
\016\323\164\012\321\332\252\352\151\270\227\050\217\110\304\007  
\370\122\103\072\364\312\125\065\054\260\246\152\300\234\371\362  
\201\341\022\152\300\105\331\147\263\316\377\043\242\211\012\124  
\324\024\271\052\250\327\354\371\253\315\045\130\062\171\217\220  
\133\230\071\304\010\006\301\254\177\016\075\000\245\002\003\001  
\000\001\243\124\060\122\060\016\006\003\125\035\017\001\001\377  
\004\004\003\002\001\206\060\017\006\003\125\035\023\001\001\377  
\004\005\060\003\001\001\377\060\035\006\003\125\035\016\004\026

\004\024\011\313\131\177\206\262\160\217\032\303\071\343\300\331  
\351\277\273\115\262\043\060\020\006\011\053\006\001\004\001\202  
\067\025\001\004\003\002\001\000\060\015\006\011\052\206\110\206  
\367\015\001\001\014\005\000\003\202\002\001\000\254\257\076\135  
\302\021\226\211\216\243\347\222\326\227\025\270\023\242\246\102  
\056\002\315\026\005\131\047\312\040\350\272\270\350\032\354\115  
\250\227\126\256\145\103\261\217\000\233\122\315\125\315\123\071  
\155\142\114\213\015\133\174\056\104\277\203\020\217\363\123\202  
\200\303\117\072\307\156\021\077\346\343\026\221\204\373\155\204  
\177\064\164\255\211\247\316\271\327\327\237\204\144\222\276\225  
\241\255\011\123\063\335\356\012\352\112\121\216\157\125\253\272  
\265\224\106\256\214\177\330\242\120\045\145\140\200\106\333\063  
\004\256\154\265\230\164\124\045\334\223\344\370\343\125\025\075  
\270\155\303\012\244\022\301\151\205\156\337\144\361\123\231\341  
\112\165\040\235\225\017\344\326\334\003\361\131\030\350\107\211  
\262\127\132\224\266\251\330\027\053\027\111\345\166\313\301\126  
\231\072\067\261\377\151\054\221\221\223\341\337\114\243\067\166  
\115\241\237\370\155\036\035\323\372\354\373\364\105\035\023\155  
\317\367\131\345\042\047\162\053\206\363\127\273\060\355\044\115  
\334\175\126\273\243\263\370\064\171\211\301\340\362\002\141\367  
\246\374\017\273\034\027\013\256\101\331\174\275\047\243\375\056  
\072\321\223\224\261\163\035\044\213\257\133\040\211\255\267\147  
\146\171\365\072\306\246\226\063\376\123\222\310\106\261\021\221  
\306\231\177\217\311\326\146\061\040\101\020\207\055\014\326\301  
\257\064\230\312\144\203\373\023\127\321\301\360\074\172\214\245  
\301\375\225\041\240\161\301\223\147\161\022\352\217\210\012\151  
\031\144\231\043\126\373\254\052\056\160\276\146\304\014\204\357  
\345\213\363\223\001\370\152\220\223\147\113\262\150\243\265\142  
\217\351\077\214\172\073\136\017\347\214\270\306\174\357\067\375  
\164\342\310\117\063\162\341\224\071\155\275\022\257\276\014\116  
\160\174\033\157\215\263\062\223\163\104\026\155\350\364\367\340  
\225\200\217\226\135\070\244\364\253\336\012\060\207\223\330\115  
\000\161\142\105\047\113\072\102\204\133\177\145\267\147\064\122  
\055\234\026\153\252\250\330\173\243\102\114\161\307\014\312\076  
\203\344\246\357\267\001\060\136\121\243\171\365\160\151\246\101  
\104\017\206\260\054\221\306\075\352\256\017\204

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "Microsoft RSA Root Certificate Authority 2017"

# Issuer: CN=Microsoft RSA Root Certificate Authority 2017,O=Microsoft Corporation,C=US

# Serial Number:1e:d3:97:09:5f:d8:b4:b3:47:70:1e:aa:be:7f:45:b3

# Subject: CN=Microsoft RSA Root Certificate Authority 2017,O=Microsoft Corporation,C=US

# Not Valid Before: Wed Dec 18 22:51:22 2019

# Not Valid After : Fri Jul 18 23:00:23 2042

```

# Fingerprint (SHA-256):
C7:41:F7:0F:4B:2A:8D:88:BF:2E:71:C1:41:22:EF:53:EF:10:EB:A0:CF:A5:E6:4C:FA:20:F4:18:85:30:73:E0
# Fingerprint (SHA1): 73:A5:E6:4A:3B:FF:83:16:FF:0E:DC:CC:61:8A:90:6E:4E:AE:4D:74
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL
CK_FALSE
CKA_LABEL UTF8 "Microsoft RSA Root Certificate Authority 2017"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\163\245\346\112\073\377\203\026\377\016\334\314\141\212\220\156
\116\256\115\164
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\020\377\000\377\317\311\370\307\172\300\356\065\216\311\017\107
END
CKA_ISSUER MULTILINE_OCTAL
\060\145\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\036\060\034\006\003\125\004\012\023\025\115\151\143\162\157\163
\157\146\164\040\103\157\162\160\157\162\141\164\151\157\156\061
\066\060\064\006\003\125\004\003\023\055\115\151\143\162\157\163
\157\146\164\040\122\123\101\040\122\157\157\164\040\103\145\162
\164\151\146\151\143\141\164\145\040\101\165\164\150\157\162\151
\164\171\040\062\060\061\067
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\020\036\323\227\011\137\330\264\263\107\160\036\252\276\177
\105\263
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_CODE_SIGNING
CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "e-Szigno Root CA 2017"
#
# Issuer: CN=e-Szigno Root CA 2017,OID.2.5.4.97=VATHU-23584497,O=Microsec Ltd.,L=Budapest,C=HU
# Serial Number:01:54:48:ef:21:fd:97:59:0d:f5:04:0a
# Subject: CN=e-Szigno Root CA 2017,OID.2.5.4.97=VATHU-23584497,O=Microsec Ltd.,L=Budapest,C=HU
# Not Valid Before: Tue Aug 22 12:07:06 2017
# Not Valid After : Fri Aug 22 12:07:06 2042
# Fingerprint (SHA-256):
BE:B0:0B:30:83:9B:9B:C3:2C:32:E4:44:79:05:95:06:41:F2:64:21:B1:5E:D0:89:19:8B:51:8A:E2:EA:1B:99
# Fingerprint (SHA1): 89:D4:83:03:4F:9E:9A:48:80:5F:72:37:D4:A9:A6:EF:CB:7C:1F:D1
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE

```

```
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "e-Szigno Root CA 2017"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\161\061\013\060\011\006\003\125\004\006\023\002\110\125\061
\021\060\017\006\003\125\004\007\014\010\102\165\144\141\160\145
\163\164\061\026\060\024\006\003\125\004\012\014\015\115\151\143
\162\157\163\145\143\040\114\164\144\056\061\027\060\025\006\003
\125\004\141\014\016\126\101\124\110\125\055\062\063\065\070\064
\064\071\067\061\036\060\034\006\003\125\004\003\014\025\145\055
\123\172\151\147\156\157\040\122\157\157\164\040\103\101\040\062
\060\061\067
END
CKA_ID
UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\161\061\013\060\011\006\003\125\004\006\023\002\110\125\061
\021\060\017\006\003\125\004\007\014\010\102\165\144\141\160\145
\163\164\061\026\060\024\006\003\125\004\012\014\015\115\151\143
\162\157\163\145\143\040\114\164\144\056\061\027\060\025\006\003
\125\004\141\014\016\126\101\124\110\125\055\062\063\065\070\064
\064\071\067\061\036\060\034\006\003\125\004\003\014\025\145\055
\123\172\151\147\156\157\040\122\157\157\164\040\103\101\040\062
\060\061\067
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\014\001\124\110\357\041\375\227\131\015\365\004\012
END
CKA_VALUE
MULTILINE_OCTAL
\060\202\002\100\060\202\001\345\240\003\002\001\002\002\014\001
\124\110\357\041\375\227\131\015\365\004\012\060\012\006\010\052
\206\110\316\075\004\003\002\060\161\061\013\060\011\006\003\125
\004\006\023\002\110\125\061\021\060\017\006\003\125\004\007\014
\010\102\165\144\141\160\145\163\164\061\026\060\024\006\003\125
\004\012\014\015\115\151\143\162\157\163\145\143\040\114\164\144
\056\061\027\060\025\006\003\125\004\141\014\016\126\101\124\110
\125\055\062\063\065\070\064\064\071\067\061\036\060\034\006\003
\125\004\003\014\025\145\055\123\172\151\147\156\157\040\122\157
\157\164\040\103\101\040\062\060\061\067\060\036\027\015\061\067
\060\070\062\062\061\062\060\067\060\066\132\027\015\064\062\060
\070\062\062\061\062\060\067\060\066\132\060\161\061\013\060\011
\006\003\125\004\006\023\002\110\125\061\021\060\017\006\003\125
\004\007\014\010\102\165\144\141\160\145\163\164\061\026\060\024
\006\003\125\004\012\014\015\115\151\143\162\157\163\145\143\040
\114\164\144\056\061\027\060\025\006\003\125\004\141\014\016\126
\101\124\110\125\055\062\063\065\070\064\064\071\067\061\036\060
```

```
\034\006\003\125\004\003\014\025\145\055\123\172\151\147\156\157
\040\122\157\157\164\040\103\101\040\062\060\061\067\060\131\060
\023\006\007\052\206\110\316\075\002\001\006\010\052\206\110\316
\075\003\001\007\003\102\000\004\226\334\075\212\330\260\173\157
\306\047\276\104\220\261\263\126\025\173\216\103\044\175\032\204
\131\356\143\150\262\306\136\207\320\025\110\036\250\220\255\275
\123\242\332\336\072\220\246\140\137\150\062\265\206\101\337\207
\133\054\173\305\376\174\172\332\243\143\060\141\060\017\006\003
\125\035\023\001\001\377\004\005\060\003\001\001\377\060\016\006
\003\125\035\017\001\001\377\004\004\003\002\001\006\060\035\006
\003\125\035\016\004\026\004\024\207\021\025\010\321\252\301\170
\014\261\257\316\306\311\220\357\277\060\004\300\060\037\006\003
\125\035\043\004\030\060\026\200\024\207\021\025\010\321\252\301
\170\014\261\257\316\306\311\220\357\277\060\004\300\060\012\006
\010\052\206\110\316\075\004\003\002\003\111\000\060\106\002\041
\000\265\127\335\327\212\125\013\066\341\206\104\372\324\331\150
\215\270\334\043\212\212\015\324\057\175\352\163\354\277\115\154
\250\002\041\000\313\245\264\022\372\347\265\350\317\176\223\374
\363\065\217\157\116\132\174\264\274\116\262\374\162\252\133\131
\371\347\334\061
```

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "e-Szigno Root CA 2017"

# Issuer: CN=e-Szigno Root CA 2017,OID.2.5.4.97=VATHU-23584497,O=Microsec Ltd.,L=Budapest,C=HU

# Serial Number:01:54:48:ef:21:fd:97:59:0d:f5:04:0a

# Subject: CN=e-Szigno Root CA 2017,OID.2.5.4.97=VATHU-23584497,O=Microsec Ltd.,L=Budapest,C=HU

# Not Valid Before: Tue Aug 22 12:07:06 2017

# Not Valid After : Fri Aug 22 12:07:06 2042

# Fingerprint (SHA-256):

BE:B0:0B:30:83:9B:9B:C3:2C:32:E4:44:79:05:95:06:41:F2:64:21:B1:5E:D0:89:19:8B:51:8A:E2:EA:1B:99

#

Fingerprint (SHA1): 89:D4:83:03:4F:9E:9A:48:80:5F:72:37:D4:A9:A6:EF:CB:7C:1F:D1

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "e-Szigno Root CA 2017"

CKA\_CERT\_SHA1\_HASH MULTILINE\_OCTAL

```
\211\324\203\003\117\236\232\110\200\137\162\067\324\251\246\357
```

```
\313\174\037\321
```

END

CKA\_CERT\_MD5\_HASH MULTILINE\_OCTAL

```
\336\037\366\236\204\256\247\264\041\316\036\130\175\321\204\230
```

END

```

CKA_ISSUER MULTILINE_OCTAL
\060\161\061\013\060\011\006\003\125\004\006\023\002\110\125\061
\021\060\017\006\003\125\004\007\014\010\102\165\144\141\160\145
\163\164\061\026\060\024\006\003\125\004\012\014\015\115\151\143
\162\157\163\145\143\040\114\164\144\056\061\027\060\025\006\003
\125\004\141\014\016\126\101\124\110\125\055\062\063\065\070\064
\064\071\067\061\036\060\034\006\003\125\004\003\014\025\145\055
\123\172\151\147\156\157\040\122\157\157\164\040\103\101\040\062
\060\061\067
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\014\001\124\110\357\041\375\227\131\015\365\004\012
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "certSIGN Root CA G2"
#
# Issuer: OU=certSIGN ROOT CA G2,O=CERTSIGN SA,C=RO
# Serial Number:11:00:34:b6:4e:c6:36:2d:36
# Subject: OU=certSIGN ROOT CA G2,O=CERTSIGN SA,C=RO
# Not Valid Before: Mon Feb 06 09:27:35 2017
# Not Valid After : Thu Feb 06 09:27:35 2042
# Fingerprint (SHA-256):
65:7C:FE:2F:A7:3F:AA:38:46:25:71:F3:32:A2:36:3A:46:FC:E7:02:09:51:71:07:02:CD:FB:B6:EE:DA:33:05
# Fingerprint (SHA1): 26:F9:93:B4:ED:3D:28:27:B0:B9:4B:A7:E9:15:1D:A3:8D:92:E5:32
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "certSIGN Root CA G2"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT
MULTILINE_OCTAL
\060\101\061\013\060\011\006\003\125\004\006\023\002\122\117\061
\024\060\022\006\003\125\004\012\023\013\103\105\122\124\123\111
\107\116\040\123\101\061\034\060\032\006\003\125\004\013\023\023
\143\145\162\164\123\111\107\116\040\122\117\117\124\040\103\101
\040\107\062
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\101\061\013\060\011\006\003\125\004\006\023\002\122\117\061
\024\060\022\006\003\125\004\012\023\013\103\105\122\124\123\111

```



\107\116\040\123\101\061\034\060\032\006\003\125\004\013\023\023  
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CKA\_NSS\_MOZILLA\_CA\_POLICY

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CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

# Trust for "certSIGN Root CA G2"
# Issuer: OU=certSIGN ROOT CA G2,O=CERTSIGN SA,C=RO
# Serial Number:11:00:34:b6:4e:c6:36:2d:36
# Subject: OU=certSIGN ROOT CA G2,O=CERTSIGN SA,C=RO
# Not Valid Before: Mon Feb 06 09:27:35 2017
# Not Valid After : Thu Feb 06 09:27:35 2042
# Fingerprint (SHA-256):
65:7C:FE:2F:A7:3F:AA:38:46:25:71:F3:32:A2:36:3A:46:FC:E7:02:09:51:71:07:02:CD:FB:B6:EE:DA:33:05
# Fingerprint (SHA1): 26:F9:93:B4:ED:3D:28:27:B0:B9:4B:A7:E9:15:1D:A3:8D:92:E5:32
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL
UTF8 "certSIGN Root CA G2"
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\046\371\223\264\355\075\050\047\260\271\113\247\351\025\035\243
\215\222\345\062
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CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "Trustwave Global Certification Authority"
#
# Issuer: CN=Trustwave Global Certification Authority,O="Trustwave Holdings,
Inc.",L=Chicago,ST=Illinois,C=US
#

```

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Serial Number:05:f7:0e:86:da:49:f3:46:35:2e:ba:b2
# Subject: CN=Trustwave Global Certification Authority,O="Trustwave Holdings,
Inc.",L=Chicago,ST=Illinois,C=US
# Not Valid Before: Wed Aug 23 19:34:12 2017
# Not Valid After : Sat Aug 23 19:34:12 2042
# Fingerprint (SHA-256):
97:55:20:15:F5:DD:FC:3C:87:88:C0:06:94:45:55:40:88:94:45:00:84:F1:00:86:70:86:BC:1A:2B:B5:8D:C8
# Fingerprint (SHA1): 2F:8F:36:4F:E1:58:97:44:21:59:87:A5:2A:9A:D0:69:95:26:7F:B5
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CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Trustwave Global Certification Authority"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
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\102\371\367\074\143\354\046\214\163\014\175\032\035\352\250\174  
\207\250\302\047\174\341\063\101\017\317\317\374\000\240\042\200  
\236\112\247\157\000\260\101\105\267\042\312\150\110\305\102\242  
\256\335\035\362\340\156\116\005\130\261\300\220\026\052\244\075  
\020\100\276\217\142\143\203\251\234\202\175\055\002\351\203\060  
\174\313\047\311\375\036\146\000\260\056\323\041\057\216\063\026  
\154\230\355\020\250\007\326\314\223\317\333\321\151\034\344\312  
\311\340\266\234\351\316\161\161\336\154\077\026\244\171

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRUST\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRUST\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "Trustwave Global Certification Authority"

```
# Issuer: CN=Trustwave Global Certification Authority,O="Trustwave Holdings,
Inc.",L=Chicago,ST=Illinois,C=US
# Serial Number:05:f7:0e:86:da:49:f3:46:35:2e:ba:b2
# Subject: CN=Trustwave Global Certification Authority,O="Trustwave Holdings,
Inc.",L=Chicago,ST=Illinois,C=US
# Not Valid Before: Wed Aug 23 19:34:12 2017
# Not Valid After : Sat Aug 23 19:34:12 2042
# Fingerprint (SHA-256):
97:55:20:15:F5:DD:FC:3C:87:88:C0:06:94:45:55:40:88:94:45:00:84:F1:00:86:70:86:BC:1A:2B:B5:8D:C8
# Fingerprint (SHA1): 2F:8F:36:4F:E1:58:97:44:21:59:87:A5:2A:9A:D0:69:95:26:7F:B5
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE
CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Trustwave Global Certification Authority"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\057\217\066\117\341\130\227\104\041\131\207\245\052\232\320\151
\225\046\177\265
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\370\034\030\055\057\272\137\155\241\154\274\307\253\221\307\016
END
CKA_ISSUER MULTILINE_OCTAL
\060\201\210\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\021\060\017\006\003\125\004\010\014\010\111\154\154\151\156
\157\151\163\061\020\060\016\006\003\125\004\007\014\007\103\150
\151\143\141\147\157\061\041\060\037\006\003\125\004\012\014\030
\124\162\165\163\164\167\141\166\145\040\110\157\154\144\151\156
\147\163\054\040\111\156\143\056\061\061\060\057\006\003\125\004
\003\014\050\124\162\165\163\164\167\141\166\145\040\107\154\157
\142\141\154\040\103\145\162\164\151\146\151\143\141\164\151\157
\156\040\101\165\164\150\157\162\151\164\171
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\014\005\367\016\206\332\111\363\106\065\056\272\262
END
CKA_TRUST_SERVER_AUTH
CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "Trustwave Global ECC P256 Certification Authority"
#
# Issuer: CN=Trustwave Global ECC P256 Certification Authority,O="Trustwave Holdings,
Inc.",L=Chicago,ST=Illinois,C=US
```

```
# Serial Number:0d:6a:5f:08:3f:28:5c:3e:51:95:df:5d
# Subject: CN=Trustwave Global ECC P256 Certification Authority,O="Trustwave Holdings,
Inc.",L=Chicago,ST=Illinois,C=US
# Not Valid Before: Wed Aug 23 19:35:10 2017
# Not Valid After : Sat Aug 23 19:35:10 2042
# Fingerprint (SHA-256):
94:5B:BC:82:5E:A5:54:F4:89:D1:FD:51:A7:3D:DF:2E:A6:24:AC:70:19:A0:52:05:22:5C:22:A7:8C:CF:A8:B4
# Fingerprint (SHA1): B4:90:82:DD:45:0C:BE:8B:5B:B1:66:D3:E2:A4:08:26:CD:ED:42:CF
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE
CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Trustwave Global ECC P256 Certification Authority"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\201\221\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\021\060\017\006\003\125\004\010\023\010\111\154\154\151\156
\157\151\163\061\020\060\016\006\003\125\004\007\023\007\103\150
\151\143\141\147\157\061\041\060\037\006\003\125\004\012\023\030
\124\162\165\163\164\167\141\166\145\040\110\157\154\144\151\156
\147\163\054\040\111\156\143\056\061\072\060\070\006\003\125\004
\003\023\061\124\162\165\163\164\167\141\166\145\040\107\154\157
\142\141\154\040\105\103\103\040\120\062\065\066\040\103\145\162
\164\151\146\151\143\141\164\151\157\156\040\101\165\164\150\157
\162\151\164\171
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\201\221\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\021\060\017\006\003\125\004\010\023\010\111\154\154\151\156
\157\151\163\061\020\060\016\006\003\125\004\007\023\007\103\150
\151\143\141\147\157\061\041\060\037\006\003\125\004\012\023\030
\124\162\165\163\164\167\141\166\145\040\110\157\154\144\151\156
\147\163\054\040\111\156\143\056\061\072\060\070\006\003\125\004
\003\023\061\124\162\165\163\164\167\141\166\145\040\107\154\157
\142\141\154\040\105\103\103\040\120\062\065\066\040\103\145\162
\164\151\146\151\143\141\164\151\157\156\040\101\165\164\150\157
\162\151\164\171
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\014\015\152\137\010\077\050\134\076\121\225\337\135
END
CKA_VALUE MULTILINE_OCTAL
\060\202\002\140\060\202\002\007\240\003\002\001\002\002\014\015
\152\137\010\077\050\134\076\121\225\337\135\060\012\006\010\052
\206\110\316\075\004\003\002\060\201\221\061\013\060\011\006\003
```



\125\004\006\023\002\125\123\061\021\060\017\006\003\125\004\010  
\023\010\111\154\154\151\156\157\151\163\061\020\060\016\006\003  
\125\004\007\023\007\103\150\151\143\141\147\157\061\041\060\037  
\006\003\125\004\012\023\030\124\162\165\163\164\167\141\166\145  
\040\110\157\154\144\151\156\147\163\054\040\111\156\143\056\061  
\072\060\070\006\003\125\004\003\023\061\124\162\165\163\164\167  
\141\166\145\040\107\154\157\142\141\154\040\105\103\103\040\120  
\062\065\066\040\103\145\162\164\151\146\151\143\141\164\151\157  
\156\040\101\165\164\150\157\162\151\164\171\060\036\027\015\061  
\067\060\070\062\063\061\071\063\065\061\060\132\027\015\064\062  
\060\070\062\063\061\071\063\065\061\060\132\060\201\221\061\013  
\060\011\006\003\125\004\006\023\002\125\123\061\021\060\017\006  
\003\125\004\010\023\010\111\154\154\151\156\157\151\163\061\020  
\060\016\006\003\125\004\007\023\007\103\150\151\143\141\147\157  
\061\041\060\037\006\003\125\004\012\023\030\124\162\165\163\164  
\167\141\166\145\040\110\157\154\144\151\156\147\163\054\040\111  
\156\143\056\061\072\060\070\006\003\125\004\003\023\061\124\162  
\165\163\164\167\141\166\145\040\107\154\157\142\141\154\040\105  
\103\103\040\120\062\065\066\040\103\145\162\164\151\146\151\143  
\141\164\151\157\156\040\101\165\164\150\157\162\151\164\171\060  
\131\060\023\006\007\052\206\110\316\075\002\001\006\010\052\206  
\110\316\075\003\001\007\003\102\000\004\176\373\154\346\043\343  
\163\062\010\312\140\346\123\234\272\164\215\030\260\170\220\122  
\200\335\070\300\112\035\321\250\314\223\244\227\006\070\312\015  
\025\142\306\216\001\052\145\235\252\337\064\221\056\201\301\344  
\063\222\061\304\375\011\072\246\077\255\243\103\060\101\060\017  
\006\003\125\035\023\001\001\377\004\005\060\003\001\001\377\060  
\017\006\003\125\035\017\001\001\377\004\005\003\003\007\006\000  
\060\035\006\003\125\035\016\004\026\004\024\243\101\006\254\220  
\155\321\112\353\165\245\112\020\231\263\261\241\213\112\367\060  
\012\006\010\052\206\110\316\075\004\003\002\003\107\000\060\104  
\002\040\007\346\124\332\016\240\132\262\256\021\237\207\305\266  
\377\151\336\045\276\370\240\267\010\363\104\316\052\337\010\041  
\014\067\002\040\055\046\003\240\005\275\153\321\366\134\370\145  
\314\206\155\263\234\064\110\143\204\011\305\215\167\032\342\314  
\234\341\164\173

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "Trustwave Global ECC P256 Certification Authority"

# Issuer: CN=Trustwave Global ECC P256 Certification Authority,O="Trustwave Holdings,  
Inc.",L=Chicago,ST=Illinois,C=US

# Serial Number:0d:6a:5f:08:3f:28:5c:3e:51:95:df:5d

# Subject: CN=Trustwave Global ECC P256 Certification Authority,O="Trustwave Holdings,  
Inc.",L=Chicago,ST=Illinois,C=US

```

# Not Valid Before: Wed Aug 23 19:35:10 2017
# Not Valid After : Sat Aug 23 19:35:10 2042
# Fingerprint (SHA-256):
94:5B:BC:82:5E:A5:54:F4:89:D1:FD:51:A7:3D:DF:2E:A6:24:AC:70:19:A0:52:05:22:5C:22:A7:8C:CF:A8:B4
# Fingerprint (SHA1): B4:90:82:DD:45:0C:BE:8B:5B:B1:66:D3:E2:A4:08:26:CD:ED:42:CF
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Trustwave Global
ECC P256 Certification Authority"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\264\220\202\335\105\014\276\213\133\261\146\323\342\244\010\046
\315\355\102\317
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\133\104\343\215\135\066\206\046\350\015\005\322\131\247\203\124
END
CKA_ISSUER MULTILINE_OCTAL
\060\201\221\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\021\060\017\006\003\125\004\010\023\010\111\154\154\151\156
\157\151\163\061\020\060\016\006\003\125\004\007\023\007\103\150
\151\143\141\147\157\061\041\060\037\006\003\125\004\012\023\030
\124\162\165\163\164\167\141\166\145\040\110\157\154\144\151\156
\147\163\054\040\111\156\143\056\061\072\060\070\006\003\125\004
\003\023\061\124\162\165\163\164\167\141\166\145\040\107\154\157
\142\141\154\040\105\103\103\040\120\062\065\066\040\103\145\162
\164\151\146\151\143\141\164\151\157\156\040\101\165\164\150\157
\162\151\164\171
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\014\015\152\137\010\077\050\134\076\121\225\337\135
END
CKA_TRUST_SERVER_AUTH
CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "Trustwave Global ECC P384 Certification Authority"
#
# Issuer: CN=Trustwave Global ECC P384 Certification Authority,O="Trustwave Holdings,
Inc.",L=Chicago,ST=Illinois,C=US
# Serial Number:08:bd:85:97:6c:99:27:a4:80:68:47:3b
# Subject: CN=Trustwave Global ECC P384 Certification Authority,O="Trustwave Holdings,
Inc.",L=Chicago,ST=Illinois,C=US
# Not Valid Before: Wed Aug 23 19:36:43 2017

```

# Not Valid After : Sat Aug 23 19:36:43 2042

# Fingerprint (SHA-256):

55:90:38:59:C8:C0:C3:EB:B8:75:9E:CE:4E:25:57:22:5F:F5:75:8B:BD:38:EB:D4:82:76:60:1E:1B:D5:80:97

# Fingerprint (SHA1): E7:F3:A3:C8:CF:6F:C3:04:2E:6D:0E:67:32:C5:9E:68:95:0D:5E:D2

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_CERTIFICATE

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL

UTF8 "Trustwave Global ECC P384 Certification Authority"

CKA\_CERTIFICATE\_TYPE CK\_CERTIFICATE\_TYPE CKC\_X\_509

CKA\_SUBJECT MULTILINE\_OCTAL

\060\201\221\061\013\060\011\006\003\125\004\006\023\002\125\123  
\061\021\060\017\006\003\125\004\010\023\010\111\154\154\151\156  
\157\151\163\061\020\060\016\006\003\125\004\007\023\007\103\150  
\151\143\141\147\157\061\041\060\037\006\003\125\004\012\023\030  
\124\162\165\163\164\167\141\166\145\040\110\157\154\144\151\156  
\147\163\054\040\111\156\143\056\061\072\060\070\006\003\125\004  
\003\023\061\124\162\165\163\164\167\141\166\145\040\107\154\157  
\142\141\154\040\105\103\103\040\120\063\070\064\040\103\145\162  
\164\151\146\151\143\141\164\151\157\156\040\101\165\164\150\157  
\162\151\164\171

END

CKA\_ID UTF8 "0"

CKA\_ISSUER MULTILINE\_OCTAL

\060\201\221\061\013\060\011\006\003\125\004\006\023\002\125\123  
\061\021\060\017\006\003\125\004\010\023\010\111\154\154\151\156  
\157\151\163\061\020\060\016\006\003\125\004\007\023\007\103\150  
\151\143\141\147\157\061\041\060\037\006\003\125\004\012\023\030  
\124\162\165\163\164\167\141\166\145\040\110\157\154\144\151\156  
\147\163\054\040\111\156\143\056\061\072\060\070\006\003\125\004  
\003\023\061\124\162\165\163\164\167\141\166\145\040\107\154\157  
\142\141\154\040\105\103\103\040\120\063\070\064\040\103\145\162  
\164\151\146\151\143\141\164\151\157\156\040\101\165\164\150\157  
\162\151\164\171

END

CKA\_SERIAL\_NUMBER

MULTILINE\_OCTAL

\002\014\010\275\205\227\154\231\047\244\200\150\107\073

END

CKA\_VALUE MULTILINE\_OCTAL

\060\202\002\235\060\202\002\044\240\003\002\001\002\002\014\010  
\275\205\227\154\231\047\244\200\150\107\073\060\012\006\010\052  
\206\110\316\075\004\003\003\060\201\221\061\013\060\011\006\003  
\125\004\006\023\002\125\123\061\021\060\017\006\003\125\004\010  
\023\010\111\154\154\151\156\157\151\163\061\020\060\016\006\003  
\125\004\007\023\007\103\150\151\143\141\147\157\061\041\060\037  
\006\003\125\004\012\023\030\124\162\165\163\164\167\141\166\145

\040\110\157\154\144\151\156\147\163\054\040\111\156\143\056\061  
\072\060\070\006\003\125\004\003\023\061\124\162\165\163\164\167  
\141\166\145\040\107\154\157\142\141\154\040\105\103\103\040\120  
\063\070\064\040\103\145\162\164\151\146\151\143\141\164\151\157  
\156\040\101\165\164\150\157\162\151\164\171\060\036\027\015\061  
\067\060\070\062\063\061\071\063\066\064\063\132\027\015\064\062  
\060\070\062\063\061\071\063\066\064\063\132\060\201\221\061\013  
\060\011\006\003\125\004\006\023\002\125\123\061\021\060\017\006  
\003\125\004\010\023\010\111\154\154\151\156\157\151\163\061\020  
\060\016\006\003\125\004\007\023\007\103\150\151\143\141\147\157  
\061\041\060\037\006\003\125\004\012\023\030\124\162\165\163\164  
\167\141\166\145\040\110\157\154\144\151\156\147\163\054\040\111  
\156\143\056\061\072\060\070\006\003\125\004\003\023\061\124\162  
\165\163\164\167\141\166\145\040\107\154\157\142\141\154\040\105  
\103\103\040\120\063\070\064\040\103\145\162\164\151\146\151\143  
\141\164\151\157\156\040\101\165\164\150\157\162\151\164\171\060  
\166\060\020\006\007\052\206\110\316\075\002\001\006\005\053\201  
\004\000\042\003\142\000\004\153\332\015\165\065\010\061\107\005  
\256\105\231\125\361\021\023\056\112\370\020\061\043\243\176\203  
\323\177\050\010\072\046\032\072\317\227\202\037\200\267\047\011  
\217\321\216\060\304\012\233\016\254\130\004\253\367\066\175\224  
\043\244\233\012\212\213\253\353\375\071\045\146\361\136\376\214  
\256\215\101\171\235\011\140\316\050\251\323\212\155\363\326\105  
\324\362\230\204\070\145\240\243\103\060\101\060\017\006\003\125  
\035\023\001\001\377\004\005\060\003\001\001\377\060\017\006\003  
\125\035\017\001\001\377\004\005\003\003\007\006\000\060\035\006  
\003\125\035\016\004\026\004\024\125\251\204\211\322\301\062\275  
\030\313\154\246\007\116\310\347\235\276\202\220\060\012\006\010  
\052\206\110\316\075\004\003\003\003\147\000\060\144\002\060\067  
\001\222\227\105\022\176\240\363\076\255\031\072\162\335\364\120  
\223\003\022\276\104\322\117\101\244\214\234\235\037\243\366\302  
\222\347\110\024\376\116\233\245\221\127\256\306\067\162\273\002  
\060\147\045\012\261\014\136\356\251\143\222\157\345\220\013\376  
\146\042\312\107\375\212\061\367\203\376\172\277\020\276\030\053  
\036\217\366\051\036\224\131\357\216\041\067\313\121\230\245\156  
\113

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "Trustwave Global ECC P384 Certification Authority"

# Issuer: CN=Trustwave Global ECC P384 Certification Authority,O="Trustwave Holdings,  
Inc.",L=Chicago,ST=Illinois,C=US

# Serial Number:08:bd:85:97:6c:99:27:a4:80:68:47:3b

# Subject: CN=Trustwave Global ECC P384 Certification Authority,O="Trustwave Holdings,  
Inc.",L=Chicago,ST=Illinois,C=US

```

# Not Valid Before: Wed Aug 23 19:36:43 2017
# Not Valid After : Sat Aug 23 19:36:43 2042
# Fingerprint (SHA-256):
55:90:38:59:C8:C0:C3:EB:B8:75:9E:CE:4E:25:57:22:5F:F5:75:8B:BD:38:EB:D4:82:76:60:1E:1B:D5:80:97
# Fingerprint (SHA1): E7:F3:A3:C8:CF:6F:C3:04:2E:6D:0E:67:32:C5:9E:68:95:0D:5E:D2
CKA_CLASS
CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Trustwave Global ECC P384 Certification Authority"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\347\363\243\310\317\157\303\004\056\155\016\147\062\305\236\150
\225\015\136\322
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\352\317\140\304\073\271\025\051\100\241\227\355\170\047\223\326
END
CKA_ISSUER MULTILINE_OCTAL
\060\201\221\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\021\060\017\006\003\125\004\010\023\010\111\154\154\151\156
\157\151\163\061\020\060\016\006\003\125\004\007\023\007\103\150
\151\143\141\147\157\061\041\060\037\006\003\125\004\012\023\030
\124\162\165\163\164\167\141\166\145\040\110\157\154\144\151\156
\147\163\054\040\111\156\143\056\061\072\060\070\006\003\125\004
\003\023\061\124\162\165\163\164\167\141\166\145\040\107\154\157
\142\141\154\040\105\103\103\040\120\063\070\064\040\103\145\162
\164\151\146\151\143\141\164\151\157\156\040\101\165\164\150\157
\162\151\164\171
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\014\010\275\205\227\154\231\047\244\200\150\107\073
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "NAVER Global Root Certification Authority"
#
# Issuer: CN=NAVER Global Root Certification Authority,O=NAVER BUSINESS PLATFORM Corp.,C=KR
# Serial Number:01:94:30:1e:a2:0b:dd:f5:c5:33:2a:b1:43:44:71:f8:d6:50:4d:0d
# Subject: CN=NAVER Global Root Certification Authority,O=NAVER BUSINESS PLATFORM Corp.,C=KR
# Not Valid Before: Fri Aug 18 08:58:42 2017
# Not Valid After : Tue Aug 18 23:59:59 2037
# Fingerprint (SHA-256):

```

88:F4:38:DC:F8:FF:D1:FA:8F:42:91:15:FF:E5:F8:2A:E1:E0:6E:0C:70:C3:75:FA:AD:71:7B:34:A4:9E:72:65

# Fingerprint (SHA1): 8F:6B:F2:A9:27:4A:DA:14:A0:C4:F4:8E:61:27:F9:C0:1E:78:5D:D1

CKA\_CLASS

CK\_OBJECT\_CLASS CKO\_CERTIFICATE

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "NAVER Global Root Certification Authority"

CKA\_CERTIFICATE\_TYPE CK\_CERTIFICATE\_TYPE CKC\_X\_509

CKA\_SUBJECT MULTILINE\_OCTAL

\060\151\061\013\060\011\006\003\125\004\006\023\002\113\122\061  
\046\060\044\006\003\125\004\012\014\035\116\101\126\105\122\040  
\102\125\123\111\116\105\123\123\040\120\114\101\124\106\117\122  
\115\040\103\157\162\160\056\061\062\060\060\006\003\125\004\003  
\014\051\116\101\126\105\122\040\107\154\157\142\141\154\040\122  
\157\157\164\040\103\145\162\164\151\146\151\143\141\164\151\157  
\156\040\101\165\164\150\157\162\151\164\171

END

CKA\_ID UTF8 "0"

CKA\_ISSUER MULTILINE\_OCTAL

\060\151\061\013\060\011\006\003\125\004\006\023\002\113\122\061  
\046\060\044\006\003\125\004\012\014\035\116\101\126\105\122\040  
\102\125\123\111\116\105\123\123\040\120\114\101\124\106\117\122  
\115\040\103\157\162\160\056\061\062\060\060\006\003\125\004\003  
\014\051\116\101\126\105\122\040\107\154\157\142\141\154\040\122  
\157\157\164\040\103\145\162\164\151\146\151\143\141\164\151\157  
\156\040\101\165\164\150\157\162\151\164\171

END

CKA\_SERIAL\_NUMBER

MULTILINE\_OCTAL

\002\024\001\224\060\036\242\013\335\365\305\063\052\261\103\104  
\161\370\326\120\115\015

END

CKA\_VALUE MULTILINE\_OCTAL

\060\202\005\242\060\202\003\212\240\003\002\001\002\002\024\001  
\224\060\036\242\013\335\365\305\063\052\261\103\104\161\370\326  
\120\115\015\060\015\006\011\052\206\110\206\367\015\001\001\014  
\005\000\060\151\061\013\060\011\006\003\125\004\006\023\002\113  
\122\061\046\060\044\006\003\125\004\012\014\035\116\101\126\105  
\122\040\102\125\123\111\116\105\123\123\040\120\114\101\124\106  
\117\122\115\040\103\157\162\160\056\061\062\060\060\006\003\125  
\004\003\014\051\116\101\126\105\122\040\107\154\157\142\141\154  
\040\122\157\157\164\040\103\145\162\164\151\146\151\143\141\164  
\151\157\156\040\101\165\164\150\157\162\151\164\171\060\036\027  
\015\061\067\060\070\061\070\060\070\065\070\064\062\132\027\015  
\063\067\060\070\061\070\062\063\065\071\065\071\132\060\151\061  
\013\060\011\006\003\125\004\006\023\002\113\122\061\046\060\044  
\006\003\125\004\012\014\035\116\101\126\105\122\040\102\125\123

\111\116\105\123\123\040\120\114\101\124\106\117\122\115\040\103  
\157\162\160\056\061\062\060\060\006\003\125\004\003\014\051\116  
\101\126\105\122\040\107\154\157\142\141\154\040\122\157\157\164  
\040\103\145\162\164\151\146\151\143\141\164\151\157\156\040\101  
\165\164\150\157\162\151\164\171\060\202\002\042\060\015\006\011  
\052\206\110\206\367\015\001\001\001\005\000\003\202\002\017\000  
\060\202\002\012\002\202\002\001\000\266\324\361\223\134\265\100  
\211\012\253\015\220\133\120\143\256\220\224\164\027\105\162\326  
\173\145\132\051\113\247\126\240\113\270\057\102\165\351\331\173  
\044\132\061\145\253\027\027\321\063\072\331\021\334\100\066\207  
\337\307\152\351\046\136\131\212\167\343\350\110\234\061\026\372  
\076\221\261\312\311\243\342\237\316\041\123\243\002\066\060\313  
\122\002\345\332\062\135\303\305\346\371\356\021\307\213\311\104  
\036\204\223\030\112\264\237\345\022\144\151\320\046\205\142\001  
\266\311\002\035\276\203\121\273\134\332\370\255\025\152\231\367  
\222\124\367\064\133\351\277\352\051\201\022\324\123\221\226\263  
\221\132\335\376\220\163\050\373\060\106\265\312\010\007\307\161  
\162\311\146\323\064\227\366\214\364\030\112\341\320\075\132\105  
\266\151\247\051\373\043\316\210\330\022\234\000\110\250\246\017  
\263\073\222\215\161\016\164\305\213\310\114\371\364\233\216\270  
\074\151\355\157\073\120\057\130\355\304\260\320\034\033\152\014  
\342\274\104\252\330\315\024\135\224\170\141\277\016\156\332\052  
\274\057\014\013\161\246\263\026\077\234\346\371\314\237\123\065  
\342\003\240\240\030\277\273\361\276\364\326\214\207\015\102\367  
\006\271\361\155\355\004\224\250\376\266\323\006\306\100\141\337  
\235\235\363\124\166\316\123\072\001\246\222\101\354\004\243\217  
\015\242\325\011\312\326\313\232\361\357\103\135\300\253\245\101  
\317\134\123\160\160\311\210\246\055\324\153\141\163\120\046\206  
\141\016\137\033\302\053\342\214\325\273\235\301\003\102\272\224  
\332\137\251\260\312\314\115\012\357\107\151\003\057\042\373\361  
\050\316\277\135\120\145\250\220\155\263\164\260\010\307\254\250  
\321\353\076\234\374\135\032\203\056\053\313\265\363\104\235\072  
\247\027\141\226\242\161\323\160\226\025\115\267\114\163\356\031  
\134\305\133\076\101\376\254\165\140\073\033\143\316\000\335\332  
\010\220\142\264\345\055\356\110\247\153\027\231\124\276\207\112  
\343\251\136\004\114\353\020\155\124\326\357\361\350\362\142\026  
\313\200\153\355\075\355\365\037\060\245\256\113\311\023\355\212  
\001\001\311\270\121\130\300\146\072\261\146\113\304\325\061\002  
\142\351\164\204\014\333\115\106\055\002\003\001\000\001\243\102  
\060\100\060\035\006\003\125\035\016\004\026\004\024\322\237\210  
\337\241\315\054\275\354\365\073\001\001\223\063\047\262\353\140  
\113\060\016\006\003\125\035\017\001\001\377\004\004\003\002\001  
\006\060\017\006\003\125\035\023\001\001\377\004\005\060\003\001  
\001\377\060\015\006\011\052\206\110\206\367\015\001\001\014\005  
\000\003\202\002\001\000\062\312\200\263\235\075\124\006\335\322  
\322\056\360\244\001\041\013\147\110\312\155\216\340\310\252\015  
\252\215\041\127\217\306\076\172\312\333\121\324\122\263\324\226  
\204\245\130\140\177\345\013\216\037\365\334\012\025\201\345\073

\266\267\042\057\011\234\023\026\261\154\014\065\010\155\253\143  
\162\355\334\276\354\307\127\346\060\040\161\326\327\020\301\023  
\125\001\214\052\103\344\101\361\317\072\172\123\222\316\242\003  
\005\015\070\337\002\273\020\056\331\073\322\233\172\300\241\246  
\370\265\061\346\364\165\311\271\123\231\165\107\042\132\024\025  
\307\170\033\266\235\351\014\370\033\166\361\205\204\336\241\332  
\022\357\244\342\020\227\172\170\336\014\121\227\250\041\100\213  
\206\275\015\360\136\116\113\066\273\073\040\037\212\102\126\341  
\013\032\277\173\320\042\103\054\104\214\373\345\052\264\154\034  
\034\272\224\340\023\176\041\346\232\302\313\305\102\144\264\036  
\224\173\010\045\310\161\314\207\105\127\205\323\237\051\142\042  
\203\121\227\000\030\227\167\152\230\222\311\174\140\154\337\154  
\175\112\344\160\114\302\236\270\035\367\320\064\307\017\314\373  
\247\377\003\276\255\160\220\332\013\335\310\155\227\137\232\177  
\011\062\101\375\315\242\314\132\155\114\362\252\111\376\146\370  
\351\330\065\353\016\050\036\356\110\057\072\320\171\011\070\174  
\246\042\202\223\225\320\003\276\276\002\240\005\335\040\042\343  
\157\035\210\064\140\306\346\012\271\011\165\013\360\007\350\151  
\226\065\307\373\043\201\216\070\071\270\105\053\103\170\242\321  
\054\024\377\015\050\162\162\225\233\136\011\333\211\104\230\252  
\241\111\273\161\122\362\277\366\377\047\241\066\257\270\266\167  
\210\335\072\244\155\233\064\220\334\024\135\060\277\267\353\027  
\344\207\267\161\320\241\327\167\025\324\102\327\362\363\061\231  
\135\233\335\026\155\077\352\006\043\370\106\242\042\355\223\366  
\335\232\346\052\207\261\230\124\361\042\367\153\105\343\342\216  
\166\035\232\215\304\006\215\066\267\024\363\235\124\151\267\216  
\074\325\244\155\223\201\267\255\366\275\144\173\302\311\150\071  
\240\222\234\315\064\206\221\220\372\144\121\235\376\376\353\245  
\365\165\336\211\367\162

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRUST\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRUST\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "NAVER Global Root Certification Authority"

# Issuer: CN=NAVER Global Root Certification Authority,O=NAVER BUSINESS PLATFORM Corp.,C=KR

# Serial Number:01:94:30:1e:a2:0b:dd:f5:c5:33:2a:b1:43:44:71:f8:d6:50:4d:0d

# Subject: CN=NAVER Global Root Certification Authority,O=NAVER BUSINESS PLATFORM Corp.,C=KR

# Not Valid Before: Fri Aug 18 08:58:42 2017

# Not Valid After : Tue Aug 18 23:59:59 2037

# Fingerprint (SHA-256):

88:F4:38:DC:F8:FF:D1:FA:8F:42:91:15:FF:E5:F8:2A:E1:E0:6E:0C:70:C3:75:FA:AD:71:7B:34:A4:9E:72:65

# Fingerprint (SHA1): 8F:6B:F2:A9:27:4A:DA:14:A0:C4:F4:8E:61:27:F9:C0:1E:78:5D:D1

CKA\_CLASS

CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE



```

CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "NAVER Global Root Certification Authority"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\217\153\362\251\047\112\332\024\240\304\364\216\141\047\371\300
\036\170\135\321
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\310\176\101\366\045\073\365\011\263\027\350\106\075\277\320\233
END
CKA_ISSUER MULTILINE_OCTAL
\060\151\061\013\060\011\006\003\125\004\006\023\002\113\122\061
\046\060\044\006\003\125\004\012\014\035\116\101\126\105\122\040
\102\125\123\111\116\105\123\123\040\120\114\101\124\106\117\122
\115\040\103\157\162\160\056\061\062\060\060\006\003\125\004\003
\014\051\116\101\126\105\122\040\107\154\157\142\141\154\040\122
\157\157\164\040\103\145\162\164\151\146\151\143\141\164\151\157
\156\040\101\165\164\150\157\162\151\164\171
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\024\001\224\060\036\242\013\335\365\305\063\052\261\103\104
\161\370\326\120\115\015
END
CKA_TRUST_SERVER_AUTH
CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "AC RAIZ FNMT-RCM SERVIDORES SEGUROS"
#
# Issuer: CN=AC RAIZ FNMT-RCM SERVIDORES SEGUROS,OID.2.5.4.97=VATES-
Q2826004J,OU=Ceres,O=FNMT-RCM,C=ES
# Serial Number:62:f6:32:6c:e5:c4:e3:68:5c:1b:62:dd:9c:2e:9d:95
# Subject: CN=AC RAIZ FNMT-RCM SERVIDORES SEGUROS,OID.2.5.4.97=VATES-
Q2826004J,OU=Ceres,O=FNMT-RCM,C=ES
# Not Valid Before: Thu Dec 20 09:37:33 2018
# Not Valid After : Sun Dec 20 09:37:33 2043
# Fingerprint (SHA-256):
55:41:53:B1:3D:2C:F9:DD:B7:53:BF:BE:1A:4E:0A:E0:8D:0A:A4:18:70:58:FE:60:A2:B8:62:B2:E4:B8:7B:CB
# Fingerprint (SHA1): 62:FF:D9:9E:C0:65:0D:03:CE:75:93:D2:ED:3F:2D:32:C9:E3:E5:4A
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8
"AC RAIZ FNMT-RCM SERVIDORES SEGUROS"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509

```

CKA\_SUBJECT MULTILINE\_OCTAL

\060\170\061\013\060\011\006\003\125\004\006\023\002\105\123\061  
\021\060\017\006\003\125\004\012\014\010\106\116\115\124\055\122  
\103\115\061\016\060\014\006\003\125\004\013\014\005\103\145\162  
\145\163\061\030\060\026\006\003\125\004\141\014\017\126\101\124  
\105\123\055\121\062\070\062\066\060\060\064\112\061\054\060\052  
\006\003\125\004\003\014\043\101\103\040\122\101\111\132\040\106  
\116\115\124\055\122\103\115\040\123\105\122\126\111\104\117\122  
\105\123\040\123\105\107\125\122\117\123

END

CKA\_ID UTF8 "0"

CKA\_ISSUER MULTILINE\_OCTAL

\060\170\061\013\060\011\006\003\125\004\006\023\002\105\123\061  
\021\060\017\006\003\125\004\012\014\010\106\116\115\124\055\122  
\103\115\061\016\060\014\006\003\125\004\013\014\005\103\145\162  
\145\163\061\030\060\026\006\003\125\004\141\014\017\126\101\124  
\105\123\055\121\062\070\062\066\060\060\064\112\061\054\060\052  
\006\003\125\004\003\014\043\101\103\040\122\101\111\132\040\106  
\116\115\124\055\122\103\115\040\123\105\122\126\111\104\117\122  
\105\123\040\123\105\107\125\122\117\123

END

CKA\_SERIAL\_NUMBER

MULTILINE\_OCTAL

\002\020\142\366\062\154\345\304\343\150\134\033\142\335\234\056  
\235\225

END

CKA\_VALUE MULTILINE\_OCTAL

\060\202\002\156\060\202\001\363\240\003\002\001\002\002\020\142  
\366\062\154\345\304\343\150\134\033\142\335\234\056\235\225\060  
\012\006\010\052\206\110\316\075\004\003\003\060\170\061\013\060  
\011\006\003\125\004\006\023\002\105\123\061\021\060\017\006\003  
\125\004\012\014\010\106\116\115\124\055\122\103\115\061\016\060  
\014\006\003\125\004\013\014\005\103\145\162\145\163\061\030\060  
\026\006\003\125\004\141\014\017\126\101\124\105\123\055\121\062  
\070\062\066\060\060\064\112\061\054\060\052\006\003\125\004\003  
\014\043\101\103\040\122\101\111\132\040\106\116\115\124\055\122  
\103\115\040\123\105\122\126\111\104\117\122\105\123\040\123\105  
\107\125\122\117\123\060\036\027\015\061\070\061\062\062\060\060  
\071\063\067\063\063\132\027\015\064\063\061\062\062\060\060\071  
\063\067\063\063\132\060\170\061\013\060\011\006\003\125\004\006  
\023\002\105\123\061\021\060\017\006\003\125\004\012\014\010\106  
\116\115\124\055\122\103\115\061\016\060\014\006\003\125\004\013  
\014\005\103\145\162\145\163\061\030\060\026\006\003\125\004\141  
\014\017\126\101\124\105\123\055\121\062\070\062\066\060\060\064  
\112\061\054\060\052\006\003\125\004\003\014\043\101\103\040\122  
\101\111\132\040\106\116\115\124\055\122\103\115\040\123\105\122  
\126\111\104\117\122\105\123\040\123\105\107\125\122\117\123\060  
\166\060\020\006\007\052\206\110\316\075\002\001\006\005\053\201

```
\004\000\042\003\142\000\004\366\272\127\123\310\312\253\337\066
\112\122\041\344\227\322\203\147\236\360\145\121\320\136\207\307
\107\261\131\362\127\107\233\000\002\223\104\027\151\333\102\307
\261\262\072\030\016\264\135\214\263\146\135\241\064\371\066\054
\111\333\363\106\374\263\104\151\104\023\146\375\327\305\375\257
\066\115\316\003\115\007\161\317\257\152\005\322\242\103\132\012
\122\157\001\003\116\216\213\243\102\060\100\060\017\006\003\125
\035\023\001\001\377\004\005\060\003\001\001\377\060\016\006\003
\125\035\017\001\001\377\004\004\003\002\001\006\060\035\006\003
\125\035\016\004\026\004\024\001\271\057\357\277\021\206\140\362
\117\320\101\156\253\163\037\347\322\156\111\060\012\006\010\052
\206\110\316\075\004\003\003\003\151\000\060\146\002\061\000\256
\112\343\053\100\303\164\021\362\225\255\026\043\336\116\014\032
\346\135\245\044\136\153\104\173\374\070\342\117\313\234\105\027
\021\114\024\047\046\125\071\165\112\003\314\023\220\237\222\002
\061\000\372\112\154\140\210\163\363\356\270\230\142\251\316\053
\302\331\212\246\160\061\035\257\260\224\114\353\117\306\343\321
\363\142\247\074\377\223\056\007\134\111\001\147\151\022\002\162
\277\347
```

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "AC

RAIZ FNMT-RCM SERVIDORES SEGUROS"

# Issuer: CN=AC RAIZ FNMT-RCM SERVIDORES SEGUROS,OID.2.5.4.97=VATES-  
Q2826004J,OU=Ceres,O=FNMT-RCM,C=ES

# Serial Number:62:f6:32:6c:e5:c4:e3:68:5c:1b:62:dd:9c:2e:9d:95

# Subject: CN=AC RAIZ FNMT-RCM SERVIDORES SEGUROS,OID.2.5.4.97=VATES-  
Q2826004J,OU=Ceres,O=FNMT-RCM,C=ES

# Not Valid Before: Thu Dec 20 09:37:33 2018

# Not Valid After : Sun Dec 20 09:37:33 2043

# Fingerprint (SHA-256):

55:41:53:B1:3D:2C:F9:DD:B7:53:BF:BE:1A:4E:0A:E0:8D:0A:A4:18:70:58:FE:60:A2:B8:62:B2:E4:B8:7B:CB

# Fingerprint (SHA1): 62:FF:D9:9E:C0:65:0D:03:CE:75:93:D2:ED:3F:2D:32:C9:E3:E5:4A

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "AC RAIZ FNMT-RCM SERVIDORES SEGUROS"

CKA\_CERT\_SHA1\_HASH MULTILINE\_OCTAL

```
\142\377\331\236\300\145\015\003\316\165\223\322\355\077\055\062
\311\343\345\112
```

END

CKA\_CERT\_MD5\_HASH MULTILINE\_OCTAL

```
\031\066\234\122\003\057\322\321\273\043\314\335\036\022\125\273
```

END

CKA\_ISSUER

MULTILINE\_OCTAL

\060\170\061\013\060\011\006\003\125\004\006\023\002\105\123\061  
\021\060\017\006\003\125\004\012\014\010\106\116\115\124\055\122  
\103\115\061\016\060\014\006\003\125\004\013\014\005\103\145\162  
\145\163\061\030\060\026\006\003\125\004\141\014\017\126\101\124  
\105\123\055\121\062\070\062\066\060\060\064\112\061\054\060\052  
\006\003\125\004\003\014\043\101\103\040\122\101\111\132\040\106  
\116\115\124\055\122\103\115\040\123\105\122\126\111\104\117\122  
\105\123\040\123\105\107\125\122\117\123

END

CKA\_SERIAL\_NUMBER MULTILINE\_OCTAL

\002\020\142\366\062\154\345\304\343\150\134\033\142\335\234\056  
\235\225

END

CKA\_TRUST\_SERVER\_AUTH CK\_TRUST CKT\_NSS\_TRUSTED\_DELEGATOR

CKA\_TRUST\_EMAIL\_PROTECTION CK\_TRUST CKT\_NSS\_MUST\_VERIFY\_TRUST

CKA\_TRUST\_CODE\_SIGNING CK\_TRUST CKT\_NSS\_MUST\_VERIFY\_TRUST

CKA\_TRUST\_STEP\_UP\_APPROVED CK\_BBOOL CK\_FALSE

#

# Certificate "GlobalSign Secure Mail Root R45"

#

# Issuer: CN=GlobalSign Secure Mail Root R45,O=GlobalSign nv-sa,C=BE

# Serial Number:76:53:fe:a8:4c:50:ab:9f:8d:32:b5:1d:03:8f:57:dc

#

Subject: CN=GlobalSign Secure Mail Root R45,O=GlobalSign nv-sa,C=BE

# Not Valid Before: Wed Mar 18 00:00:00 2020

# Not Valid After : Sat Mar 18 00:00:00 2045

# Fingerprint (SHA-256):

31:9A:F0:A7:72:9E:6F:89:26:9C:13:1E:A6:A3:A1:6F:CD:86:38:9F:DC:AB:3C:47:A4:A6:75:C1:61:A3:F9:74

# Fingerprint (SHA1): 76:18:D1:F3:80:24:3D:52:40:C6:11:6A:AD:57:77:09:7D:81:30:A0

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_CERTIFICATE

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "GlobalSign Secure Mail Root R45"

CKA\_CERTIFICATE\_TYPE CK\_CERTIFICATE\_TYPE CKC\_X\_509

CKA\_SUBJECT MULTILINE\_OCTAL

\060\122\061\013\060\011\006\003\125\004\006\023\002\102\105\061  
\031\060\027\006\003\125\004\012\023\020\107\154\157\142\141\154  
\123\151\147\156\040\156\166\055\163\141\061\050\060\046\006\003  
\125\004\003\023\037\107\154\157\142\141\154\123\151\147\156\040  
\123\145\143\165\162\145\040\115\141\151\154\040\122\157\157\164  
\040\122\064\065

END

CKA\_ID

UTF8 "0"

CKA\_ISSUER MULTILINE\_OCTAL

\060\122\061\013\060\011\006\003\125\004\006\023\002\102\105\061  
\031\060\027\006\003\125\004\012\023\020\107\154\157\142\141\154  
\123\151\147\156\040\156\166\055\163\141\061\050\060\046\006\003  
\125\004\003\023\037\107\154\157\142\141\154\123\151\147\156\040  
\123\145\143\165\162\145\040\115\141\151\154\040\122\157\157\164  
\040\122\064\065

END

CKA\_SERIAL\_NUMBER MULTILINE\_OCTAL

\002\020\166\123\376\250\114\120\253\237\215\062\265\035\003\217  
\127\334

END

CKA\_VALUE MULTILINE\_OCTAL

\060\202\005\160\060\202\003\130\240\003\002\001\002\002\020\166  
\123\376\250\114\120\253\237\215\062\265\035\003\217\127\334\060  
\015\006\011\052\206\110\206\367\015\001\001\014\005\000\060\122  
\061\013\060\011\006\003\125\004\006\023\002\102\105\061\031\060  
\027\006\003\125\004\012\023\020\107\154\157\142\141\154\123\151  
\147\156\040\156\166\055\163\141\061\050\060\046\006\003\125\004  
\003\023\037\107\154\157\142\141\154\123\151\147\156\040\123\145  
\143\165\162\145\040\115\141\151\154\040\122\157\157\164\040\122  
\064\065\060\036\027\015\062\060\060\063\061\070\060\060\060\060  
\060\060\132\027\015\064\065\060\063\061\070\060\060\060\060\060  
\060\132\060\122\061\013\060\011\006\003\125\004\006\023\002\102  
\105\061\031\060\027\006\003\125\004\012\023\020\107\154\157\142  
\141\154\123\151\147\156\040\156\166\055\163\141\061\050\060\046  
\006\003\125\004\003\023\037\107\154\157\142\141\154\123\151\147  
\156\040\123\145\143\165\162\145\040\115\141\151\154\040\122\157  
\157\164\040\122\064\065\060\202\002\042\060\015\006\011\052\206  
\110\206\367\015\001\001\001\005\000\003\202\002\017\000\060\202  
\002\012\002\202\002\001\000\334\171\314\155\006\371\155\273\340  
\126\004\154\177\340\165\314\055\005\111\350\113\334\124\354\133  
\167\225\162\277\177\142\235\205\251\212\044\120\137\123\345\333  
\164\157\244\051\133\023\052\011\255\232\305\057\302\367\166\073  
\241\105\106\252\103\346\044\376\053\260\157\062\160\031\106\132  
\171\046\057\374\075\175\137\144\313\127\314\141\141\250\331\225  
\156\343\225\240\156\177\107\022\030\326\357\003\311\373\212\372  
\232\275\202\025\251\125\167\113\021\117\131\340\153\303\161\363  
\014\330\124\325\201\150\076\023\271\025\056\207\212\074\104\047  
\066\142\044\156\370\054\005\162\060\141\275\102\221\043\304\235  
\045\247\331\124\232\024\243\061\255\200\171\014\247\143\154\230  
\243\254\127\107\063\037\145\226\341\320\322\065\332\371\161\367  
\241\246\045\265\101\135\337\076\140\330\321\366\237\245\362\270  
\314\023\252\217\371\262\156\341\203\055\223\335\076\205\032\335  
\350\261\134\046\001\313\111\205\374\374\322\324\177\205\142\206  
\164\371\313\354\065\042\242\014\060\217\073\253\171\353\126\362  
\372\102\363\355\371\037\105\211\100\051\255\352\222\164\352\122

\375\126\264\053\332\242\355\165\302\156\253\316\122\220\113\366  
\336\360\111\217\232\110\324\210\031\155\105\346\314\214\271\335  
\144\140\140\002\100\370\271\317\274\130\353\075\205\271\306\012  
\323\234\007\146\217\307\030\071\043\106\341\074\036\243\057\120  
\141\222\013\075\053\154\361\243\107\070\127\221\253\015\217\306  
\235\115\004\322\046\122\134\345\245\375\052\055\026\052\001\151  
\347\251\175\341\066\267\261\052\305\331\261\215\275\271\213\316  
\314\213\241\076\013\110\315\120\225\064\304\330\010\131\330\153  
\046\364\276\365\324\042\027\000\127\311\256\233\004\060\063\237  
\013\373\337\126\242\311\156\124\166\332\261\227\142\047\131\017  
\021\212\042\033\144\226\077\250\361\267\044\112\215\074\123\174  
\155\203\166\075\262\046\110\163\365\104\026\001\055\011\052\216  
\026\226\120\320\163\006\135\273\042\110\202\114\012\106\132\077  
\200\377\134\362\362\232\254\054\010\340\326\352\360\022\070\201  
\117\246\020\355\106\253\314\026\234\013\317\144\246\231\002\205  
\104\147\106\255\375\115\347\002\003\001\000\001\243\102\060\100  
\060\016\006\003\125\035\017\001\001\377\004\004\003\002\001\206  
\060\017\006\003\125\035\023\001\001\377\004\005\060\003\001\001  
\377\060\035\006\003\125\035\016\004\026\004\024\240\223\025\050  
\156\356\217\010\262\065\306\236\142\171\164\247\261\016\053\173  
\060\015\006\011\052\206\110\206\367\015\001\001\014\005\000\003  
\202\002\001\000\105\012\370\321\134\254\142\201\320\004\327\266  
\377\127\121\211\013\014\313\336\044\145\067\373\253\236\355\146  
\364\352\014\031\151\211\270\031\261\060\126\264\331\366\367\276  
\306\256\227\313\105\366\021\214\072\060\144\114\301\237\131\300  
\106\102\010\006\107\144\027\170\340\225\007\006\326\214\242\254  
\251\331\077\323\173\126\117\374\304\207\050\337\266\053\026\043  
\300\237\037\133\343\326\104\136\042\117\043\004\214\065\026\265  
\171\007\206\134\057\227\342\366\010\144\246\334\333\250\212\343  
\244\173\167\015\321\051\223\050\040\264\123\243\113\116\137\336  
\301\366\165\043\374\037\074\170\117\160\061\170\057\242\065\124  
\161\004\254\310\304\155\303\366\221\261\376\315\356\104\156\201  
\366\100\305\076\052\001\277\253\114\261\003\077\015\021\344\017  
\322\044\343\042\210\233\237\137\107\075\121\111\340\011\067\176  
\027\041\061\166\267\147\161\110\050\113\045\327\020\350\237\141  
\131\026\305\076\062\116\037\014\316\243\314\017\344\307\021\007  
\042\057\070\010\335\133\227\353\102\154\131\232\232\356\172\320  
\235\337\305\333\011\103\056\012\252\031\075\153\350\152\060\172  
\127\346\277\263\152\071\251\217\343\361\117\145\150\266\275\237  
\050\217\241\026\132\011\120\072\062\056\035\057\104\021\102\246  
\000\346\061\230\377\055\241\017\346\244\140\126\317\171\327\262  
\116\327\260\372\156\014\127\043\307\316\037\245\261\114\155\031  
\111\236\016\177\160\217\161\077\130\050\237\165\335\141\340\072  
\267\071\266\356\227\324\065\121\373\213\111\140\310\074\146\256  
\227\356\215\046\131\127\273\170\360\172\120\060\011\260\140\252  
\237\116\334\311\076\036\072\334\142\223\063\260\072\124\164\157  
\054\061\105\321\153\021\062\152\150\166\366\075\366\152\023\136  
\044\230\347\352\035\232\317\170\202\007\140\367\115\020\323\201

```
\232\105\215\236\257\233\334\200\307\103\262\225\150\244\303\016
\350\012\107\025\277\124\063\334\001\347\325\246\036\163\330\172
\262\277\057\255\343\125\060\236\337\016\101\274\340\021\365\241
\014\250\042\341\343\000\243\116\160\174\222\343\004\321\172\102
\212\165\220\131\343\233\321\114\242\144\275\163\171\233\157\362
\263\301\366\074
```

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "GlobalSign Secure Mail Root R45"

# Issuer: CN=GlobalSign Secure Mail Root R45,O=GlobalSign nv-sa,C=BE

# Serial Number:76:53:fe:a8:4c:50:ab:9f:8d:32:b5:1d:03:8f:57:dc

# Subject: CN=GlobalSign Secure Mail Root R45,O=GlobalSign nv-sa,C=BE

# Not Valid Before: Wed Mar 18 00:00:00 2020

# Not Valid After : Sat Mar 18 00:00:00 2045

# Fingerprint (SHA-256):

31:9A:F0:A7:72:9E:6F:89:26:9C:13:1E:A6:A3:A1:6F:CD:86:38:9F:DC:AB:3C:47:A4:A6:75:C1:61:A3:F9:74

# Fingerprint (SHA1): 76:18:D1:F3:80:24:3D:52:40:C6:11:6A:AD:57:77:09:7D:81:30:A0

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE

CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "GlobalSign Secure Mail Root R45"

CKA\_CERT\_SHA1\_HASH MULTILINE\_OCTAL

```
\166\030\321\363\200\044\075\122\100\306\021\152\255\127\167\011
\175\201\060\240
```

END

CKA\_CERT\_MD5\_HASH MULTILINE\_OCTAL

```
\223\304\173\263\016\124\107\034\103\054\213\276\160\205\142\051
```

END

CKA\_ISSUER MULTILINE\_OCTAL

```
\060\122\061\013\060\011\006\003\125\004\006\023\002\102\105\061
\031\060\027\006\003\125\004\012\023\020\107\154\157\142\141\154
\123\151\147\156\040\156\166\055\163\141\061\050\060\046\006\003
\125\004\003\023\037\107\154\157\142\141\154\123\151\147\156\040
\123\145\143\165\162\145\040\115\141\151\154\040\122\157\157\164
\040\122\064\065
```

END

CKA\_SERIAL\_NUMBER MULTILINE\_OCTAL

```
\002\020\166\123\376\250\114\120\253\237\215\062\265\035\003\217
\127\334
```

END

CKA\_TRUST\_SERVER\_AUTH CK\_TRUST CKT\_NSS\_MUST\_VERIFY\_TRUST

CKA\_TRUST\_EMAIL\_PROTECTION CK\_TRUST CKT\_NSS\_TRUSTED\_DELEGATOR

CKA\_TRUST\_CODE\_SIGNING CK\_TRUST CKT\_NSS\_MUST\_VERIFY\_TRUST  
CKA\_TRUST\_STEP\_UP\_APPROVED CK\_BBOOL  
CK\_FALSE

#

# Certificate "GlobalSign Secure Mail Root E45"

#

# Issuer: CN=GlobalSign Secure Mail Root E45,O=GlobalSign nv-sa,C=BE

# Serial Number:76:53:fe:aa:27:1d:95:46:5d:d6:f1:9e:e5:b8:90:0a

# Subject: CN=GlobalSign Secure Mail Root E45,O=GlobalSign nv-sa,C=BE

# Not Valid Before: Wed Mar 18 00:00:00 2020

# Not Valid After : Sat Mar 18 00:00:00 2045

# Fingerprint (SHA-256):

5C:BF:6F:B8:1F:D4:17:EA:41:28:CD:6F:81:72:A3:C9:40:20:94:F7:4A:B2:ED:3A:06:B4:40:5D:04:F3:0B:19

# Fingerprint (SHA1): 18:2E:1F:32:4F:89:DF:BE:FE:88:89:F0:93:C2:C4:A0:2B:67:75:21

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_CERTIFICATE

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "GlobalSign Secure Mail Root E45"

CKA\_CERTIFICATE\_TYPE CK\_CERTIFICATE\_TYPE CKC\_X\_509

CKA\_SUBJECT MULTILINE\_OCTAL

\060\122\061\013\060\011\006\003\125\004\006\023\002\102\105\061  
\031\060\027\006\003\125\004\012\023\020\107\154\157\142\141\154  
\123\151\147\156\040\156\166\055\163\141\061\050\060\046\006\003  
\125\004\003\023\037\107\154\157\142\141\154\123\151\147\156\040  
\123\145\143\165\162\145\040\115\141\151\154\040\122\157\157\164  
\040\105\064\065

END

CKA\_ID

UTF8 "0"

CKA\_ISSUER MULTILINE\_OCTAL

\060\122\061\013\060\011\006\003\125\004\006\023\002\102\105\061  
\031\060\027\006\003\125\004\012\023\020\107\154\157\142\141\154  
\123\151\147\156\040\156\166\055\163\141\061\050\060\046\006\003  
\125\004\003\023\037\107\154\157\142\141\154\123\151\147\156\040  
\123\145\143\165\162\145\040\115\141\151\154\040\122\157\157\164  
\040\105\064\065

END

CKA\_SERIAL\_NUMBER MULTILINE\_OCTAL

\002\020\166\123\376\252\047\035\225\106\135\326\361\236\345\270  
\220\012

END

CKA\_VALUE MULTILINE\_OCTAL

\060\202\002\041\060\202\001\247\240\003\002\001\002\002\020\166  
\123\376\252\047\035\225\106\135\326\361\236\345\270\220\012\060  
\012\006\010\052\206\110\316\075\004\003\003\060\122\061\013\060  
\011\006\003\125\004\006\023\002\102\105\061\031\060\027\006\003



\125\004\012\023\020\107\154\157\142\141\154\123\151\147\156\040  
\156\166\055\163\141\061\050\060\046\006\003\125\004\003\023\037  
\107\154\157\142\141\154\123\151\147\156\040\123\145\143\165\162  
\145\040\115\141\151\154\040\122\157\157\164\040\105\064\065\060  
\036\027\015\062\060\060\063\061\070\060\060\060\060\060\132  
\027\015\064\065\060\063\061\070\060\060\060\060\060\132\060  
\122\061\013\060\011\006\003\125\004\006\023\002\102\105\061\031  
\060\027\006\003\125\004\012\023\020\107\154\157\142\141\154\123  
\151\147\156\040\156\166\055\163\141\061\050\060\046\006\003\125  
\004\003\023\037\107\154\157\142\141\154\123\151\147\156\040\123  
\145\143\165\162\145\040\115\141\151\154\040\122\157\157\164\040  
\105\064\065\060\166\060\020\006\007\052\206\110\316\075\002\001  
\006\005\053\201\004\000\042\003\142\000\004\371\171\213\201\107  
\067\211\226\077\105\111\120\177\032\046\013\223\062\176\056\300  
\300\247\010\232\303\156\217\233\076\013\042\354\067\123\267\157  
\212\260\274\047\067\113\155\251\106\073\331\037\377\245\241\104  
\273\055\163\277\236\101\007\134\123\233\121\010\072\132\273\157  
\070\307\026\221\170\302\112\023\151\035\202\337\132\057\000\210  
\226\242\056\034\164\371\235\176\146\067\212\243\102\060\100\060  
\016\006\003\125\035\017\001\001\377\004\004\003\002\001\206\060  
\017\006\003\125\035\023\001\001\377\004\005\060\003\001\001\377  
\060\035\006\003\125\035\016\004\026\004\024\337\023\136\213\137  
\302\100\002\375\126\267\224\114\266\036\325\246\261\024\226\060  
\012\006\010\052\206\110\316\075\004\003\003\003\150\000\060\145  
\002\060\023\260\276\327\161\040\076\344\253\234\316\066\022\175  
\137\114\037\052\265\151\105\063\137\323\055\132\262\344\210\307  
\336\012\066\102\062\171\235\246\153\272\341\371\104\052\173\212  
\303\022\002\061\000\240\146\034\116\207\235\207\311\355\231\114  
\033\012\356\055\140\303\067\307\035\315\265\162\260\331\306\357  
\274\362\377\077\360\122\335\010\347\252\144\171\303\344\151\127  
\221\057\244\313\174

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER

CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "GlobalSign Secure Mail Root E45"

# Issuer: CN=GlobalSign Secure Mail Root E45,O=GlobalSign nv-sa,C=BE

# Serial Number:76:53:fe:aa:27:1d:95:46:5d:d6:f1:9e:e5:b8:90:0a

# Subject: CN=GlobalSign Secure Mail Root E45,O=GlobalSign nv-sa,C=BE

# Not Valid Before: Wed Mar 18 00:00:00 2020

# Not Valid After : Sat Mar 18 00:00:00 2045

# Fingerprint (SHA-256):

5C:BF:6F:B8:1F:D4:17:EA:41:28:CD:6F:81:72:A3:C9:40:20:94:F7:4A:B2:ED:3A:06:B4:40:5D:04:F3:0B:19

# Fingerprint (SHA1): 18:2E:1F:32:4F:89:DF:BE:FE:88:89:F0:93:C2:C4:A0:2B:67:75:21

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

```

CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "GlobalSign Secure Mail Root E45"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\030\056\037\062\117\211\337\276\376\210\211\360\223\302\304\240
\053\147\165\041
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\305\374\306\056\237\364\122\055\052\250\244\272\373\147\062\377
END
CKA_ISSUER
MULTILINE_OCTAL
\060\122\061\013\060\011\006\003\125\004\006\023\002\102\105\061
\031\060\027\006\003\125\004\012\023\020\107\154\157\142\141\154
\123\151\147\156\040\156\166\055\163\141\061\050\060\046\006\003
\125\004\003\023\037\107\154\157\142\141\154\123\151\147\156\040
\123\145\143\165\162\145\040\115\141\151\154\040\122\157\157\164
\040\105\064\065
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\020\166\123\376\252\047\035\225\106\135\326\361\236\345\270
\220\012
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "GlobalSign Root R46"
#
# Issuer: CN=GlobalSign Root R46,O=GlobalSign nv-sa,C=BE
# Serial Number: 11:d2:bb:b9:d7:23:18:9e:40:5f:0a:9d:2d:d0:df:25:67:d1
# Subject: CN=GlobalSign Root R46,O=GlobalSign nv-sa,C=BE
# Not Valid Before: Wed Mar 20 00:00:00 2019
# Not
  Valid After : Tue Mar 20 00:00:00 2046
# Fingerprint (SHA-256):
4F:A3:12:6D:8D:3A:11:D1:C4:85:5A:4F:80:7C:BA:D6:CF:91:9D:3A:5A:88:B0:3B:EA:2C:63:72:D9:3C:40:C9
# Fingerprint (SHA1): 53:A2:B0:4B:CA:6B:D6:45:E6:39:8A:8E:C4:0D:D2:BF:77:C3:A2:90
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "GlobalSign Root R46"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL

```

\060\106\061\013\060\011\006\003\125\004\006\023\002\102\105\061  
\031\060\027\006\003\125\004\012\023\020\107\154\157\142\141\154  
\123\151\147\156\040\156\166\055\163\141\061\034\060\032\006\003  
\125\004\003\023\023\107\154\157\142\141\154\123\151\147\156\040  
\122\157\157\164\040\122\064\066

END

CKA\_ID UTF8 "0"

CKA\_ISSUER MULTILINE\_OCTAL

\060\106\061\013\060\011\006\003\125\004\006\023\002\102\105\061  
\031\060\027\006\003\125\004\012\023\020\107\154\157\142\141\154  
\123\151\147\156\040\156\166\055\163\141\061\034\060\032\006\003  
\125\004\003\023\023\107\154\157\142\141\154\123\151\147\156\040  
\122\157\157\164\040\122\064\066

END

CKA\_SERIAL\_NUMBER

MULTILINE\_OCTAL

\002\022\021\322\273\271\327\043\030\236\100\137\012\235\055\320  
\337\045\147\321

END

CKA\_VALUE MULTILINE\_OCTAL

\060\202\005\132\060\202\003\102\240\003\002\001\002\002\022\021  
\322\273\271\327\043\030\236\100\137\012\235\055\320\337\045\147  
\321\060\015\006\011\052\206\110\206\367\015\001\001\014\005\000  
\060\106\061\013\060\011\006\003\125\004\006\023\002\102\105\061  
\031\060\027\006\003\125\004\012\023\020\107\154\157\142\141\154  
\123\151\147\156\040\156\166\055\163\141\061\034\060\032\006\003  
\125\004\003\023\023\107\154\157\142\141\154\123\151\147\156\040  
\122\157\157\164\040\122\064\066\060\036\027\015\061\071\060\063  
\062\060\060\060\060\060\060\060\132\027\015\064\066\060\063\062  
\060\060\060\060\060\060\060\132\060\106\061\013\060\011\006\003  
\125\004\006\023\002\102\105\061\031\060\027\006\003\125\004\012  
\023\020\107\154\157\142\141\154\123\151\147\156\040\156\166\055  
\163\141\061\034\060\032\006\003\125\004\003\023\023\107\154\157  
\142\141\154\123\151\147\156\040\122\157\157\164\040\122\064\066  
\060\202\002\042\060\015\006\011\052\206\110\206\367\015\001\001  
\001\005\000\003\202\002\017\000\060\202\002\012\002\202\002\001  
\000\254\254\164\062\350\263\145\345\272\355\103\046\035\246\211  
\015\105\272\051\210\262\244\035\143\335\323\301\054\011\127\211  
\071\241\125\351\147\064\167\014\156\344\125\035\122\045\322\023  
\153\136\341\035\251\267\175\211\062\137\015\236\237\054\172\143  
\140\100\037\246\260\266\170\217\231\124\226\010\130\256\344\006  
\274\142\005\002\026\277\257\250\043\003\266\224\017\274\156\154  
\302\313\325\246\273\014\351\366\301\002\373\041\336\146\335\027  
\253\164\102\357\360\164\057\045\364\352\153\125\133\220\333\235  
\337\136\207\012\100\373\255\031\153\373\367\312\140\210\336\332  
\301\217\326\256\325\177\324\074\203\356\327\026\114\203\105\063  
\153\047\320\206\320\034\055\153\363\253\175\361\205\251\365\050  
\322\255\357\363\204\113\034\207\374\023\243\072\162\242\132\021

\053\326\047\161\047\355\201\055\155\146\201\222\207\264\033\130  
\172\314\077\012\372\106\117\115\170\134\370\053\110\343\004\204  
\313\135\366\264\152\263\145\374\102\236\121\046\043\040\313\075  
\024\371\201\355\145\026\000\117\032\144\227\146\010\317\214\173  
\343\053\300\235\371\024\362\033\361\126\152\026\277\054\205\205  
\315\170\070\232\353\102\152\002\064\030\203\027\116\224\126\370  
\266\202\265\363\226\335\075\363\276\177\040\167\076\173\031\043  
\153\054\324\162\163\103\127\175\340\370\327\151\117\027\066\004  
\371\300\220\140\067\105\336\346\014\330\164\215\256\234\242\155  
\164\135\102\276\006\365\331\144\156\002\020\254\211\260\114\073  
\007\115\100\176\044\305\212\230\202\171\216\244\247\202\040\215  
\043\372\047\161\311\337\306\101\164\240\115\366\221\026\334\106  
\214\137\051\143\061\131\161\014\330\157\302\266\062\175\373\346  
\135\123\246\176\025\374\273\165\174\135\354\370\366\027\034\354  
\307\153\031\313\363\173\360\053\007\245\331\154\171\124\166\154  
\235\034\246\156\016\351\171\014\250\043\152\243\337\033\060\061  
\237\261\124\173\376\152\313\146\252\334\145\320\242\236\112\232  
\007\041\153\201\217\333\304\131\372\336\042\300\004\234\343\252  
\133\066\223\350\075\275\172\241\235\013\166\261\013\307\235\375  
\317\230\250\006\302\370\052\243\241\203\240\267\045\162\245\002  
\343\002\003\001\000\001\243\102\060\100\060\016\006\003\125\035  
\017\001\001\377\004\004\003\002\001\206\060\017\006\003\125\035  
\023\001\001\377\004\005\060\003\001\001\377\060\035\006\003\125  
\035\016\004\026\004\024\003\134\253\163\201\207\250\314\260\246  
\325\224\342\066\226\111\377\005\231\054\060\015\006\011\052\206  
\110\206\367\015\001\001\014\005\000\003\202\002\001\000\174\170  
\354\366\002\054\273\133\176\222\053\135\071\334\276\330\035\242  
\102\063\115\371\357\244\052\073\104\151\036\254\331\105\243\116  
\074\247\330\044\121\262\124\034\223\116\304\357\173\223\205\140  
\046\352\011\110\340\365\273\307\351\150\322\273\152\061\161\314  
\171\256\021\250\360\231\375\345\037\274\057\250\314\127\353\166  
\304\041\246\107\123\125\115\150\277\005\244\356\327\046\253\142  
\332\103\067\113\342\306\265\345\262\203\031\072\307\323\333\115  
\236\010\172\363\356\317\076\142\373\254\350\140\314\321\307\241  
\134\203\105\304\105\314\363\027\153\024\311\004\002\076\322\044  
\246\171\351\036\316\242\347\301\131\025\237\035\342\113\232\076  
\237\166\010\055\153\330\272\127\024\332\203\352\376\214\125\351  
\320\116\251\314\167\061\261\104\021\172\134\261\076\323\024\105  
\025\030\142\044\023\322\313\115\316\134\203\301\066\362\020\265  
\016\210\155\270\341\126\237\211\336\226\146\071\107\144\054\156  
\115\256\142\173\277\140\164\031\270\126\254\222\254\026\062\355  
\255\150\125\376\230\272\323\064\336\364\311\141\303\016\206\366  
\113\204\140\356\015\173\265\062\130\171\221\125\054\201\103\263  
\164\037\172\252\045\236\035\327\241\213\271\315\102\056\004\244  
\146\203\115\211\065\266\154\250\066\112\171\041\170\042\320\102  
\274\321\100\061\220\241\276\004\317\312\147\355\365\360\200\323  
\140\311\203\052\042\005\320\007\073\122\277\014\236\252\053\371  
\273\346\037\217\045\272\205\215\027\036\002\376\135\120\004\127

```
\317\376\055\274\357\134\300\032\253\266\237\044\306\337\163\150
\110\220\054\024\364\077\122\032\344\322\313\024\303\141\151\317
\342\371\030\305\272\063\237\024\243\004\135\271\161\367\265\224
\330\366\063\301\132\301\064\213\174\233\335\223\072\347\023\242
\160\141\237\257\217\353\330\305\165\370\063\146\324\164\147\072
\067\167\234\347\335\244\017\166\103\146\212\103\362\237\373\014
\102\170\143\321\342\017\157\173\324\241\075\164\227\205\267\110
\071\101\326\040\374\320\072\263\372\350\157\304\212\272\161\067
\276\213\227\261\170\061\117\263\347\266\003\023\316\124\235\256
\045\131\314\177\065\137\010\367\100\105\061\170\052\172
```

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

#

Trust for "GlobalSign Root R46"

# Issuer: CN=GlobalSign Root R46,O=GlobalSign nv-sa,C=BE

# Serial Number:11:d2:bb:b9:d7:23:18:9e:40:5f:0a:9d:2d:d0:df:25:67:d1

# Subject: CN=GlobalSign Root R46,O=GlobalSign nv-sa,C=BE

# Not Valid Before: Wed Mar 20 00:00:00 2019

# Not Valid After : Tue Mar 20 00:00:00 2046

# Fingerprint (SHA-256):

4F:A3:12:6D:8D:3A:11:D1:C4:85:5A:4F:80:7C:BA:D6:CF:91:9D:3A:5A:88:B0:3B:EA:2C:63:72:D9:3C:40:C9

# Fingerprint (SHA1): 53:A2:B0:4B:CA:6B:D6:45:E6:39:8A:8E:C4:0D:D2:BF:77:C3:A2:90

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "GlobalSign Root R46"

CKA\_CERT\_SHA1\_HASH MULTILINE\_OCTAL

```
\123\242\260\113\312\153\326\105\346\071\212\216\304\015\322\277
\167\303\242\220
```

END

CKA\_CERT\_MD5\_HASH MULTILINE\_OCTAL

```
\304\024\060\344\372\146\103\224\052\152\033\044\137\031\320\357
```

END

CKA\_ISSUER MULTILINE\_OCTAL

```
\060\106\061\013\060\011\006\003\125\004\006\023\002\102\105\061
\031\060\027\006\003\125\004\012\023\020\107\154\157\142\141\154
\123\151\147\156\040\156\166\055\163\141\061\034\060\032\006\003
\125\004\003\023\023\107\154\157\142\141\154\123\151\147\156\040
\122\157\157\164\040\122\064\066
```

END

CKA\_SERIAL\_NUMBER

MULTILINE\_OCTAL

```
\002\022\021\322\273\271\327\043\030\236\100\137\012\235\055\320
```

\337\045\147\321

END

CKA\_TRUST\_SERVER\_AUTH CK\_TRUST CKT\_NSS\_TRUSTED\_DELEGATOR  
CKA\_TRUST\_EMAIL\_PROTECTION CK\_TRUST CKT\_NSS\_MUST\_VERIFY\_TRUST  
CKA\_TRUST\_CODE\_SIGNING CK\_TRUST CKT\_NSS\_MUST\_VERIFY\_TRUST  
CKA\_TRUST\_STEP\_UP\_APPROVED CK\_BBOOL CK\_FALSE

#

# Certificate "GlobalSign Root E46"

#

# Issuer: CN=GlobalSign Root E46,O=GlobalSign nv-sa,C=BE

# Serial Number:11:d2:bb:ba:33:6e:d4:bc:e6:24:68:c5:0d:84:1d:98:e8:43

# Subject: CN=GlobalSign Root E46,O=GlobalSign nv-sa,C=BE

# Not Valid Before: Wed Mar 20 00:00:00 2019

# Not Valid After : Tue Mar 20 00:00:00 2046

# Fingerprint (SHA-256):

CB:B9:C4:4D:84:B8:04:3E:10:50:EA:31:A6:9F:51:49:55:D7:BF:D2:E2:C6:B4:93:01:01:9A:D6:1D:9F:50:58

#

Fingerprint (SHA1): 39:B4:6C:D5:FE:80:06:EB:E2:2F:4A:BB:08:33:A0:AF:DB:B9:DD:84

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_CERTIFICATE

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "GlobalSign Root E46"

CKA\_CERTIFICATE\_TYPE CK\_CERTIFICATE\_TYPE CKC\_X\_509

CKA\_SUBJECT MULTILINE\_OCTAL

\060\106\061\013\060\011\006\003\125\004\006\023\002\102\105\061  
\031\060\027\006\003\125\004\012\023\020\107\154\157\142\141\154  
\123\151\147\156\040\156\166\055\163\141\061\034\060\032\006\003  
\125\004\003\023\023\107\154\157\142\141\154\123\151\147\156\040  
\122\157\157\164\040\105\064\066

END

CKA\_ID UTF8 "0"

CKA\_ISSUER MULTILINE\_OCTAL

\060\106\061\013\060\011\006\003\125\004\006\023\002\102\105\061  
\031\060\027\006\003\125\004\012\023\020\107\154\157\142\141\154  
\123\151\147\156\040\156\166\055\163\141\061\034\060\032\006\003  
\125\004\003\023\023\107\154\157\142\141\154\123\151\147\156\040  
\122\157\157\164\040\105\064\066

END

CKA\_SERIAL\_NUMBER MULTILINE\_OCTAL

\002\022\021\322\273\272\063\156\324\274\346\044\150\305\015\204  
\035\230\350\103

END

CKA\_VALUE

MULTILINE\_OCTAL

\060\202\002\013\060\202\001\221\240\003\002\001\002\002\022\021  
\322\273\272\063\156\324\274\346\044\150\305\015\204\035\230\350

\103\060\012\006\010\052\206\110\316\075\004\003\003\060\106\061  
\013\060\011\006\003\125\004\006\023\002\102\105\061\031\060\027  
\006\003\125\004\012\023\020\107\154\157\142\141\154\123\151\147  
\156\040\156\166\055\163\141\061\034\060\032\006\003\125\004\003  
\023\023\107\154\157\142\141\154\123\151\147\156\040\122\157\157  
\164\040\105\064\066\060\036\027\015\061\071\060\063\062\060\060  
\060\060\060\060\060\132\027\015\064\066\060\063\062\060\060\060  
\060\060\060\060\132\060\106\061\013\060\011\006\003\125\004\006  
\023\002\102\105\061\031\060\027\006\003\125\004\012\023\020\107  
\154\157\142\141\154\123\151\147\156\040\156\166\055\163\141\061  
\034\060\032\006\003\125\004\003\023\023\107\154\157\142\141\154  
\123\151\147\156\040\122\157\157\164\040\105\064\066\060\166\060  
\020\006\007\052\206\110\316\075\002\001\006\005\053\201\004\000  
\042\003\142\000\004\234\016\261\317\267\350\236\122\167\165\064  
\372\245\106\247\255\062\031\062\264\007\251\047\312\224\273\014  
\322\012\020\307\332\211\260\227\014\160\023\011\001\216\330\352  
\107\352\276\262\200\053\315\374\050\015\333\254\274\244\206\067  
\355\160\010\000\165\352\223\013\173\056\122\234\043\150\043\006  
\103\354\222\057\123\204\333\373\107\024\007\350\137\224\147\135  
\311\172\201\074\040\243\102\060\100\060\016\006\003\125\035\017  
\001\001\377\004\004\003\002\001\206\060\017\006\003\125\035\023  
\001\001\377\004\005\060\003\001\001\377\060\035\006\003\125\035  
\016\004\026\004\024\061\012\220\217\266\306\235\322\104\113\200  
\265\242\346\037\261\022\117\033\225\060\012\006\010\052\206\110  
\316\075\004\003\003\003\150\000\060\145\002\061\000\337\124\220  
\355\233\357\213\224\002\223\027\202\231\276\263\236\054\366\013  
\221\214\237\112\024\261\366\144\274\273\150\121\023\014\003\367  
\025\213\204\140\271\213\377\122\216\347\214\274\034\002\060\074  
\371\021\324\214\116\300\301\141\302\025\114\252\253\035\013\061  
\137\073\034\342\000\227\104\061\346\376\163\226\057\332\226\323  
\376\010\007\263\064\211\274\005\237\367\036\206\356\213\160

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "GlobalSign Root E46"

# Issuer: CN=GlobalSign Root E46,O=GlobalSign nv-sa,C=BE

# Serial Number: 11:d2:bb:ba:33:6e:d4:bc:e6:24:68:c5:0d:84:1d:98:e8:43

# Subject: CN=GlobalSign Root E46,O=GlobalSign nv-sa,C=BE

# Not Valid Before: Wed Mar 20 00:00:00 2019

# Not Valid After : Tue Mar 20 00:00:00 2046

# Fingerprint (SHA-256):

CB:B9:C4:4D:84:B8:04:3E:10:50:EA:31:A6:9F:51:49:55:D7:BF:D2:E2:C6:B4:93:01:01:9A:D6:1D:9F:50:58

# Fingerprint (SHA1): 39:B4:6C:D5:FE:80:06:EB:E2:2F:4A:BB:08:33:A0:AF:DB:B9:DD:84

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

```

CKA_PRIVATE CK_BBOOL
CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "GlobalSign Root E46"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\071\264\154\325\376\200\006\353\342\057\112\273\010\063\240\257
\333\271\335\204
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\265\270\146\355\336\010\203\343\311\342\001\064\006\254\121\157
END
CKA_ISSUER MULTILINE_OCTAL
\060\106\061\013\060\011\006\003\125\004\006\023\002\102\105\061
\031\060\027\006\003\125\004\012\023\020\107\154\157\142\141\154
\123\151\147\156\040\156\166\055\163\141\061\034\060\032\006\003
\125\004\003\023\023\107\154\157\142\141\154\123\151\147\156\040
\122\157\157\164\040\105\064\066
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\022\021\322\273\272\063\156\324\274\346\044\150\305\015\204
\035\230\350\103
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "GLOBALTRUST
# 2020"
#
# Issuer: CN=GLOBALTRUST 2020,O=e-commerce monitoring GmbH,C=AT
# Serial Number:5a:4b:bd:5a:fb:4f:8a:5b:fa:65:e5
# Subject: CN=GLOBALTRUST 2020,O=e-commerce monitoring GmbH,C=AT
# Not Valid Before: Mon Feb 10 00:00:00 2020
# Not Valid After : Sun Jun 10 00:00:00 2040
# Fingerprint (SHA-256):
9A:29:6A:51:82:D1:D4:51:A2:E3:7F:43:9B:74:DA:AF:A2:67:52:33:29:F9:0F:9A:0D:20:07:C3:34:E2:3C:9A
# Fingerprint (SHA1): D0:67:C1:13:51:01:0C:AA:D0:C7:6A:65:37:31:16:26:4F:53:71:A2
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "GLOBALTRUST 2020"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\115\061\013\060\011\006\003\125\004\006\023\002\101\124\061
\043\060\041\006\003\125\004\012\023\032\145\055\143\157\155\155

```



\145\162\143\145\040\155\157\156\151\164\157\162\151\156\147\040  
\107\155\142\110\061\031\060\027\006\003\125\004\003\023\020\107  
\114\117\102\101\114\124\122\125\123\124\040\062\060\062\060

END

CKA\_ID

UTF8 "0"

CKA\_ISSUER MULTILINE\_OCTAL

\060\115\061\013\060\011\006\003\125\004\006\023\002\101\124\061  
\043\060\041\006\003\125\004\012\023\032\145\055\143\157\155\155  
\145\162\143\145\040\155\157\156\151\164\157\162\151\156\147\040  
\107\155\142\110\061\031\060\027\006\003\125\004\003\023\020\107  
\114\117\102\101\114\124\122\125\123\124\040\062\060\062\060

END

CKA\_SERIAL\_NUMBER MULTILINE\_OCTAL

\002\013\132\113\275\132\373\117\212\133\372\145\345

END

CKA\_VALUE MULTILINE\_OCTAL

\060\202\005\202\060\202\003\152\240\003\002\001\002\002\013\132  
\113\275\132\373\117\212\133\372\145\345\060\015\006\011\052\206  
\110\206\367\015\001\001\013\005\000\060\115\061\013\060\011\006  
\003\125\004\006\023\002\101\124\061\043\060\041\006\003\125\004  
\012\023\032\145\055\143\157\155\155\145\162\143\145\040\155\157  
\156\151\164\157\162\151\156\147\040\107\155\142\110\061\031\060  
\027\006\003\125\004\003\023\020\107\114\117\102\101\114\124\122  
\125\123\124\040\062\060\062\060\060\060\036\027\015\062\060\060\062  
\061\060\060\060\060\060\060\060\132\027\015\064\060\060\066\061  
\060\060\060\060\060\060\060\132\060\115\061\013\060\011\006\003  
\125\004\006\023\002\101\124\061\043\060\041\006\003\125\004\012  
\023\032\145\055\143\157\155\155\145\162\143\145\040\155\157\156  
\151\164\157\162\151\156\147\040\107\155\142\110\061\031\060\027  
\006\003\125\004\003\023\020\107\114\117\102\101\114\124\122\125  
\123\124\040\062\060\062\060\060\202\002\042\060\015\006\011\052  
\206\110\206\367\015\001\001\001\005\000\003\202\002\017\000\060  
\202\002\012\002\202\002\001\000\256\056\126\255\033\034\357\366  
\225\217\240\167\033\053\323\143\217\204\115\105\242\017\237\133  
\105\253\131\173\121\064\371\354\213\212\170\305\335\153\257\275  
\304\337\223\105\036\277\221\070\013\256\016\026\347\101\163\370  
\333\273\321\270\121\340\313\203\073\163\070\156\167\212\017\131  
\143\046\315\247\052\316\124\373\270\342\300\174\107\316\140\174  
\077\262\163\362\300\031\266\212\222\207\065\015\220\050\242\344  
\025\004\143\076\272\257\356\174\136\314\246\213\120\262\070\367  
\101\143\312\316\377\151\217\150\016\225\066\345\314\271\214\011  
\312\113\335\061\220\226\310\314\037\375\126\226\064\333\216\034  
\352\054\276\205\056\143\335\252\251\225\323\375\051\225\023\360  
\310\230\223\331\055\026\107\220\021\203\242\072\042\242\050\127  
\242\353\376\300\214\050\240\246\175\347\052\102\073\202\200\143  
\245\143\037\031\314\174\262\146\250\302\323\155\067\157\342\176  
\006\121\331\105\204\037\022\316\044\122\144\205\013\110\200\116

\207\261\042\042\060\252\353\256\276\340\002\340\100\350\260\102  
\200\003\121\252\264\176\252\104\327\103\141\363\242\153\026\211  
\111\244\243\244\053\212\002\304\170\364\150\212\301\344\172\066  
\261\157\033\226\033\167\111\215\324\311\006\162\217\317\123\343  
\334\027\205\040\112\334\230\047\323\221\046\053\107\036\151\007  
\257\336\242\344\344\324\153\013\263\136\174\324\044\200\107\051  
\151\073\156\350\254\375\100\353\330\355\161\161\053\362\350\130  
\035\353\101\227\042\305\037\324\071\320\047\217\207\343\030\364  
\340\251\106\015\365\164\072\202\056\320\156\054\221\243\061\134  
\073\106\352\173\004\020\126\136\200\035\365\245\145\350\202\374  
\342\007\214\142\105\365\040\336\106\160\206\241\274\223\323\036  
\164\246\154\260\054\367\003\014\210\014\313\324\162\123\206\274  
\140\106\363\230\152\302\361\277\103\371\160\040\167\312\067\101  
\171\125\122\143\215\133\022\237\305\150\304\210\235\254\362\060  
\253\267\243\061\227\147\255\217\027\017\154\307\163\355\044\224  
\153\310\203\232\320\232\067\111\004\253\261\026\310\154\111\111  
\055\253\241\320\214\222\362\101\112\171\041\045\333\143\327\266  
\234\247\176\102\151\373\072\143\002\003\001\000\001\243\143\060  
\141\060\017\006\003\125\035\023\001\001\377\004\005\060\003\001  
\001\377\060\016\006\003\125\035\017\001\001\377\004\004\003\002  
\001\006\060\035\006\003\125\035\016\004\026\004\024\334\056\037  
\321\141\067\171\344\253\325\325\263\022\161\150\075\152\150\234  
\042\060\037\006\003\125\035\043\004\030\060\026\200\024\334\056  
\037\321\141\067\171\344\253\325\325\263\022\161\150\075\152\150  
\234\042\060\015\006\011\052\206\110\206\367\015\001\001\013\005  
\000\003\202\002\001\000\221\360\102\002\150\100\356\303\150\300  
\124\057\337\354\142\303\303\236\212\240\061\050\252\203\216\244  
\126\226\022\020\206\126\272\227\162\322\124\060\174\255\031\325  
\035\150\157\373\024\102\330\215\016\363\265\321\245\343\002\102  
\136\334\350\106\130\007\065\002\060\340\274\164\112\301\103\052  
\377\333\032\320\260\257\154\303\375\313\263\365\177\155\003\056  
\131\126\235\055\055\065\214\262\326\103\027\054\222\012\313\135  
\350\214\017\113\160\103\320\202\377\250\314\277\244\224\300\276  
\207\275\212\343\223\173\306\217\233\026\235\047\145\274\172\305  
\102\202\154\134\007\320\251\301\210\140\104\351\230\205\026\137  
\370\217\312\001\020\316\045\303\371\140\033\240\305\227\303\323  
\054\210\061\242\275\060\354\320\320\300\022\361\301\071\343\345  
\365\370\326\112\335\064\315\373\157\301\117\343\000\213\126\342  
\222\367\050\262\102\167\162\043\147\307\077\021\025\262\304\003  
\005\276\273\021\173\012\277\250\156\347\377\130\103\317\233\147  
\240\200\007\266\035\312\255\155\352\101\021\176\055\164\223\373  
\302\274\276\121\104\305\357\150\045\047\200\343\310\240\324\022  
\354\331\245\067\035\067\174\264\221\312\332\324\261\226\201\357  
\150\134\166\020\111\257\176\245\067\200\261\034\122\275\063\201  
\114\217\371\335\145\331\024\315\212\045\130\364\342\305\203\245  
\011\220\324\154\024\143\265\100\337\353\300\374\304\130\176\015  
\024\026\207\124\047\156\126\344\160\204\270\154\062\022\176\202  
\061\103\276\327\335\174\241\255\256\326\253\040\022\357\012\303

```
\020\214\111\226\065\334\013\165\136\261\117\325\117\064\016\021
\040\007\165\103\105\351\243\021\332\254\243\231\302\266\171\047
\342\271\357\310\342\366\065\051\172\164\372\305\177\202\005\142
\246\012\352\150\262\171\107\006\156\362\127\250\025\063\306\367
\170\112\075\102\173\153\176\376\367\106\352\321\353\216\357\210
\150\133\350\301\331\161\176\375\144\357\377\147\107\210\130\045
\057\076\206\007\275\373\250\345\202\250\254\245\323\151\103\315
\061\210\111\204\123\222\300\261\071\033\071\203\001\060\304\362
\251\372\320\003\275\162\067\140\126\037\066\174\275\071\221\365
\155\015\277\173\327\222
```

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "GLOBALTRUST 2020"

# Issuer: CN=GLOBALTRUST 2020,O=e-commerce monitoring GmbH,C=AT

# Serial Number:5a:4b:bd:5a:fb:4f:8a:5b:fa:65:e5

# Subject: CN=GLOBALTRUST 2020,O=e-commerce monitoring GmbH,C=AT

# Not Valid Before: Mon Feb 10 00:00:00 2020

# Not Valid After : Sun Jun 10 00:00:00 2040

# Fingerprint (SHA-256):

9A:29:6A:51:82:D1:D4:51:A2:E3:7F:43:9B:74:DA:AF:A2:67:52:33:29:F9:0F:9A:0D:20:07:C3:34:E2:3C:9A

# Fingerprint (SHA1): D0:67:C1:13:51:01:0C:AA:D0:C7:6A:65:37:31:16:26:4F:53:71:A2

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE

CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "GLOBALTRUST 2020"

CKA\_CERT\_SHA1\_HASH MULTILINE\_OCTAL

```
\320\147\301\023\121\001\014\252\320\307\152\145\067\061\026\046
\117\123\161\242
```

END

CKA\_CERT\_MD5\_HASH MULTILINE\_OCTAL

```
\212\307\157\313\155\343\314\242\361\174\203\372\016\170\327\350
```

END

CKA\_ISSUER MULTILINE\_OCTAL

```
\060\115\061\013\060\011\006\003\125\004\006\023\002\101\124\061
\043\060\041\006\003\125\004\012\023\032\145\055\143\157\155\155
\145\162\143\145\040\155\157\156\151\164\157\162\151\156\147\040
\107\155\142\110\061\031\060\027\006\003\125\004\003\023\020\107
\114\117\102\101\114\124\122\125\123\124\040\062\060\062\060
```

END

CKA\_SERIAL\_NUMBER MULTILINE\_OCTAL

```
\002\013\132\113\275\132\373\117\212\133\372\145\345
```

END

CKA\_TRUST\_SERVER\_AUTH CK\_TRUST CKT\_NSS\_TRUSTED\_DELEGATOR  
CKA\_TRUST\_EMAIL\_PROTECTION CK\_TRUST CKT\_NSS\_TRUSTED\_DELEGATOR  
CKA\_TRUST\_CODE\_SIGNING CK\_TRUST CKT\_NSS\_MUST\_VERIFY\_TRUST  
CKA\_TRUST\_STEP\_UP\_APPROVED CK\_BBOOL CK\_FALSE

#

# Certificate "ANF

Secure Server Root CA"

#

# Issuer: CN=ANF Secure Server Root CA,OU=ANF CA Raiz,O=ANF Autoridad de  
Certificacion,C=ES,serialNumber=G63287510

# Serial Number:0d:d3:e3:bc:6c:f9:6b:b1

# Subject: CN=ANF Secure Server Root CA,OU=ANF CA Raiz,O=ANF Autoridad de  
Certificacion,C=ES,serialNumber=G63287510

# Not Valid Before: Wed Sep 04 10:00:38 2019

# Not Valid After : Tue Aug 30 10:00:38 2039

# Fingerprint (SHA-256):

FB:8F:EC:75:91:69:B9:10:6B:1E:51:16:44:C6:18:C5:13:04:37:3F:6C:06:43:08:8D:8B:EF:FD:1B:99:75:99

# Fingerprint (SHA1): 5B:6E:68:D0:CC:15:B6:A0:5F:1E:C1:5F:AE:02:FC:6B:2F:5D:6F:74

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_CERTIFICATE

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "ANF Secure Server Root CA"

CKA\_CERTIFICATE\_TYPE CK\_CERTIFICATE\_TYPE CKC\_X\_509

CKA\_SUBJECT MULTILINE\_OCTAL

\060\201\204\061\022\060\020\006\003\125\004\005\023\011\107\066  
\063\062\070\067\065\061\060\061\013\060\011\006\003\125\004\006  
\023\002\105\123\061\047\060\045\006\003\125\004\012\023\036\101  
\116\106\040\101\165\164\157\162\151\144\141\144\040\144\145\040  
\103\145\162\164\151\146\151\143\141\143\151\157\156\061\024\060  
\022\006\003\125\004\013\023\013\101\116\106\040\103\101\040\122  
\141\151\172\061\042\060\040\006\003\125\004\003\023\031\101\116  
\106\040\123\145\143\165\162\145\040\123\145\162\166\145\162\040  
\122\157\157\164\040\103\101

END

CKA\_ID

UTF8 "0"

CKA\_ISSUER MULTILINE\_OCTAL

\060\201\204\061\022\060\020\006\003\125\004\005\023\011\107\066  
\063\062\070\067\065\061\060\061\013\060\011\006\003\125\004\006  
\023\002\105\123\061\047\060\045\006\003\125\004\012\023\036\101  
\116\106\040\101\165\164\157\162\151\144\141\144\040\144\145\040  
\103\145\162\164\151\146\151\143\141\143\151\157\156\061\024\060  
\022\006\003\125\004\013\023\013\101\116\106\040\103\101\040\122  
\141\151\172\061\042\060\040\006\003\125\004\003\023\031\101\116  
\106\040\123\145\143\165\162\145\040\123\145\162\166\145\162\040  
\122\157\157\164\040\103\101

END

CKA\_SERIAL\_NUMBER

MULTILINE\_OCTAL

\002\010\015\323\343\274\154\371\153\261

END

CKA\_VALUE MULTILINE\_OCTAL

\060\202\005\357\060\202\003\327\240\003\002\001\002\002\010\015  
\323\343\274\154\371\153\261\060\015\006\011\052\206\110\206\367  
\015\001\001\013\005\000\060\201\204\061\022\060\020\006\003\125  
\004\005\023\011\107\066\063\062\070\067\065\061\060\061\013\060  
\011\006\003\125\004\006\023\002\105\123\061\047\060\045\006\003  
\125\004\012\023\036\101\116\106\040\101\165\164\157\162\151\144  
\141\144\040\144\145\040\103\145\162\164\151\146\151\143\141\143  
\151\157\156\061\024\060\022\006\003\125\004\013\023\013\101\116  
\106\040\103\101\040\122\141\151\172\061\042\060\040\006\003\125  
\004\003\023\031\101\116\106\040\123\145\143\165\162\145\040\123  
\145\162\166\145\162\040\122\157\157\164\040\103\101\060\036\027  
\015\061\071\060\071\060\064\061\060\060\060\063\070\132\027\015  
\063\071\060\070\063\060\061\060\060\060\063\070\132\060\201\204  
\061\022\060\020\006\003\125\004\005\023\011\107\066\063\062\070  
\067\065\061\060\061\013\060\011\006\003\125\004\006\023\002\105  
\123\061\047\060\045\006\003\125\004\012\023\036\101\116\106\040  
\101\165\164\157\162\151\144\141\144\040\144\145\040\103\145\162  
\164\151\146\151\143\141\143\151\157\156\061\024\060\022\006\003  
\125\004\013\023\013\101\116\106\040\103\101\040\122\141\151\172  
\061\042\060\040\006\003\125\004\003\023\031\101\116\106\040\123  
\145\143\165\162\145\040\123\145\162\166\145\162\040\122\157\157  
\164\040\103\101\060\202\002\042\060\015\006\011\052\206\110\206  
\367\015\001\001\001\005\000\003\202\002\017\000\060\202\002\012  
\002\202\002\001\000\333\353\153\053\346\144\124\225\202\220\243  
\162\244\031\001\235\234\013\201\137\163\111\272\247\254\363\004  
\116\173\226\013\354\021\340\133\246\034\316\033\322\015\203\034  
\053\270\236\035\176\105\062\140\017\007\351\167\130\176\237\152  
\310\141\116\266\046\301\114\215\377\114\357\064\262\037\145\330  
\271\170\365\255\251\161\271\357\117\130\035\245\336\164\040\227  
\241\355\150\114\336\222\027\113\274\253\377\145\232\236\373\107  
\331\127\162\363\011\241\256\166\104\023\156\234\055\104\071\274  
\371\307\073\244\130\075\101\275\264\302\111\243\310\015\322\227  
\057\007\145\122\000\247\156\310\257\150\354\364\024\226\266\127  
\037\126\303\071\237\053\155\344\363\076\366\065\144\332\014\034  
\241\204\113\057\113\113\342\054\044\235\155\223\100\353\265\043  
\216\062\312\157\105\323\250\211\173\036\317\036\372\133\103\213  
\315\315\250\017\152\312\014\136\271\236\107\217\360\331\266\012  
\013\130\145\027\063\271\043\344\167\031\175\313\112\056\222\173  
\117\057\020\167\261\215\057\150\234\142\314\340\120\370\354\221  
\247\124\114\127\011\325\166\143\305\350\145\036\356\155\152\317  
\011\235\372\174\117\255\140\010\375\126\231\017\025\054\173\251  
\200\253\214\141\217\112\007\166\102\336\075\364\335\262\044\063

\133\270\265\243\104\311\254\177\167\074\035\043\354\202\251\246  
\342\310\006\114\002\376\254\134\231\231\013\057\020\212\246\364  
\177\325\207\164\015\131\111\105\366\360\161\134\071\051\326\277  
\112\043\213\365\137\001\143\322\207\163\050\265\113\012\365\370  
\253\202\054\176\163\045\062\035\013\143\012\027\201\000\377\266  
\166\136\347\264\261\100\312\041\273\325\200\121\345\110\122\147  
\054\322\141\211\007\015\017\316\102\167\300\104\163\234\104\120  
\240\333\020\012\055\225\034\201\257\344\034\345\024\036\361\066  
\101\001\002\057\175\163\247\336\102\314\114\351\211\015\126\367  
\237\221\324\003\306\154\311\217\333\330\034\340\100\230\135\146  
\231\230\200\156\055\377\001\305\316\313\106\037\254\002\306\103  
\346\256\242\204\074\305\116\036\075\155\311\024\114\343\056\101  
\273\312\071\277\066\074\052\031\252\101\207\116\245\316\113\062  
\171\335\220\111\177\002\003\001\000\001\243\143\060\141\060\037  
\006\003\125\035\043\004\030\060\026\200\024\234\137\320\154\143  
\243\137\223\312\223\230\010\255\214\207\245\054\134\301\067\060  
\035\006\003\125\035\016\004\026\004\024\234\137\320\154\143\243  
\137\223\312\223\230\010\255\214\207\245\054\134\301\067\060\016  
\006\003\125\035\017\001\001\377\004\004\003\002\001\206\060\017  
\006\003\125\035\023\001\001\377\004\005\060\003\001\001\377\060  
\015\006\011\052\206\110\206\367\015\001\001\013\005\000\003\202  
\002\001\000\116\036\271\212\306\240\230\077\156\303\151\300\152  
\134\111\122\254\313\053\135\170\070\301\325\124\204\237\223\360  
\207\031\075\054\146\211\353\015\102\374\314\360\165\205\077\213  
\364\200\135\171\345\027\147\275\065\202\342\362\074\216\175\133  
\066\313\132\200\000\051\362\316\053\054\361\217\252\155\005\223  
\154\162\307\126\353\337\120\043\050\345\105\020\075\350\147\243  
\257\016\125\017\220\011\142\357\113\131\242\366\123\361\300\065  
\344\057\301\044\275\171\057\116\040\042\073\375\032\040\260\244  
\016\054\160\355\164\077\270\023\225\006\121\310\350\207\046\312  
\244\133\152\026\041\222\335\163\140\236\020\030\336\074\201\352  
\350\030\303\174\211\362\213\120\076\275\021\342\025\003\250\066  
\175\063\001\154\110\025\327\210\220\231\004\305\314\346\007\364  
\274\364\220\355\023\342\352\213\303\217\243\063\017\301\051\114  
\023\116\332\025\126\161\163\162\202\120\366\232\063\174\242\261  
\250\032\064\164\145\134\316\321\353\253\123\340\032\200\330\352  
\072\111\344\046\060\233\345\034\212\250\251\025\062\206\231\222  
\012\020\043\126\022\340\366\316\114\342\273\276\333\215\222\163  
\001\146\057\142\076\262\162\047\105\066\355\115\126\343\227\231  
\377\072\065\076\245\124\112\122\131\113\140\333\356\376\170\021  
\177\112\334\024\171\140\266\153\144\003\333\025\203\341\242\276  
\366\043\227\120\360\011\063\066\247\161\226\045\363\271\102\175  
\333\070\077\054\130\254\350\102\341\016\330\323\073\114\056\202  
\351\203\056\153\061\331\335\107\206\117\155\227\221\056\117\342  
\050\161\065\026\321\362\163\376\045\053\007\107\044\143\047\310  
\370\366\331\153\374\022\061\126\010\300\123\102\257\234\320\063  
\176\374\006\360\061\104\003\024\361\130\352\362\152\015\251\021  
\262\203\276\305\032\277\007\352\131\334\243\210\065\357\234\166

```
\062\074\115\006\042\316\025\345\335\236\330\217\332\336\322\304
\071\345\027\201\317\070\107\353\177\210\155\131\033\337\237\102
\024\256\176\317\250\260\146\145\332\067\257\237\252\075\352\050
\266\336\325\061\130\026\202\133\352\273\031\165\002\163\032\312
\110\032\041\223\220\012\216\223\204\247\175\073\043\030\222\211
\240\215\254
```

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "ANF Secure Server Root CA"

# Issuer: CN=ANF Secure Server Root CA,OU=ANF CA Raiz,O=ANF Autoridad de  
Certificacion,C=ES,serialNumber=G63287510

# Serial Number:0d:d3:e3:bc:6c:f9:6b:b1

# Subject: CN=ANF Secure Server Root CA,OU=ANF CA Raiz,O=ANF Autoridad de  
Certificacion,C=ES,serialNumber=G63287510

# Not Valid Before: Wed Sep 04 10:00:38 2019

# Not Valid After : Tue Aug 30 10:00:38 2039

# Fingerprint (SHA-256):

FB:8F:EC:75:91:69:B9:10:6B:1E:51:16:44:C6:18:C5:13:04:37:3F:6C:06:43:08:8D:8B:EF:FD:1B:99:75:99

# Fingerprint (SHA1): 5B:6E:68:D0:CC:15:B6:A0:5F:1E:C1:5F:AE:02:FC:6B:2F:5D:6F:74

CKA\_CLASS

CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "ANF Secure Server Root CA"

CKA\_CERT\_SHA1\_HASH MULTILINE\_OCTAL

```
\133\156\150\320\314\025\266\240\137\036\301\137\256\002\374\153
\057\135\157\164
```

END

CKA\_CERT\_MD5\_HASH MULTILINE\_OCTAL

```
\046\246\104\132\331\257\116\057\262\035\266\145\260\116\350\226
```

END

CKA\_ISSUER MULTILINE\_OCTAL

```
\060\201\204\061\022\060\020\006\003\125\004\005\023\011\107\066
\063\062\070\067\065\061\060\061\013\060\011\006\003\125\004\006
\023\002\105\123\061\047\060\045\006\003\125\004\012\023\036\101
\116\106\040\101\165\164\157\162\151\144\141\144\040\144\145\040
\103\145\162\164\151\146\151\143\141\143\151\157\156\061\024\060
\022\006\003\125\004\013\023\013\101\116\106\040\103\101\040\122
\141\151\172\061\042\060\040\006\003\125\004\003\023\031\101\116
\106\040\123\145\143\165\162\145\040\123\145\162\166\145\162\040
\122\157\157\164\040\103\101
```

END

CKA\_SERIAL\_NUMBER

```
MULTILINE_OCTAL
\002\010\015\323\343\274\154\371\153\261
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "Certum EC-384 CA"
#
# Issuer: CN=Certum EC-384 CA,OU=Certum Certification Authority,O=Asseco Data Systems S.A.,C=PL
# Serial Number:78:8f:27:5c:81:12:52:20:a5:04:d0:2d:dd:ba:73:f4
# Subject: CN=Certum EC-384 CA,OU=Certum Certification Authority,O=Asseco Data Systems S.A.,C=PL
# Not Valid Before: Mon Mar 26 07:24:54 2018
# Not Valid After : Thu Mar 26 07:24:54 2043
# Fingerprint (SHA-256):
6B:32:80:85:62:53:18:AA:50:D1:73:C9:8D:8B:DA:09:D5:7E:27:41:3D:11:4C:F7:87:A0:F5:D0:6C:03:0C:F6
# Fingerprint (SHA1): F3:3E:78:3C:AC:DF:F4:A2:CC:AC:67:55:69:56:D7:E5:16:3C:E1:ED
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE
CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Certum EC-384 CA"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\164\061\013\060\011\006\003\125\004\006\023\002\120\114\061
\041\060\037\006\003\125\004\012\023\030\101\163\163\145\143\157
\040\104\141\164\141\040\123\171\163\164\145\155\163\040\123\056
\101\056\061\047\060\045\006\003\125\004\013\023\036\103\145\162
\164\165\155\040\103\145\162\164\151\146\151\143\141\164\151\157
\156\040\101\165\164\150\157\162\151\164\171\061\031\060\027\006
\003\125\004\003\023\020\103\145\162\164\165\155\040\105\103\055
\063\070\064\040\103\101
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\164\061\013\060\011\006\003\125\004\006\023\002\120\114\061
\041\060\037\006\003\125\004\012\023\030\101\163\163\145\143\157
\040\104\141\164\141\040\123\171\163\164\145\155\163\040\123\056
\101\056\061\047\060\045\006\003\125\004\013\023\036\103\145\162
\164\165\155\040\103\145\162\164\151\146\151\143\141\164\151\157
\156\040\101\165\164\150\157\162\151\164\171\061\031\060\027\006
\003\125\004\003\023\020\103\145\162\164\165\155\040\105\103\055
\063\070\064\040\103\101
END
CKA_SERIAL_NUMBER
```



MULTILINE\_OCTAL

\002\020\170\217\047\134\201\022\122\040\245\004\320\055\335\272  
\163\364

END

CKA\_VALUE MULTILINE\_OCTAL

\060\202\002\145\060\202\001\353\240\003\002\001\002\002\020\170  
\217\047\134\201\022\122\040\245\004\320\055\335\272\163\364\060  
\012\006\010\052\206\110\316\075\004\003\003\060\164\061\013\060  
\011\006\003\125\004\006\023\002\120\114\061\041\060\037\006\003  
\125\004\012\023\030\101\163\163\145\143\157\040\104\141\164\141  
\040\123\171\163\164\145\155\163\040\123\056\101\056\061\047\060  
\045\006\003\125\004\013\023\036\103\145\162\164\165\155\040\103  
\145\162\164\151\146\151\143\141\164\151\157\156\040\101\165\164  
\150\157\162\151\164\171\061\031\060\027\006\003\125\004\003\023  
\020\103\145\162\164\165\155\040\105\103\055\063\070\064\040\103  
\101\060\036\027\015\061\070\060\063\062\066\060\067\062\064\065  
\064\132\027\015\064\063\060\063\062\066\060\067\062\064\065\064  
\132\060\164\061\013\060\011\006\003\125\004\006\023\002\120\114  
\061\041\060\037\006\003\125\004\012\023\030\101\163\163\145\143  
\157\040\104\141\164\141\040\123\171\163\164\145\155\163\040\123  
\056\101\056\061\047\060\045\006\003\125\004\013\023\036\103\145  
\162\164\165\155\040\103\145\162\164\151\146\151\143\141\164\151  
\157\156\040\101\165\164\150\157\162\151\164\171\061\031\060\027  
\006\003\125\004\003\023\020\103\145\162\164\165\155\040\105\103  
\055\063\070\064\040\103\101\060\166\060\020\006\007\052\206\110  
\316\075\002\001\006\005\053\201\004\000\042\003\142\000\004\304  
\050\216\253\030\133\152\276\156\144\067\143\344\315\354\253\072  
\367\314\241\270\016\202\111\327\206\051\237\241\224\362\343\140  
\170\230\201\170\006\115\362\354\232\016\127\140\203\237\264\346  
\027\057\032\263\135\002\133\211\043\074\302\021\005\052\247\210  
\023\030\363\120\204\327\275\064\054\047\211\125\377\316\114\347  
\337\246\037\050\304\360\124\303\271\174\267\123\255\353\302\243  
\102\060\100\060\017\006\003\125\035\023\001\001\377\004\005\060  
\003\001\001\377\060\035\006\003\125\035\016\004\026\004\024\215  
\006\146\164\044\166\072\363\211\367\274\326\275\107\175\057\274  
\020\137\113\060\016\006\003\125\035\017\001\001\377\004\004\003  
\002\001\006\060\012\006\010\052\206\110\316\075\004\003\003\003  
\150\000\060\145\002\060\003\125\055\246\346\030\304\174\357\311  
\120\156\301\047\017\234\207\257\156\325\033\010\030\275\222\051  
\301\357\224\221\170\322\072\034\125\211\142\345\033\011\036\272  
\144\153\361\166\264\324\002\061\000\264\102\204\231\377\253\347  
\236\373\221\227\047\135\334\260\133\060\161\316\136\070\032\152  
\331\045\347\352\367\141\222\126\370\352\332\066\302\207\145\226  
\056\162\045\057\177\337\303\023\311

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "Certum EC-384 CA"

# Issuer: CN=Certum EC-384

CA,OU=Certum Certification Authority,O=Asseco Data Systems S.A.,C=PL

# Serial Number:78:8f:27:5c:81:12:52:20:a5:04:d0:2d:dd:ba:73:f4

# Subject: CN=Certum EC-384 CA,OU=Certum Certification Authority,O=Asseco Data Systems S.A.,C=PL

# Not Valid Before: Mon Mar 26 07:24:54 2018

# Not Valid After : Thu Mar 26 07:24:54 2043

# Fingerprint (SHA-256):

6B:32:80:85:62:53:18:AA:50:D1:73:C9:8D:8B:DA:09:D5:7E:27:41:3D:11:4C:F7:87:A0:F5:D0:6C:03:0C:F6

# Fingerprint (SHA1): F3:3E:78:3C:AC:DF:F4:A2:CC:AC:67:55:69:56:D7:E5:16:3C:E1:ED

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "Certum EC-384 CA"

CKA\_CERT\_SHA1\_HASH MULTILINE\_OCTAL

\363\076\170\074\254\337\364\242\314\254\147\125\151\126\327\345

\026\074\341\355

END

CKA\_CERT\_MD5\_HASH MULTILINE\_OCTAL

\266\145\263\226\140\227\022\241\354\116\341\075\243\306\311\361

END

CKA\_ISSUER MULTILINE\_OCTAL

\060\164\061\013\060\011\006\003\125\004\006\023\002\120\114\061

\041\060\037\006\003\125\004\012\023\030\101\163\163\145\143\157

\040\104\141\164\141\040\123\171\163\164\145\155\163\040\123\056

\101\056\061\047\060\045\006\003\125\004\013\023\036\103\145\162

\164\165\155\040\103\145\162\164\151\146\151\143\141\164\151\157

\156\040\101\165\164\150\157\162\151\164\171\061\031\060\027\006

\003\125\004\003\023\020\103\145\162\164\165\155\040\105\103\055

\063\070\064\040\103\101

END

CKA\_SERIAL\_NUMBER

MULTILINE\_OCTAL

\002\020\170\217\047\134\201\022\122\040\245\004\320\055\335\272

\163\364

END

CKA\_TRUST\_SERVER\_AUTH CK\_TRUST CKT\_NSS\_TRUSTED\_DELEGATOR

CKA\_TRUST\_EMAIL\_PROTECTION CK\_TRUST CKT\_NSS\_TRUSTED\_DELEGATOR

CKA\_TRUST\_CODE\_SIGNING CK\_TRUST CKT\_NSS\_MUST\_VERIFY\_TRUST

CKA\_TRUST\_STEP\_UP\_APPROVED CK\_BBOOL CK\_FALSE

#

# Certificate "Certum Trusted Root CA"

#

# Issuer: CN=Certum Trusted Root CA,OU=Certum Certification Authority,O=Asseco Data Systems S.A.,C=PL

```
# Serial Number:1e:bf:59:50:b8:c9:80:37:4c:06:f7:eb:55:4f:b5:ed
# Subject: CN=Certum Trusted Root
CA,OU=Certum Certification Authority,O=Asesco Data Systems S.A.,C=PL
# Not Valid Before: Fri Mar 16 12:10:13 2018
# Not Valid After : Mon Mar 16 12:10:13 2043
# Fingerprint (SHA-256):
FE:76:96:57:38:55:77:3E:37:A9:5E:7A:D4:D9:CC:96:C3:01:57:C1:5D:31:76:5B:A9:B1:57:04:E1:AE:78:FD
# Fingerprint (SHA1): C8:83:44:C0:18:AE:9F:CC:F1:87:B7:8F:22:D1:C5:D7:45:84:BA:E5
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Certum Trusted Root CA"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\172\061\013\060\011\006\003\125\004\006\023\002\120\114\061
\041\060\037\006\003\125\004\012\023\030\101\163\163\145\143\157
\040\104\141\164\141\040\123\171\163\164\145\155\163\040\123\056
\101\056\061\047\060\045\006\003\125\004\013\023\036\103\145\162
\164\165\155\040\103\145\162\164\151\146\151\143\141\164\151\157
\156\040\101\165\164\150\157\162\151\164\171\061\037\060\035\006
\003\125\004\003\023\026\103\145\162\164\165\155\040\124\162\165
\163\164\145\144\040\122\157\157\164\040\103\101
END
CKA_ID
UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\172\061\013\060\011\006\003\125\004\006\023\002\120\114\061
\041\060\037\006\003\125\004\012\023\030\101\163\163\145\143\157
\040\104\141\164\141\040\123\171\163\164\145\155\163\040\123\056
\101\056\061\047\060\045\006\003\125\004\013\023\036\103\145\162
\164\165\155\040\103\145\162\164\151\146\151\143\141\164\151\157
\156\040\101\165\164\150\157\162\151\164\171\061\037\060\035\006
\003\125\004\003\023\026\103\145\162\164\165\155\040\124\162\165
\163\164\145\144\040\122\157\157\164\040\103\101
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\020\036\277\131\120\270\311\200\067\114\006\367\353\125\117
\265\355
END
CKA_VALUE MULTILINE_OCTAL
\060\202\005\300\060\202\003\250\240\003\002\001\002\002\020\036
\277\131\120\270\311\200\067\114\006\367\353\125\117\265\355\060
\015\006\011\052\206\110\206\367\015\001\001\015\005\000\060\172
\061\013\060\011\006\003\125\004\006\023\002\120\114\061\041\060
\037\006\003\125\004\012\023\030\101\163\163\145\143\157\040\104
\141\164\141\040\123\171\163\164\145\155\163\040\123\056\101\056
\061\047\060\045\006\003\125\004\013\023\036\103\145\162\164\165
```

\155\040\103\145\162\164\151\146\151\143\141\164\151\157\156\040  
\101\165\164\150\157\162\151\164\171\061\037\060\035\006\003\125  
\004\003\023\026\103\145\162\164\165\155\040\124\162\165\163\164  
\145\144\040\122\157\157\164\040\103\101\060\036\027\015\061\070  
\060\063\061\066\061\062\061\060\061\063\132\027\015\064\063\060  
\063\061\066\061\062\061\060\061\063\132\060\172\061\013\060\011  
\006\003\125\004\006\023\002\120\114\061\041\060\037\006\003\125  
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END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "Certum Trusted Root CA"

# Issuer: CN=Certum

Trusted Root CA,OU=Certum Certification Authority,O=Asseco Data Systems S.A.,C=PL

# Serial Number: 1e:bf:59:50:b8:c9:80:37:4c:06:f7:eb:55:4f:b5:ed

```

# Subject: CN=Certum Trusted Root CA,OU=Certum Certification Authority,O=Asseco Data Systems S.A.,C=PL
# Not Valid Before: Fri Mar 16 12:10:13 2018
# Not Valid After : Mon Mar 16 12:10:13 2043
# Fingerprint (SHA-256):
FE:76:96:57:38:55:77:3E:37:A9:5E:7A:D4:D9:CC:96:C3:01:57:C1:5D:31:76:5B:A9:B1:57:04:E1:AE:78:FD
# Fingerprint (SHA1): C8:83:44:C0:18:AE:9F:CC:F1:87:B7:8F:22:D1:C5:D7:45:84:BA:E5
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Certum Trusted Root CA"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\310\203\104\300\030\256\237\314\361\207\267\217\042\321\305\327
\105\204\272\345
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\121\341\302\347\376\114\204\257\131\016\057\364\124\157\352\051
END
CKA_ISSUER MULTILINE_OCTAL
\060\172\061\013\060\011\006\003\125\004\006\023\002\120\114\061
\041\060\037\006\003\125\004\012\023\030\101\163\163\145\143\157
\040\104\141\164\141\040\123\171\163\164\145\155\163\040\123\056
\101\056\061\047\060\045\006\003\125\004\013\023\036\103\145\162
\164\165\155\040\103\145\162\164\151\146\151\143\141\164\151\157
\156\040\101\165\164\150\157\162\151\164\171\061\037\060\035\006
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\163\164\145\144\040\122\157\157\164\040\103\101
END
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MULTILINE_OCTAL
\002\020\036\277\131\120\270\311\200\067\114\006\367\353\125\117
\265\355
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CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "TunTrust Root CA"
#
# Issuer: CN=TunTrust Root CA,O=Agence Nationale de Certification Electronique,C=TN
# Serial Number:13:02:d5:e2:40:4c:92:46:86:16:67:5d:b4:bb:bb:b2:6b:3e:fc:13
#
# Subject: CN=TunTrust Root CA,O=Agence Nationale de Certification Electronique,C=TN
# Not Valid Before: Fri Apr 26 08:57:56 2019
# Not Valid After : Tue Apr 26 08:57:56 2044
# Fingerprint (SHA-256):

```

2E:44:10:2A:B5:8C:B8:54:19:45:1C:8E:19:D9:AC:F3:66:2C:AF:BC:61:4B:6A:53:96:0A:30:F7:D0:E2:EB:41

# Fingerprint (SHA1): CF:E9:70:84:0F:E0:73:0F:9D:F6:0C:7F:2C:4B:EE:20:46:34:9C:BB

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_CERTIFICATE

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "TunTrust Root CA"

CKA\_CERTIFICATE\_TYPE CK\_CERTIFICATE\_TYPE CKC\_X\_509

CKA\_SUBJECT MULTILINE\_OCTAL

\060\141\061\013\060\011\006\003\125\004\006\023\002\124\116\061  
\067\060\065\006\003\125\004\012\014\056\101\147\145\156\143\145  
\040\116\141\164\151\157\156\141\154\145\040\144\145\040\103\145  
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\040\103\101

END

CKA\_ID

UTF8 "0"

CKA\_ISSUER MULTILINE\_OCTAL

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END

CKA\_SERIAL\_NUMBER MULTILINE\_OCTAL

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END

CKA\_VALUE MULTILINE\_OCTAL

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END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRUST\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRUST\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "TunTrust Root CA"

# Issuer: CN=TunTrust Root CA,O=Agence Nationale de Certification Electronique,C=TN

# Serial Number: 13:02:d5:e2:40:4c:92:46:86:16:67:5d:b4:bb:bb:b2:6b:3e:fc:13

# Subject: CN=TunTrust Root CA,O=Agence Nationale de Certification Electronique,C=TN

#

Not Valid Before: Fri Apr 26 08:57:56 2019

# Not Valid After : Tue Apr 26 08:57:56 2044

# Fingerprint (SHA-256):

2E:44:10:2A:B5:8C:B8:54:19:45:1C:8E:19:D9:AC:F3:66:2C:AF:BC:61:4B:6A:53:96:0A:30:F7:D0:E2:EB:41

# Fingerprint (SHA1): CF:E9:70:84:0F:E0:73:0F:9D:F6:0C:7F:2C:4B:EE:20:46:34:9C:BB

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

```

CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "TunTrust Root CA"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\317\351\160\204\017\340\163\017\235\366\014\177\054\113\356\040
\106\064\234\273
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\205\023\271\220\133\066\134\266\136\270\132\370\340\061\127\264
END
CKA_ISSUER MULTILINE_OCTAL
\060\141\061\013\060\011\006\003\125\004\006\023\002\124\116\061
\067\060\065\006\003\125\004\012\014\056\101\147\145\156\143\145
\040\116\141\164\151\157\156\141\154\145\040\144\145\040\103\145
\162\164\151\146\151\143\141\164\151\157\156\040\105\154\145\143
\164\162\157\156\151\161\165\145\061\031\060\027\006\003\125\004
\003\014\020\124\165\156\124\162\165\163\164\040\122\157\157\164
\040\103\101
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\024\023\002\325\342\100\114\222\106\206\026\147\135\264\273
\273\262\153\076\374\023
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "HARICA TLS RSA Root CA 2021"
#
# Issuer: CN=HARICA TLS RSA Root CA 2021,O=Hellenic Academic and Research Institutions CA,C=GR
# Serial Number:39:ca:93:1c:ef:43:f3:c6:8e:93:c7:f4:64:89:38:7e
# Subject: CN=HARICA TLS RSA Root CA 2021,O=Hellenic Academic and Research Institutions CA,C=GR
# Not Valid Before: Fri Feb 19 10:55:38 2021
# Not Valid After : Mon Feb 13 10:55:37 2045
# Fingerprint (SHA-256):
D9:5D:0E:8E:DA:79:52:5B:F9:BE:B1:1B:14:D2:10:0D:32:94:98:5F:0C:62:D9:FA:BD:9C:D9:99:EC:CB:7B:1D
# Fingerprint
(SHA1): 02:2D:05:82:FA:88:CE:14:0C:06:79:DE:7F:14:10:E9:45:D7:A5:6D
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "HARICA TLS RSA Root CA 2021"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\154\061\013\060\011\006\003\125\004\006\023\002\107\122\061

```

\067\060\065\006\003\125\004\012\014\056\110\145\154\154\145\156  
\151\143\040\101\143\141\144\145\155\151\143\040\141\156\144\040  
\122\145\163\145\141\162\143\150\040\111\156\163\164\151\164\165  
\164\151\157\156\163\040\103\101\061\044\060\042\006\003\125\004  
\003\014\033\110\101\122\111\103\101\040\124\114\123\040\122\123  
\101\040\122\157\157\164\040\103\101\040\062\060\062\061

END

CKA\_ID UTF8 "0"

CKA\_ISSUER MULTILINE\_OCTAL

\060\154\061\013\060\011\006\003\125\004\006\023\002\107\122\061  
\067\060\065\006\003\125\004\012\014\056\110\145\154\154\145\156  
\151\143\040\101\143\141\144\145\155\151\143\040\141\156\144\040  
\122\145\163\145\141\162\143\150\040\111\156\163\164\151\164\165  
\164\151\157\156\163\040\103\101\061\044\060\042\006\003\125\004  
\003\014\033\110\101\122\111\103\101\040\124\114\123\040\122\123  
\101\040\122\157\157\164\040\103\101\040\062\060\062\061

END

CKA\_SERIAL\_NUMBER

MULTILINE\_OCTAL

\002\020\071\312\223\034\357\103\363\306\216\223\307\364\144\211  
\070\176

END

CKA\_VALUE MULTILINE\_OCTAL

\060\202\005\244\060\202\003\214\240\003\002\001\002\002\020\071  
\312\223\034\357\103\363\306\216\223\307\364\144\211\070\176\060  
\015\006\011\052\206\110\206\367\015\001\001\013\005\000\060\154  
\061\013\060\011\006\003\125\004\006\023\002\107\122\061\067\060  
\065\006\003\125\004\012\014\056\110\145\154\154\145\156\151\143  
\040\101\143\141\144\145\155\151\143\040\141\156\144\040\122\145  
\163\145\141\162\143\150\040\111\156\163\164\151\164\165\164\151  
\157\156\163\040\103\101\061\044\060\042\006\003\125\004\003\014  
\033\110\101\122\111\103\101\040\124\114\123\040\122\123\101\040  
\122\157\157\164\040\103\101\040\062\060\062\061\060\036\027\015  
\062\061\060\062\061\071\061\060\065\065\063\070\132\027\015\064  
\065\060\062\061\063\061\060\065\065\063\067\132\060\154\061\013  
\060\011\006\003\125\004\006\023\002\107\122\061\067\060\065\006  
\003\125\004\012\014\056\110\145\154\154\145\156\151\143\040\101  
\143\141\144\145\155\151\143\040\141\156\144\040\122\145\163\145  
\141\162\143\150\040\111\156\163\164\151\164\165\164\151\157\156  
\163\040\103\101\061\044\060\042\006\003\125\004\003\014\033\110  
\101\122\111\103\101\040\124\114\123\040\122\123\101\040\122\157  
\157\164\040\103\101\040\062\060\062\061\060\202\002\042\060\015  
\006\011\052\206\110\206\367\015\001\001\001\005\000\003\202\002  
\017\000\060\202\002\012\002\202\002\001\000\213\302\347\257\145  
\233\005\147\226\311\015\044\271\320\016\144\374\316\342\044\030  
\054\204\177\167\121\313\004\021\066\270\136\355\151\161\247\236  
\344\045\011\227\147\301\107\302\317\221\026\066\142\075\070\004  
\341\121\202\377\254\322\264\151\335\056\354\021\243\105\356\153

\153\073\114\277\214\215\244\036\235\021\271\351\070\371\172\016  
\014\230\342\043\035\321\116\143\324\347\270\101\104\373\153\257  
\153\332\037\323\305\221\210\133\244\211\222\321\201\346\214\071  
\130\240\326\151\103\251\255\230\122\130\156\333\012\373\153\317  
\150\372\343\244\136\072\105\163\230\007\352\137\002\162\336\014  
\245\263\237\256\251\035\267\035\263\374\212\131\347\156\162\145  
\255\365\060\224\043\007\363\202\026\113\065\230\234\123\273\057  
\312\344\132\331\307\215\035\374\230\231\373\054\244\202\153\360  
\052\037\216\013\137\161\134\134\256\102\173\051\211\201\313\003  
\243\231\312\210\236\013\100\011\101\063\333\346\130\172\375\256  
\231\160\300\132\017\326\023\206\161\057\166\151\374\220\335\333  
\055\156\321\362\233\365\032\153\236\157\025\214\172\360\113\050  
\240\042\070\200\044\154\066\244\073\362\060\221\363\170\023\317  
\301\077\065\253\361\035\021\043\265\103\042\236\001\222\267\030  
\002\345\021\321\202\333\025\000\314\141\067\301\052\174\232\341  
\320\272\263\120\106\356\202\254\235\061\370\373\043\342\003\000  
\110\160\243\011\046\171\025\123\140\363\070\134\255\070\352\201  
\000\143\024\271\063\136\335\013\333\240\105\007\032\063\011\370  
\115\264\247\002\246\151\364\302\131\005\210\145\205\126\256\113  
\313\340\336\074\175\055\032\310\351\373\037\243\141\112\326\052  
\023\255\167\114\032\030\233\221\017\130\330\006\124\305\227\370  
\252\077\040\212\246\205\246\167\366\246\374\034\342\356\156\224  
\063\052\203\120\204\012\345\117\206\370\120\105\170\000\201\353  
\133\150\343\046\215\314\173\134\121\364\024\054\100\276\032\140  
\035\172\162\141\035\037\143\055\210\252\316\242\105\220\010\374  
\153\276\263\120\052\132\375\250\110\030\106\326\220\100\222\220  
\012\204\136\150\061\370\353\355\015\323\035\306\175\231\030\125  
\126\047\145\056\215\105\305\044\354\316\343\002\003\001\000\001  
\243\102\060\100\060\017\006\003\125\035\023\001\001\377\004\005  
\060\003\001\001\377\060\035\006\003\125\035\016\004\026\004\024  
\012\110\043\246\140\244\222\012\063\352\223\133\305\127\352\045  
\115\275\022\356\060\016\006\003\125\035\017\001\001\377\004\004  
\003\002\001\206\060\015\006\011\052\206\110\206\367\015\001\001  
\013\005\000\003\202\002\001\000\076\220\110\252\156\142\025\045  
\146\173\014\325\214\213\211\235\327\355\116\007\357\234\320\024  
\137\136\120\275\150\226\220\244\024\021\252\150\155\011\065\071  
\100\011\332\364\011\054\064\245\173\131\204\111\051\227\164\310  
\007\036\107\155\362\316\034\120\046\343\236\075\100\123\077\367  
\177\226\166\020\305\106\245\320\040\113\120\364\065\073\030\364  
\125\152\101\033\107\006\150\074\273\011\010\142\331\137\125\102  
\252\254\123\205\254\225\126\066\126\253\344\005\214\305\250\332  
\037\243\151\275\123\017\304\377\334\312\343\176\362\114\210\206  
\107\106\032\363\000\365\200\221\242\334\103\102\224\233\040\360  
\321\315\262\353\054\123\302\123\170\112\117\004\224\101\232\217  
\047\062\301\345\111\031\277\361\362\302\213\250\012\071\061\050  
\264\175\142\066\054\115\354\037\063\266\176\167\155\176\120\360  
\237\016\327\021\217\317\030\305\343\047\376\046\357\005\235\317  
\317\067\305\320\173\332\073\260\026\204\014\072\223\326\276\027

```
\333\017\076\016\031\170\011\307\251\002\162\042\113\367\067\166
\272\165\304\205\003\132\143\325\261\165\005\302\271\275\224\255
\214\025\231\247\223\175\366\305\363\252\164\317\004\205\224\230
\000\364\342\371\312\044\145\277\340\142\257\310\305\372\262\311
\236\126\110\332\171\375\226\166\025\276\243\216\126\304\263\064
\374\276\107\364\301\264\250\374\325\060\210\150\356\313\256\311
\143\304\166\276\254\070\030\341\136\134\317\256\072\042\121\353
\321\213\263\363\053\063\007\124\207\372\264\262\023\173\272\123
\004\142\001\235\361\300\117\356\341\072\324\213\040\020\372\002
\127\346\357\301\013\267\220\106\234\031\051\214\334\157\240\112
\151\151\224\267\044\145\240\377\254\077\316\001\373\041\056\375
\150\370\233\362\245\317\061\070\134\025\252\346\227\000\301\337
\132\245\247\071\252\351\204\177\074\121\250\072\331\224\133\214
\277\117\010\161\345\333\250\134\324\322\246\376\000\243\306\026
\307\017\350\200\316\034\050\144\164\031\010\323\102\343\316\000
\135\177\261\334\023\260\341\005\313\321\040\252\206\164\236\071
\347\221\375\377\133\326\367\255\246\057\003\013\155\343\127\124
\353\166\123\030\215\021\230\272
```

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "HARICA TLS RSA Root CA 2021"

# Issuer: CN=HARICA TLS RSA Root CA 2021,O=Hellenic Academic and Research Institutions CA,C=GR

# Serial Number:39:ca:93:1c:ef:43:f3:c6:8e:93:c7:f4:64:89:38:7e

# Subject: CN=HARICA TLS RSA Root CA 2021,O=Hellenic Academic and Research Institutions CA,C=GR

# Not Valid Before: Fri Feb 19 10:55:38 2021

# Not Valid After : Mon Feb 13 10:55:37 2045

# Fingerprint (SHA-256):

D9:5D:0E:8E:DA:79:52:5B:F9:BE:B1:1B:14:D2:10:0D:32:94:98:5F:0C:62:D9:FA:BD:9C:D9:99:EC:CB:7B:1D

# Fingerprint (SHA1): 02:2D:05:82:FA:88:CE:14:0C:06:79:DE:7F:14:10:E9:45:D7:A5:6D

CKA\_CLASS

CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "HARICA TLS RSA Root CA 2021"

CKA\_CERT\_SHA1\_HASH MULTILINE\_OCTAL

```
\002\055\005\202\372\210\316\024\014\006\171\336\177\024\020\351
\105\327\245\155
```

END

CKA\_CERT\_MD5\_HASH MULTILINE\_OCTAL

```
\145\107\233\130\206\335\054\360\374\242\204\037\036\226\304\221
```

END

CKA\_ISSUER MULTILINE\_OCTAL

```
\060\154\061\013\060\011\006\003\125\004\006\023\002\107\122\061
```

```
\067\060\065\006\003\125\004\012\014\056\110\145\154\154\145\156
\151\143\040\101\143\141\144\145\155\151\143\040\141\156\144\040
\122\145\163\145\141\162\143\150\040\111\156\163\164\151\164\165
\164\151\157\156\163\040\103\101\061\044\060\042\006\003\125\004
\003\014\033\110\101\122\111\103\101\040\124\114\123\040\122\123
\101\040\122\157\157\164\040\103\101\040\062\060\062\061
```

END

CKA\_SERIAL\_NUMBER MULTILINE\_OCTAL

```
\002\020\071\312\223\034\357\103\363\306\216\223\307\364\144\211
\070\176
```

END

CKA\_TRUST\_SERVER\_AUTH

CK\_TRUST CKT\_NSS\_TRUSTED\_DELEGATOR

CKA\_TRUST\_EMAIL\_PROTECTION CK\_TRUST CKT\_NSS\_MUST\_VERIFY\_TRUST

CKA\_TRUST\_CODE\_SIGNING CK\_TRUST CKT\_NSS\_MUST\_VERIFY\_TRUST

CKA\_TRUST\_STEP\_UP\_APPROVED CK\_BBOOL CK\_FALSE

#

# Certificate "HARICA TLS ECC Root CA 2021"

#

# Issuer: CN=HARICA TLS ECC Root CA 2021,O=Hellenic Academic and Research Institutions CA,C=GR

# Serial Number:67:74:9d:8d:77:d8:3b:6a:db:22:f4:ff:59:e2:bf:ce

# Subject: CN=HARICA TLS ECC Root CA 2021,O=Hellenic Academic and Research Institutions CA,C=GR

# Not Valid Before: Fri Feb 19 11:01:10 2021

# Not Valid After : Mon Feb 13 11:01:09 2045

# Fingerprint (SHA-256):

3F:99:CC:47:4A:CF:CE:4D:FE:D5:87:94:66:5E:47:8D:15:47:73:9F:2E:78:0F:1B:B4:CA:9B:13:30:97:D4:01

# Fingerprint (SHA1): BC:B0:C1:9D:E9:98:92:70:19:38:57:E9:8D:A7:B4:5D:6E:EE:01:48

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_CERTIFICATE

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "HARICA TLS ECC Root

CA 2021"

CKA\_CERTIFICATE\_TYPE CK\_CERTIFICATE\_TYPE CKC\_X\_509

CKA\_SUBJECT MULTILINE\_OCTAL

```
\060\154\061\013\060\011\006\003\125\004\006\023\002\107\122\061
\067\060\065\006\003\125\004\012\014\056\110\145\154\154\145\156
\151\143\040\101\143\141\144\145\155\151\143\040\141\156\144\040
\122\145\163\145\141\162\143\150\040\111\156\163\164\151\164\165
\164\151\157\156\163\040\103\101\061\044\060\042\006\003\125\004
\003\014\033\110\101\122\111\103\101\040\124\114\123\040\105\103
\103\040\122\157\157\164\040\103\101\040\062\060\062\061
```

END

CKA\_ID UTF8 "0"

CKA\_ISSUER MULTILINE\_OCTAL

```
\060\154\061\013\060\011\006\003\125\004\006\023\002\107\122\061
\067\060\065\006\003\125\004\012\014\056\110\145\154\154\145\156
```

\151\143\040\101\143\141\144\145\155\151\143\040\141\156\144\040  
\122\145\163\145\141\162\143\150\040\111\156\163\164\151\164\165  
\164\151\157\156\163\040\103\101\061\044\060\042\006\003\125\004  
\003\014\033\110\101\122\111\103\101\040\124\114\123\040\105\103  
\103\040\122\157\157\164\040\103\101\040\062\060\062\061

END

CKA\_SERIAL\_NUMBER

MULTILINE\_OCTAL

\002\020\147\164\235\215\167\330\073\152\333\042\364\377\131\342  
\277\316

END

CKA\_VALUE MULTILINE\_OCTAL

\060\202\002\124\060\202\001\333\240\003\002\001\002\002\020\147  
\164\235\215\167\330\073\152\333\042\364\377\131\342\277\316\060  
\012\006\010\052\206\110\316\075\004\003\003\060\154\061\013\060  
\011\006\003\125\004\006\023\002\107\122\061\067\060\065\006\003  
\125\004\012\014\056\110\145\154\154\145\156\151\143\040\101\143  
\141\144\145\155\151\143\040\141\156\144\040\122\145\163\145\141  
\162\143\150\040\111\156\163\164\151\164\165\164\151\157\156\163  
\040\103\101\061\044\060\042\006\003\125\004\003\014\033\110\101  
\122\111\103\101\040\124\114\123\040\105\103\103\040\122\157\157  
\164\040\103\101\040\062\060\062\061\060\036\027\015\062\061\060  
\062\061\071\061\061\060\061\061\060\132\027\015\064\065\060\062  
\061\063\061\061\060\061\060\071\132\060\154\061\013\060\011\006  
\003\125\004\006\023\002\107\122\061\067\060\065\006\003\125\004  
\012\014\056\110\145\154\154\145\156\151\143\040\101\143\141\144  
\145\155\151\143\040\141\156\144\040\122\145\163\145\141\162\143  
\150\040\111\156\163\164\151\164\165\164\151\157\156\163\040\103  
\101\061\044\060\042\006\003\125\004\003\014\033\110\101\122\111  
\103\101\040\124\114\123\040\105\103\103\040\122\157\157\164\040  
\103\101\040\062\060\062\061\060\166\060\020\006\007\052\206\110  
\316\075\002\001\006\005\053\201\004\000\042\003\142\000\004\070  
\010\376\261\240\226\322\172\254\257\111\072\320\300\340\303\073  
\050\252\361\162\155\145\000\107\210\204\374\232\046\153\252\113  
\272\154\004\012\210\136\027\362\125\207\374\060\260\064\342\064  
\130\127\032\204\123\351\060\331\251\362\226\164\303\121\037\130  
\111\061\314\230\116\140\021\207\165\323\162\224\220\117\233\020  
\045\052\250\170\055\276\220\101\130\220\025\162\247\241\267\243  
\102\060\100\060\017\006\003\125\035\023\001\001\377\004\005\060  
\003\001\001\377\060\035\006\003\125\035\016\004\026\004\024\311  
\033\123\201\022\376\004\325\026\321\252\274\232\157\267\240\225  
\031\156\312\060\016\006\003\125\035\017\001\001\377\004\004\003  
\002\001\206\060\012\006\010\052\206\110\316\075\004\003\003\003  
\147\000\060\144\002\060\021\336\256\370\334\116\210\260\251\360  
\042\255\302\121\100\357\140\161\055\356\217\002\304\135\003\160  
\111\244\222\352\305\024\210\160\246\323\015\260\252\312\054\100  
\234\373\351\202\156\232\002\060\053\107\232\007\306\321\302\201  
\174\312\013\226\030\101\033\243\364\060\011\236\265\043\050\015

```

\237\024\266\074\123\242\114\006\151\175\372\154\221\306\052\111
\105\346\354\267\023\341\072\154
END
CKA_NSS_MOZILLA_CA_POLICY
CK_BBOOL CK_TRUE
CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE
CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

# Trust for "HARICA TLS ECC Root CA 2021"
# Issuer: CN=HARICA TLS ECC Root CA 2021,O=Hellenic Academic and Research Institutions CA,C=GR
# Serial Number:67:74:9d:8d:77:d8:3b:6a:db:22:f4:ff:59:e2:bf:ce
# Subject: CN=HARICA TLS ECC Root CA 2021,O=Hellenic
Academic and Research Institutions CA,C=GR
# Not Valid Before: Fri Feb 19 11:01:10 2021
# Not Valid After : Mon Feb 13 11:01:09 2045
# Fingerprint (SHA-256):
3F:99:CC:47:4A:CF:CE:4D:FE:D5:87:94:66:5E:47:8D:15:47:73:9F:2E:78:0F:1B:B4:CA:9B:13:30:97:D4:01
# Fingerprint (SHA1): BC:B0:C1:9D:E9:98:92:70:19:38:57:E9:8D:A7:B4:5D:6E:EE:01:48
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "HARICA TLS ECC Root CA 2021"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\274\260\301\235\351\230\222\160\031\070\127\351\215\247\264\135
\156\356\001\110
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\256\367\114\345\146\065\321\267\233\214\042\223\164\323\113\260
END
CKA_ISSUER MULTILINE_OCTAL
\060\154\061\013\060\011\006\003\125\004\006\023\002\107\122\061
\067\060\065\006\003\125\004\012\014\056\110\145\154\154\145\156
\151\143\040\101\143\141\144\145\155\151\143\040\141\156\144\040
\122\145\163\145\141\162\143\150\040\111\156\163\164\151\164\165
\164\151\157\156\163\040\103\101\061\044\060\042\006\003\125\004
\003\014\033\110\101\122\111\103\101\040\124\114\123\040\105\103
\103\040\122\157\157\164\040\103\101\040\062\060\062\061
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\020\147\164\235\215\167\330\073\152\333\042\364\377\131\342
\277\316
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

```



```

#
# Certificate "HARICA Client RSA Root CA 2021"
#
# Issuer: CN=HARICA Client RSA Root CA 2021,O=Hellenic Academic and Research Institutions CA,C=GR
# Serial Number:55:52:f8:1e:db:1b:24:2c:9e:bb:96:18:cd:02:28:3e
# Subject: CN=HARICA Client RSA Root CA 2021,O=Hellenic Academic and Research Institutions CA,C=GR
# Not Valid Before: Fri Feb 19 10:58:46 2021
# Not Valid After : Mon Feb 13 10:58:45 2045
# Fingerprint (SHA-256):
1B:E7:AB:E3:06:86:B1:63:48:AF:D1:C6:1B:68:66:A0:EA:7F:48:21:E6:7D:5E:8A:F9:37:CF:80:11:BC:75:0D
#
Fingerprint (SHA1): 46:C6:90:0A:77:3A:B6:BC:F4:65:AD:AC:FC:E3:F7:07:00:6E:DE:6E
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "HARICA Client RSA Root CA 2021"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\157\061\013\060\011\006\003\125\004\006\023\002\107\122\061
\067\060\065\006\003\125\004\012\014\056\110\145\154\154\145\156
\151\143\040\101\143\141\144\145\155\151\143\040\141\156\144\040
\122\145\163\145\141\162\143\150\040\111\156\163\164\151\164\165
\164\151\157\156\163\040\103\101\061\047\060\045\006\003\125\004
\003\014\036\110\101\122\111\103\101\040\103\154\151\145\156\164
\040\122\123\101\040\122\157\157\164\040\103\101\040\062\060\062
\061
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\157\061\013\060\011\006\003\125\004\006\023\002\107\122\061
\067\060\065\006\003\125\004\012\014\056\110\145\154\154\145\156
\151\143\040\101\143\141\144\145\155\151\143\040\141\156\144\040
\122\145\163\145\141\162\143\150\040\111\156\163\164\151\164\165
\164\151\157\156\163\040\103\101\061\047\060\045\006\003\125\004
\003\014\036\110\101\122\111\103\101\040\103\154\151\145\156\164
\040\122\123\101\040\122\157\157\164\040\103\101\040\062\060\062
\061
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\020\125\122\370\036\333\033\044\054\236\273\226\030\315\002
\050\076
END
CKA_VALUE MULTILINE_OCTAL
\060\202\005\252\060\202\003\222\240\003\002\001\002\002\020\125
\122\370\036\333\033\044\054\236\273\226\030\315\002\050\076\060

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\015\006\011\052\206\110\206\367\015\001\001\013\005\000\060\157  
\061\013\060\011\006\003\125\004\006\023\002\107\122\061\067\060  
\065\006\003\125\004\012\014\056\110\145\154\154\145\156\151\143  
\040\101\143\141\144\145\155\151\143\040\141\156\144\040\122\145  
\163\145\141\162\143\150\040\111\156\163\164\151\164\165\164\151  
\157\156\163\040\103\101\061\047\060\045\006\003\125\004\003\014  
\036\110\101\122\111\103\101\040\103\154\151\145\156\164\040\122  
\123\101\040\122\157\157\164\040\103\101\040\062\060\062\061\060  
\036\027\015\062\061\060\062\061\071\061\060\065\070\064\066\132  
\027\015\064\065\060\062\061\063\061\060\065\070\064\065\132\060  
\157\061\013\060\011\006\003\125\004\006\023\002\107\122\061\067  
\060\065\006\003\125\004\012\014\056\110\145\154\154\145\156\151  
\143\040\101\143\141\144\145\155\151\143\040\141\156\144\040\122  
\145\163\145\141\162\143\150\040\111\156\163\164\151\164\165\164  
\151\157\156\163\040\103\101\061\047\060\045\006\003\125\004\003  
\014\036\110\101\122\111\103\101\040\103\154\151\145\156\164\040  
\122\123\101\040\122\157\157\164\040\103\101\040\062\060\062\061  
\060\202\002\042\060\015\006\011\052\206\110\206\367\015\001\001  
\001\005\000\003\202\002\017\000\060\202\002\012\002\202\002\001  
\000\201\333\127\102\220\054\164\065\364\370\270\164\031\115\253  
\011\132\167\105\201\163\142\260\065\237\370\320\267\063\000\207  
\023\266\226\253\016\124\022\060\007\274\233\267\110\327\321\031  
\203\256\216\330\251\361\251\000\204\260\214\136\236\350\014\217  
\124\151\277\366\324\010\117\046\160\376\030\101\143\032\263\062  
\213\100\370\007\253\127\061\360\306\026\166\147\232\264\335\057  
\362\321\153\305\320\222\204\221\161\156\017\056\143\351\037\123  
\244\335\122\023\314\011\203\051\201\014\305\123\165\104\261\016  
\147\123\030\320\303\037\210\113\237\224\044\264\051\274\273\350  
\116\375\157\322\025\035\111\334\215\160\362\021\032\040\121\125  
\021\272\210\157\304\367\120\171\326\252\061\342\204\075\136\062  
\310\167\052\120\161\345\013\057\351\266\352\357\253\012\063\071  
\016\375\217\245\147\103\202\216\230\151\011\011\033\100\315\070  
\147\107\352\311\354\227\161\022\336\044\365\162\074\321\367\103  
\114\046\367\220\262\211\351\105\113\125\075\061\005\172\101\342  
\225\272\103\300\027\305\266\205\075\031\215\144\160\363\133\254  
\315\237\323\051\165\207\113\225\147\152\246\370\321\335\274\220  
\206\211\103\051\251\067\133\365\135\260\046\132\123\102\166\220  
\053\317\236\126\154\053\124\317\134\232\145\337\133\213\110\140  
\070\174\373\305\013\317\166\004\143\002\063\052\175\365\203\147  
\347\372\306\103\375\053\017\324\046\057\167\244\062\301\044\352  
\144\235\277\263\070\161\061\104\362\107\270\242\146\101\241\373  
\233\173\274\307\106\152\165\277\132\242\214\350\152\104\301\270  
\226\265\300\062\010\055\173\164\065\163\262\312\306\376\257\021  
\162\030\366\347\310\302\317\245\052\352\173\326\131\350\174\240  
\262\152\100\011\151\016\245\226\333\321\000\271\361\210\156\066  
\360\210\262\235\361\122\362\303\174\277\060\211\074\012\151\371  
\042\244\145\341\233\340\164\306\261\205\227\226\054\256\224\217  
\120\246\071\022\037\276\107\362\201\170\323\165\066\236\175\132

\040\227\342\122\256\231\237\306\174\233\146\363\376\330\317\356  
\275\227\006\035\055\205\334\076\066\123\226\173\040\272\350\310  
\341\255\226\142\076\021\174\263\000\204\236\247\114\161\253\112  
\067\002\003\001\000\001\243\102\060\100\060\017\006\003\125\035  
\023\001\001\377\004\005\060\003\001\001\377\060\035\006\003\125  
\035\016\004\026\004\024\240\326\007\075\136\044\367\173\240\104  
\056\044\122\015\031\252\053\004\221\247\060\016\006\003\125\035  
\017\001\001\377\004\004\003\002\001\206\060\015\006\011\052\206  
\110\206\367\015\001\001\013\005\000\003\202\002\001\000\015\107  
\371\011\146\061\122\354\171\356\302\250\362\150\076\355\226\105  
\313\072\246\230\143\077\352\053\115\116\003\320\034\202\341\313  
\323\345\326\253\133\147\050\274\235\376\014\231\012\200\125\247  
\316\033\043\141\015\260\127\360\376\340\312\276\346\220\333\203  
\054\276\203\216\364\171\266\376\320\015\102\247\130\037\151\352  
\201\365\005\245\376\106\150\353\154\170\311\340\352\347\346\336  
\061\305\322\325\054\202\143\050\235\135\250\032\176\210\346\347  
\053\361\054\325\320\005\236\334\055\275\067\146\324\004\242\247  
\255\277\072\302\250\073\255\377\215\235\063\340\271\232\204\241  
\207\037\166\364\202\164\327\016\371\060\110\076\133\210\076\252  
\134\153\326\057\014\350\216\163\302\030\221\203\071\266\146\132  
\320\037\140\047\135\115\343\366\072\015\146\120\234\170\173\253  
\363\023\020\256\017\057\253\350\144\263\030\040\235\106\065\144  
\045\163\352\233\020\134\130\065\211\261\106\110\247\364\254\324  
\035\236\133\314\251\245\032\023\117\044\120\252\331\033\155\261  
\100\373\235\335\130\164\304\302\157\024\162\354\333\065\237\270  
\124\165\105\303\246\310\032\050\065\072\256\145\362\251\230\316  
\257\133\311\070\214\061\073\177\314\334\226\375\342\133\326\320  
\131\364\166\272\013\313\117\203\020\307\100\320\035\140\351\052  
\345\110\130\167\014\105\151\276\031\161\004\044\342\343\044\037  
\112\310\301\076\231\365\226\230\070\110\045\241\025\260\033\327  
\342\204\030\133\366\161\065\232\150\173\100\314\030\134\014\044  
\235\324\225\365\231\252\106\352\256\254\277\364\024\031\044\350  
\214\354\343\365\274\006\150\212\052\014\005\137\012\227\165\247  
\334\176\300\375\327\172\030\337\060\321\070\113\037\260\230\160  
\277\314\174\163\360\156\304\061\245\244\227\035\254\277\316\154  
\041\112\276\047\043\147\363\006\126\201\012\221\216\266\341\003  
\005\063\054\332\064\010\115\116\120\043\255\037\245\305\324\172  
\376\352\011\354\247\050\140\213\106\174\265\352\233\335\117\371  
\347\153\025\306\210\317\103\333\345\047\334\004\126\156\157\106  
\025\361\126\055\350\134\014\163\303\043\201\070\040\313\311\014  
\151\317\054\253\073\204\140\063\031\122\375\151\024\063

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRUST\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRUST\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "HARICA Client RSA Root CA 2021"

```
# Issuer: CN=HARICA Client RSA Root CA 2021,O=Hellenic Academic and Research Institutions CA,C=GR
# Serial Number:55:52:f8:1e:db:1b:24:2c:9e:bb:96:18:cd:02:28:3e
# Subject: CN=HARICA Client RSA Root CA 2021,O=Hellenic Academic and Research Institutions CA,C=GR
# Not Valid Before: Fri Feb 19 10:58:46 2021
# Not Valid After : Mon Feb 13 10:58:45 2045
# Fingerprint (SHA-256):
1B:E7:AB:E3:06:86:B1:63:48:AF:D1:C6:1B:68:66:A0:EA:7F:48:21:E6:7D:5E:8A:F9:37:CF:80:11:BC:75:0D
#
Fingerprint (SHA1): 46:C6:90:0A:77:3A:B6:BC:F4:65:AD:AC:FC:E3:F7:07:00:6E:DE:6E
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "HARICA Client RSA Root CA 2021"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\106\306\220\012\167\072\266\274\364\145\255\254\374\343\367\007
\000\156\336\156
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\157\355\134\327\210\314\070\251\334\351\335\331\135\333\330\355
END
CKA_ISSUER MULTILINE_OCTAL
\060\157\061\013\060\011\006\003\125\004\006\023\002\107\122\061
\067\060\065\006\003\125\004\012\014\056\110\145\154\154\145\156
\151\143\040\101\143\141\144\145\155\151\143\040\141\156\144\040
\122\145\163\145\141\162\143\150\040\111\156\163\164\151\164\165
\164\151\157\156\163\040\103\101\061\047\060\045\006\003\125\004
\003\014\036\110\101\122\111\103\101\040\103\154\151\145\156\164
\040\122\123\101\040\122\157\157\164\040\103\101\040\062\060\062
\061
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\020\125\122\370\036\333\033\044\054\236\273\226\030\315\002
\050\076
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "HARICA Client ECC Root CA 2021"
#
# Issuer: CN=HARICA Client ECC Root CA 2021,O=Hellenic Academic and Research Institutions CA,C=GR
# Serial Number:31:68:d9:d8:e1:62:57:1e:d2:19:44:88:e6:10:7d:f0
# Subject: CN=HARICA Client ECC Root CA 2021,O=Hellenic Academic and Research Institutions CA,C=GR
# Not Valid Before: Fri Feb 19 11:03:34 2021
```

# Not Valid After : Mon Feb 13 11:03:33 2045

# Fingerprint (SHA-256):

8D:D4:B5:37:3C:B0:DE:36:76:9C:12:33:92:80:D8:27:46:B3:AA:6C:D4:26:E7:97:A3:1B:AB:E4:27:9C:F0:0B

# Fingerprint (SHA1): BE:64:D3:DA:14:4B:D2:6B:CD:AF:8F:DB:A6:A6:72:F8:DE:26:F9:00

CKA\_CLASS

CK\_OBJECT\_CLASS CKO\_CERTIFICATE

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "HARICA Client ECC Root CA 2021"

CKA\_CERTIFICATE\_TYPE CK\_CERTIFICATE\_TYPE CKC\_X\_509

CKA\_SUBJECT MULTILINE\_OCTAL

\060\157\061\013\060\011\006\003\125\004\006\023\002\107\122\061  
\067\060\065\006\003\125\004\012\014\056\110\145\154\154\145\156  
\151\143\040\101\143\141\144\145\155\151\143\040\141\156\144\040  
\122\145\163\145\141\162\143\150\040\111\156\163\164\151\164\165  
\164\151\157\156\163\040\103\101\061\047\060\045\006\003\125\004  
\003\014\036\110\101\122\111\103\101\040\103\154\151\145\156\164  
\040\105\103\103\040\122\157\157\164\040\103\101\040\062\060\062  
\061

END

CKA\_ID UTF8 "0"

CKA\_ISSUER MULTILINE\_OCTAL

\060\157\061\013\060\011\006\003\125\004\006\023\002\107\122\061  
\067\060\065\006\003\125\004\012\014\056\110\145\154\154\145\156  
\151\143\040\101\143\141\144\145\155\151\143\040\141\156\144\040  
\122\145\163\145\141\162\143\150\040\111\156\163\164\151\164\165  
\164\151\157\156\163\040\103\101\061\047\060\045\006\003\125\004  
\003\014\036\110\101\122\111\103\101\040\103\154\151\145\156\164  
\040\105\103\103\040\122\157\157\164\040\103\101\040\062\060\062  
\061

END

CKA\_SERIAL\_NUMBER

MULTILINE\_OCTAL

\002\020\061\150\331\330\341\142\127\036\322\031\104\210\346\020  
\175\360

END

CKA\_VALUE MULTILINE\_OCTAL

\060\202\002\132\060\202\001\341\240\003\002\001\002\002\020\061  
\150\331\330\341\142\127\036\322\031\104\210\346\020\175\360\060  
\012\006\010\052\206\110\316\075\004\003\003\060\157\061\013\060  
\011\006\003\125\004\006\023\002\107\122\061\067\060\065\006\003  
\125\004\012\014\056\110\145\154\154\145\156\151\143\040\101\143  
\141\144\145\155\151\143\040\141\156\144\040\122\145\163\145\141  
\162\143\150\040\111\156\163\164\151\164\165\164\151\157\156\163  
\040\103\101\061\047\060\045\006\003\125\004\003\014\036\110\101  
\122\111\103\101\040\103\154\151\145\156\164\040\105\103\103\040  
\122\157\157\164\040\103\101\040\062\060\062\061\060\036\027\015

\062\061\060\062\061\071\061\061\060\063\063\064\132\027\015\064  
\065\060\062\061\063\061\061\060\063\063\063\132\060\157\061\013  
\060\011\006\003\125\004\006\023\002\107\122\061\067\060\065\006  
\003\125\004\012\014\056\110\145\154\154\145\156\151\143\040\101  
\143\141\144\145\155\151\143\040\141\156\144\040\122\145\163\145  
\141\162\143\150\040\111\156\163\164\151\164\165\164\151\157\156  
\163\040\103\101\061\047\060\045\006\003\125\004\003\014\036\110  
\101\122\111\103\101\040\103\154\151\145\156\164\040\105\103\103  
\040\122\157\157\164\040\103\101\040\062\060\062\061\060\166\060  
\020\006\007\052\206\110\316\075\002\001\006\005\053\201\004\000  
\042\003\142\000\004\007\030\255\225\226\224\320\134\017\202\367  
\052\100\372\002\311\311\075\066\246\243\004\152\301\155\225\001  
\210\140\022\124\154\134\242\053\156\023\072\210\225\014\034\046  
\206\066\112\211\031\267\030\336\073\350\250\120\037\312\337\133  
\277\111\200\025\333\343\060\341\035\132\307\052\212\001\007\376  
\155\054\064\357\050\050\227\274\301\371\127\206\225\213\065\317  
\236\132\321\150\225\243\102\060\100\060\017\006\003\125\035\023  
\001\001\377\004\005\060\003\001\001\377\060\035\006\003\125\035  
\016\004\026\004\024\122\010\322\276\062\201\045\375\365\032\227  
\354\116\137\032\273\123\315\220\255\060\016\006\003\125\035\017  
\001\001\377\004\004\003\002\001\206\060\012\006\010\052\206\110  
\316\075\004\003\003\003\147\000\060\144\002\060\114\061\105\106  
\117\250\346\276\303\167\262\032\030\113\055\210\173\130\346\253  
\224\153\104\003\260\027\377\337\202\163\104\121\054\375\223\035  
\006\173\024\322\211\354\100\014\357\041\001\056\002\060\057\311  
\056\132\154\054\035\331\225\340\236\260\271\134\122\174\366\370  
\070\312\056\361\324\035\362\242\111\242\225\370\301\130\136\117  
\376\163\012\357\061\260\253\043\130\023\214\213\336\073

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "HARICA

Client ECC Root CA 2021"

# Issuer: CN=HARICA Client ECC Root CA 2021,O=Hellenic Academic and Research Institutions CA,C=GR

# Serial Number:31:68:d9:d8:e1:62:57:1e:d2:19:44:88:e6:10:7d:f0

# Subject: CN=HARICA Client ECC Root CA 2021,O=Hellenic Academic and Research Institutions CA,C=GR

# Not Valid Before: Fri Feb 19 11:03:34 2021

# Not Valid After : Mon Feb 13 11:03:33 2045

# Fingerprint (SHA-256):

8D:D4:B5:37:3C:B0:DE:36:76:9C:12:33:92:80:D8:27:46:B3:AA:6C:D4:26:E7:97:A3:1B:AB:E4:27:9C:F0:0B

# Fingerprint (SHA1): BE:64:D3:DA:14:4B:D2:6B:CD:AF:8F:DB:A6:A6:72:F8:DE:26:F9:00

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

```

CKA_LABEL UTF8 "HARICA Client ECC Root CA 2021"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\276\144\323\332\024\113\322\153\315\257\217\333\246\246\162\370
\336\046\371\000
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\255\270\120\246\251\202\172\154\075\032\252\244\322\143\244\104
END
CKA_ISSUER MULTILINE_OCTAL
\060\157\061\013\060\011\006\003\125\004\006\023\002\107\122\061
\067\060\065\006\003\125\004\012\014\056\110\145\154\154\145\156
\151\143\040\101\143\141\144\145\155\151\143\040\141\156\144\040
\122\145\163\145\141\162\143\150\040\111\156\163\164\151\164\165
\164\151\157\156\163\040\103\101\061\047\060\045\006\003\125\004
\003\014\036\110\101\122\111\103\101\040\103\154\151\145\156\164
\040\105\103\103\040\122\157\157\164\040\103\101\040\062\060\062
\061
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\020\061\150\331\330\341\142\127\036\322\031\104\210\346\020
\175\360
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "Autoridad de Certificacion Firmaprofesional CIF A62634068"
#
# Issuer: CN=Autoridad de Certificacion Firmaprofesional CIF A62634068,C=ES
# Serial Number:1b:70:e9:d2:ff:ae:6c:71
#
# Subject: CN=Autoridad de Certificacion Firmaprofesional CIF A62634068,C=ES
# Not Valid Before: Tue Sep 23 15:22:07 2014
# Not Valid After : Mon May 05 15:22:07 2036
# Fingerprint (SHA-256):
57:DE:05:83:EF:D2:B2:6E:03:61:DA:99:DA:9D:F4:64:8D:EF:7E:E8:44:1C:3B:72:8A:FA:9B:CD:E0:F9:B2:6A
# Fingerprint (SHA1): 0B:BE:C2:27:22:49:CB:39:AA:DB:35:5C:53:E3:8C:AE:78:FF:B6:FE
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Autoridad de Certificacion Firmaprofesional CIF A62634068"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\121\061\013\060\011\006\003\125\004\006\023\002\105\123\061

```

\102\060\100\006\003\125\004\003\014\071\101\165\164\157\162\151  
\144\141\144\040\144\145\040\103\145\162\164\151\146\151\143\141  
\143\151\157\156\040\106\151\162\155\141\160\162\157\146\145\163  
\151\157\156\141\154\040\103\111\106\040\101\066\062\066\063\064  
\060\066\070

END

CKA\_ID

UTF8 "0"

CKA\_ISSUER MULTILINE\_OCTAL

\060\121\061\013\060\011\006\003\125\004\006\023\002\105\123\061  
\102\060\100\006\003\125\004\003\014\071\101\165\164\157\162\151  
\144\141\144\040\144\145\040\103\145\162\164\151\146\151\143\141  
\143\151\157\156\040\106\151\162\155\141\160\162\157\146\145\163  
\151\157\156\141\154\040\103\111\106\040\101\066\062\066\063\064  
\060\066\070

END

CKA\_SERIAL\_NUMBER MULTILINE\_OCTAL

\002\010\033\160\351\322\377\256\154\161

END

CKA\_VALUE MULTILINE\_OCTAL

\060\202\006\024\060\202\003\374\240\003\002\001\002\002\010\033  
\160\351\322\377\256\154\161\060\015\006\011\052\206\110\206\367  
\015\001\001\013\005\000\060\121\061\013\060\011\006\003\125\004  
\006\023\002\105\123\061\102\060\100\006\003\125\004\003\014\071  
\101\165\164\157\162\151\144\141\144\040\144\145\040\103\145\162  
\164\151\146\151\143\141\143\151\157\156\040\106\151\162\155\141  
\160\162\157\146\145\163\151\157\156\141\154\040\103\111\106\040  
\101\066\062\066\063\064\060\066\070\060\036\027\015\061\064\060  
\071\062\063\061\065\062\062\060\067\132\027\015\063\066\060\065  
\060\065\061\065\062\062\060\067\132\060\121\061\013\060\011\006  
\003\125\004\006\023\002\105\123\061\102\060\100\006\003\125\004  
\003\014\071\101\165\164\157\162\151\144\141\144\040\144\145\040  
\103\145\162\164\151\146\151\143\141\143\151\157\156\040\106\151  
\162\155\141\160\162\157\146\145\163\151\157\156\141\154\040\103  
\111\106\040\101\066\062\066\063\064\060\066\070\060\202\002\042  
\060\015\006\011\052\206\110\206\367\015\001\001\001\005\000\003  
\202\002\017\000\060\202\002\012\002\202\002\001\000\312\226\153  
\216\352\370\373\361\242\065\340\177\114\332\340\303\122\327\175  
\266\020\310\002\136\263\103\052\304\117\152\262\312\034\135\050  
\232\170\021\032\151\131\127\257\265\040\102\344\213\017\346\337  
\133\246\003\222\057\365\021\344\142\327\062\161\070\331\004\014  
\161\253\075\121\176\017\007\337\143\005\134\351\277\224\157\301  
\051\202\300\264\332\121\260\301\074\273\255\067\112\134\312\361  
\113\066\016\044\253\277\303\204\167\375\250\120\364\261\347\306  
\057\322\055\131\215\172\012\116\226\151\122\002\252\066\230\354  
\374\372\024\203\014\067\037\311\222\067\177\327\201\055\345\304  
\271\340\076\064\376\147\364\076\146\321\323\364\100\317\136\142  
\064\017\160\006\076\040\030\132\316\367\162\033\045\154\223\164



\024\223\243\163\261\016\252\207\020\043\131\137\040\005\031\107  
\355\150\216\222\022\312\135\374\326\053\262\222\074\040\317\341  
\137\257\040\276\240\166\177\166\345\354\032\206\141\063\076\347  
\173\264\077\240\017\216\242\271\152\157\271\207\046\157\101\154  
\210\246\120\375\152\143\013\365\223\026\033\031\217\262\355\233  
\233\311\220\365\001\014\337\031\075\017\076\070\043\311\057\217  
\014\321\002\376\033\125\326\116\320\215\074\257\117\244\363\376  
\257\052\323\005\235\171\010\241\313\127\061\264\234\310\220\262  
\147\364\030\026\223\072\374\107\330\321\170\226\061\037\272\053  
\014\137\135\231\255\143\211\132\044\040\166\330\337\375\253\116  
\246\042\252\235\136\346\047\212\175\150\051\243\347\212\270\332  
\021\273\027\055\231\235\023\044\106\367\305\342\330\237\216\177  
\307\217\164\155\132\262\350\162\365\254\356\044\020\255\057\024  
\332\377\055\232\106\161\107\276\102\337\273\001\333\364\177\323  
\050\217\061\131\133\323\311\002\246\264\122\312\156\227\373\103  
\305\010\046\157\212\364\273\375\237\050\252\015\325\105\363\023  
\072\035\330\300\170\217\101\147\074\036\224\144\256\173\013\305  
\350\331\001\210\071\032\227\206\144\101\325\073\207\014\156\372  
\017\306\275\110\024\277\071\115\324\236\101\266\217\226\035\143  
\226\223\331\225\006\170\061\150\236\067\006\073\200\211\105\141  
\071\043\307\033\104\243\025\345\034\370\222\060\273\002\003\001  
\000\001\243\201\357\060\201\354\060\035\006\003\125\035\016\004  
\026\004\024\145\315\353\253\065\036\000\076\176\325\164\300\034  
\264\163\107\016\032\144\057\060\022\006\003\125\035\023\001\001  
\377\004\010\060\006\001\001\377\002\001\001\060\201\246\006\003  
\125\035\040\004\201\236\060\201\233\060\201\230\006\004\125\035  
\040\000\060\201\217\060\057\006\010\053\006\001\005\005\007\002  
\001\026\043\150\164\164\160\072\057\057\167\167\167\056\146\151  
\162\155\141\160\162\157\146\145\163\151\157\156\141\154\056\143  
\157\155\057\143\160\163\060\134\006\010\053\006\001\005\005\007  
\002\002\060\120\036\116\000\120\000\141\000\163\000\145\000\157  
\000\040\000\144\000\145\000\040\000\154\000\141\000\040\000\102  
\000\157\000\156\000\141\000\156\000\157\000\166\000\141\000\040  
\000\064\000\067\000\040\000\102\000\141\000\162\000\143\000\145  
\000\154\000\157\000\156\000\141\000\040\000\060\000\070\000\060  
\000\061\000\067\060\016\006\003\125\035\017\001\001\377\004\004  
\003\002\001\006\060\015\006\011\052\206\110\206\367\015\001\001  
\013\005\000\003\202\002\001\000\164\207\050\002\053\167\037\146  
\211\144\355\217\164\056\106\034\273\250\370\370\013\035\203\266  
\072\247\350\105\212\007\267\340\076\040\313\341\010\333\023\010  
\370\050\241\065\262\200\263\013\121\300\323\126\232\215\063\105  
\111\257\111\360\340\075\007\172\105\023\132\377\310\227\330\323  
\030\054\175\226\370\335\242\145\103\160\223\220\025\272\220\337  
\350\031\260\333\054\212\140\017\267\157\224\007\036\035\246\311  
\205\366\275\064\370\100\170\142\020\160\072\276\175\113\071\201  
\251\020\324\226\101\273\370\137\034\013\035\010\362\261\260\211  
\172\362\367\240\340\304\217\213\170\265\073\130\245\043\216\117  
\125\376\066\073\340\014\267\312\052\060\101\040\264\200\315\256

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\374\166\146\163\250\256\156\341\174\332\003\350\224\040\346\042
\243\320\037\220\135\040\123\024\046\127\332\124\227\337\026\104
\020\001\036\210\146\217\162\070\223\335\040\267\064\276\327\361
\356\143\216\107\171\050\006\374\363\131\105\045\140\042\063\033
\243\137\250\272\052\332\032\075\315\100\352\214\356\005\025\225
\325\245\054\040\057\247\230\050\356\105\374\361\270\210\000\054
\217\102\332\121\325\234\345\023\150\161\105\103\213\236\013\041
\074\113\134\005\334\032\237\230\216\332\275\042\236\162\315\255
\012\313\314\243\147\233\050\164\304\233\327\032\074\004\130\246
\202\235\255\307\173\157\377\200\226\351\370\215\152\275\030\220
\035\377\111\032\220\122\067\223\057\074\002\135\202\166\013\121
\347\026\307\127\370\070\371\247\315\233\042\124\357\143\260\025
\155\123\145\003\112\136\112\240\262\247\216\111\000\131\070\325
\307\364\200\144\365\156\225\120\270\021\176\025\160\070\112\260
\177\320\304\062\160\300\031\377\311\070\055\024\054\146\364\102
\104\346\125\166\033\200\025\127\377\300\247\247\252\071\252\330
\323\160\320\056\272\353\224\152\372\137\064\206\347\142\265\375
\212\360\060\205\224\311\257\044\002\057\157\326\335\147\376\343
\260\125\117\004\230\117\244\101\126\342\223\320\152\350\326\363
\373\145\340\316\165\304\061\131\014\356\202\310\014\140\063\112
\031\272\204\147\047\017\274\102\135\275\044\124\015\354\035\160
\006\137\244\274\372\040\174\125
```

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "Autoridad de Certificacion

Firmaprofesional CIF A62634068"

# Issuer: CN=Autoridad de Certificacion Firmaprofesional CIF A62634068,C=ES

# Serial Number: 1b:70:e9:d2:ff:ae:6c:71

# Subject: CN=Autoridad de Certificacion Firmaprofesional CIF A62634068,C=ES

# Not Valid Before: Tue Sep 23 15:22:07 2014

# Not Valid After : Mon May 05 15:22:07 2036

# Fingerprint (SHA-256):

57:DE:05:83:EF:D2:B2:6E:03:61:DA:99:DA:9D:F4:64:8D:EF:7E:E8:44:1C:3B:72:8A:FA:9B:CD:E0:F9:B2:6A

# Fingerprint (SHA1): 0B:BE:C2:27:22:49:CB:39:AA:DB:35:5C:53:E3:8C:AE:78:FF:B6:FE

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "Autoridad de Certificacion Firmaprofesional CIF A62634068"

CKA\_CERT\_SHA1\_HASH MULTILINE\_OCTAL

```
\013\276\302\047\042\111\313\071\252\333\065\134\123\343\214\256
```

```
\170\377\266\376
```

END

CKA\_CERT\_MD5\_HASH MULTILINE\_OCTAL

\116\156\233\124\114\312\267\372\110\344\220\261\025\113\034\243

END

CKA\_ISSUER MULTILINE\_OCTAL

\060\121\061\013\060\011\006\003\125\004\006\023\002\105\123\061  
\102\060\100\006\003\125\004\003\014\071\101\165\164\157\162\151  
\144\141\144\040\144\145\040\103\145\162\164\151\146\151\143\141  
\143\151\157\156\040\106\151\162\155\141\160\162\157\146\145\163  
\151\157\156\141\154\040\103\111\106\040\101\066\062\066\063\064  
\060\066\070

END

CKA\_SERIAL\_NUMBER

MULTILINE\_OCTAL

\002\010\033\160\351\322\377\256\154\161

END

CKA\_TRUST\_SERVER\_AUTH CK\_TRUST CKT\_NSS\_TRUSTED\_DELEGATOR

CKA\_TRUST\_EMAIL\_PROTECTION CK\_TRUST CKT\_NSS\_TRUSTED\_DELEGATOR

CKA\_TRUST\_CODE\_SIGNING CK\_TRUST CKT\_NSS\_MUST\_VERIFY\_TRUST

CKA\_TRUST\_STEP\_UP\_APPROVED CK\_BBOOL CK\_FALSE

#

# Certificate "vTrus ECC Root CA"

#

# Issuer: CN=vTrus ECC Root CA,O="iTrusChina Co.,Ltd.",C=CN

# Serial Number:6e:6a:bc:59:aa:53:be:98:39:67:a2:d2:6b:a4:3b:e6:6d:1c:d6:da

# Subject: CN=vTrus ECC Root CA,O="iTrusChina Co.,Ltd.",C=CN

# Not Valid Before: Tue Jul 31 07:26:44 2018

# Not Valid After : Fri Jul 31 07:26:44 2043

# Fingerprint (SHA-256):

30:FB:BA:2C:32:23:8E:2A:98:54:7A:F9:79:31:E5:50:42:8B:9B:3F:1C:8E:EB:66:33:DC:FA:86:C5:B2:7D:D3

#

Fingerprint (SHA1): F6:9C:DB:B0:FC:F6:02:13:B6:52:32:A6:A3:91:3F:16:70:DA:C3:E1

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_CERTIFICATE

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "vTrus ECC Root CA"

CKA\_CERTIFICATE\_TYPE CK\_CERTIFICATE\_TYPE CKC\_X\_509

CKA\_SUBJECT MULTILINE\_OCTAL

\060\107\061\013\060\011\006\003\125\004\006\023\002\103\116\061  
\034\060\032\006\003\125\004\012\023\023\151\124\162\165\163\103  
\150\151\156\141\040\103\157\056\054\114\164\144\056\061\032\060  
\030\006\003\125\004\003\023\021\166\124\162\165\163\040\105\103  
\103\040\122\157\157\164\040\103\101

END

CKA\_ID UTF8 "0"

CKA\_ISSUER MULTILINE\_OCTAL

\060\107\061\013\060\011\006\003\125\004\006\023\002\103\116\061  
\034\060\032\006\003\125\004\012\023\023\151\124\162\165\163\103

\150\151\156\141\040\103\157\056\054\114\164\144\056\061\032\060  
\030\006\003\125\004\003\023\021\166\124\162\165\163\040\105\103  
\103\040\122\157\157\164\040\103\101

END

CKA\_SERIAL\_NUMBER

MULTILINE\_OCTAL

\002\024\156\152\274\131\252\123\276\230\071\147\242\322\153\244  
\073\346\155\034\326\332

END

CKA\_VALUE MULTILINE\_OCTAL

\060\202\002\017\060\202\001\225\240\003\002\001\002\002\024\156  
\152\274\131\252\123\276\230\071\147\242\322\153\244\073\346\155  
\034\326\332\060\012\006\010\052\206\110\316\075\004\003\003\060  
\107\061\013\060\011\006\003\125\004\006\023\002\103\116\061\034  
\060\032\006\003\125\004\012\023\023\151\124\162\165\163\103\150  
\151\156\141\040\103\157\056\054\114\164\144\056\061\032\060\030  
\006\003\125\004\003\023\021\166\124\162\165\163\040\105\103\103  
\040\122\157\157\164\040\103\101\060\036\027\015\061\070\060\067  
\063\061\060\067\062\066\064\064\132\027\015\064\063\060\067\063  
\061\060\067\062\066\064\064\132\060\107\061\013\060\011\006\003  
\125\004\006\023\002\103\116\061\034\060\032\006\003\125\004\012  
\023\023\151\124\162\165\163\103\150\151\156\141\040\103\157\056  
\054\114\164\144\056\061\032\060\030\006\003\125\004\003\023\021  
\166\124\162\165\163\040\105\103\103\040\122\157\157\164\040\103  
\101\060\166\060\020\006\007\052\206\110\316\075\002\001\006\005  
\053\201\004\000\042\003\142\000\004\145\120\112\256\214\171\226  
\112\252\034\010\303\243\242\315\376\131\126\101\167\375\046\224  
\102\273\035\315\010\333\163\262\133\165\363\317\234\116\202\364  
\277\370\141\046\205\154\326\205\133\162\160\322\375\333\142\264  
\337\123\213\275\261\104\130\142\102\011\307\372\177\133\020\347  
\376\100\375\300\330\303\053\062\347\160\246\267\246\040\125\035  
\173\200\135\113\217\147\114\361\020\243\102\060\100\060\035\006  
\003\125\035\016\004\026\004\024\230\071\315\276\330\262\214\367  
\262\253\341\255\044\257\173\174\241\333\037\317\060\017\006\003  
\125\035\023\001\001\377\004\005\060\003\001\001\377\060\016\006  
\003\125\035\017\001\001\377\004\004\003\002\001\006\060\012\006  
\010\052\206\110\316\075\004\003\003\003\150\000\060\145\002\060  
\127\235\335\126\361\307\343\351\270\111\120\153\233\151\303\157  
\354\303\175\045\344\127\225\023\100\233\122\323\073\363\100\031  
\274\046\307\055\006\236\265\173\066\237\365\045\324\143\153\000  
\002\061\000\351\323\306\236\126\232\052\314\241\332\077\310\146  
\053\323\130\234\040\205\372\253\221\212\160\160\021\070\140\144  
\013\142\011\221\130\000\371\115\373\064\150\332\011\255\041\006  
\030\224\316

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "vTrus ECC Root CA"

# Issuer: CN=vTrus ECC Root CA,O="iTrusChina Co.,Ltd.",C=CN

# Serial Number:6e:6a:bc:59:aa:53:be:98:39:67:a2:d2:6b:a4:3b:e6:6d:1c:d6:da

# Subject: CN=vTrus ECC Root CA,O="iTrusChina Co.,Ltd.",C=CN

# Not Valid Before: Tue Jul 31 07:26:44 2018

# Not Valid After : Fri Jul 31 07:26:44 2043

# Fingerprint (SHA-256):

30:FB:BA:2C:32:23:8E:2A:98:54:7A:F9:79:31:E5:50:42:8B:9B:3F:1C:8E:EB:66:33:DC:FA:86:C5:B2:7D:D3

# Fingerprint (SHA1): F6:9C:DB:B0:FC:F6:02:13:B6:52:32:A6:A3:91:3F:16:70:DA:C3:E1

CKA\_CLASS

CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "vTrus ECC Root CA"

CKA\_CERT\_SHA1\_HASH MULTILINE\_OCTAL

\366\234\333\260\374\366\002\023\266\122\062\246\243\221\077\026

\160\332\303\341

END

CKA\_CERT\_MD5\_HASH MULTILINE\_OCTAL

\336\113\301\365\122\214\233\103\341\076\217\125\124\027\215\205

END

CKA\_ISSUER MULTILINE\_OCTAL

\060\107\061\013\060\011\006\003\125\004\006\023\002\103\116\061

\034\060\032\006\003\125\004\012\023\023\151\124\162\165\163\103

\150\151\156\141\040\103\157\056\054\114\164\144\056\061\032\060

\030\006\003\125\004\003\023\021\166\124\162\165\163\040\105\103

\103\040\122\157\157\164\040\103\101

END

CKA\_SERIAL\_NUMBER MULTILINE\_OCTAL

\002\024\156\152\274\131\252\123\276\230\071\147\242\322\153\244

\073\346\155\034\326\332

END

CKA\_TRUST\_SERVER\_AUTH CK\_TRUST CKT\_NSS\_TRUSTED\_DELEGATOR

CKA\_TRUST\_EMAIL\_PROTECTION CK\_TRUST CKT\_NSS\_MUST\_VERIFY\_TRUST

CKA\_TRUST\_CODE\_SIGNING

CK\_TRUST CKT\_NSS\_MUST\_VERIFY\_TRUST

CKA\_TRUST\_STEP\_UP\_APPROVED CK\_BBOOL CK\_FALSE

#

# Certificate "vTrus Root CA"

#

# Issuer: CN=vTrus Root CA,O="iTrusChina Co.,Ltd.",C=CN

# Serial Number:43:e3:71:13:d8:b3:59:14:5d:b7:ce:8c:fd:35:fd:6f:bc:05:8d:45

# Subject: CN=vTrus Root CA,O="iTrusChina Co.,Ltd.",C=CN

# Not Valid Before: Tue Jul 31 07:24:05 2018

```
# Not Valid After : Fri Jul 31 07:24:05 2043
# Fingerprint (SHA-256):
8A:71:DE:65:59:33:6F:42:6C:26:E5:38:80:D0:0D:88:A1:8D:A4:C6:A9:1F:0D:CB:61:94:E2:06:C5:C9:63:87
# Fingerprint (SHA1): 84:1A:69:FB:F5:CD:1A:25:34:13:3D:E3:F8:FC:B8:99:D0:C9:14:B7
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "vTrus Root CA"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\103\061\013\060\011\006\003\125\004\006\023\002\103\116\061
\034\060\032\006\003\125\004\012\023\023\151\124\162\165\163\103
\150\151\156\141\040\103\157\056\054\114\164\144\056\061\026\060
\024\006\003\125\004\003\023\015\166\124\162\165\163\040\122\157
\157\164\040\103\101
END
CKA_ID
UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\103\061\013\060\011\006\003\125\004\006\023\002\103\116\061
\034\060\032\006\003\125\004\012\023\023\151\124\162\165\163\103
\150\151\156\141\040\103\157\056\054\114\164\144\056\061\026\060
\024\006\003\125\004\003\023\015\166\124\162\165\163\040\122\157
\157\164\040\103\101
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\024\103\343\161\023\330\263\131\024\135\267\316\214\375\065
\375\157\274\005\215\105
END
CKA_VALUE MULTILINE_OCTAL
\060\202\005\126\060\202\003\076\240\003\002\001\002\002\024\103
\343\161\023\330\263\131\024\135\267\316\214\375\065\375\157\274
\005\215\105\060\015\006\011\052\206\110\206\367\015\001\001\013
\005\000\060\103\061\013\060\011\006\003\125\004\006\023\002\103
\116\061\034\060\032\006\003\125\004\012\023\023\151\124\162\165
\163\103\150\151\156\141\040\103\157\056\054\114\164\144\056\061
\026\060\024\006\003\125\004\003\023\015\166\124\162\165\163\040
\122\157\157\164\040\103\101\060\036\027\015\061\070\060\067\063
\061\060\067\062\064\060\065\132\027\015\064\063\060\067\063\061
\060\067\062\064\060\065\132\060\103\061\013\060\011\006\003\125
\004\006\023\002\103\116\061\034\060\032\006\003\125\004\012\023
\023\151\124\162\165\163\103\150\151\156\141\040\103\157\056\054
\114\164\144\056\061\026\060\024\006\003\125\004\003\023\015\166
\124\162\165\163\040\122\157\157\164\040\103\101\060\202\002\042
\060\015\006\011\052\206\110\206\367\015\001\001\001\005\000\003
\202\002\017\000\060\202\002\012\002\202\002\001\000\275\125\174
\141\323\270\035\004\142\005\240\256\154\267\160\264\101\352\113
```

\003\136\020\077\220\132\034\213\073\260\146\213\154\110\246\034  
\042\272\325\100\222\356\063\262\043\131\311\216\274\130\332\213  
\236\320\031\362\057\131\306\214\143\132\272\237\243\013\260\263  
\232\134\272\021\270\022\351\014\273\317\156\154\200\207\051\024  
\003\054\215\044\232\310\144\203\265\152\254\023\054\063\361\237  
\334\054\141\074\032\077\160\125\233\255\000\122\177\317\004\271  
\376\066\372\234\300\026\256\142\376\226\114\103\176\125\024\276  
\032\263\322\155\302\257\166\146\225\153\052\260\224\167\205\136  
\004\017\142\035\143\165\367\153\347\313\133\232\160\354\076\147  
\005\360\376\007\010\200\317\050\333\005\306\024\047\057\206\175  
\360\047\336\377\346\176\063\110\347\013\036\130\321\047\053\123  
\016\127\112\145\327\373\242\200\140\374\114\274\065\123\001\152  
\227\162\202\257\361\035\160\350\234\365\357\136\302\154\307\107  
\176\132\224\205\046\115\073\272\353\114\350\260\011\302\145\302  
\235\235\011\233\116\265\227\005\254\365\006\240\367\066\005\176  
\364\220\262\153\304\264\371\144\352\351\032\012\310\015\250\355  
\047\311\324\347\263\271\253\202\042\220\047\075\052\350\174\220  
\357\274\117\375\342\012\044\247\336\145\044\244\135\352\300\166  
\060\323\167\120\370\015\004\233\224\066\001\163\312\006\130\246  
\323\073\334\372\004\106\023\125\212\311\104\107\270\121\071\032  
\056\350\064\342\171\313\131\112\012\177\274\246\357\037\003\147  
\152\131\053\045\142\223\331\123\031\146\074\047\142\051\206\115  
\244\153\356\377\324\116\272\325\264\342\216\110\132\000\031\011  
\361\005\331\316\221\261\367\353\351\071\117\366\157\004\103\232  
\125\365\076\005\024\275\277\263\131\264\330\216\063\204\243\220  
\122\252\263\002\225\140\371\014\114\150\371\356\325\027\015\370  
\161\127\265\045\344\051\356\145\135\257\321\356\074\027\013\132  
\103\305\245\206\352\044\236\342\005\007\334\064\102\022\221\326  
\071\164\256\114\101\202\333\362\246\110\321\263\233\363\063\252  
\363\246\300\305\116\365\364\235\166\143\346\002\306\042\113\301  
\225\077\120\144\054\124\345\266\360\074\051\317\127\002\003\001  
\000\001\243\102\060\100\060\035\006\003\125\035\016\004\026\004  
\024\124\142\160\143\361\165\204\103\130\216\321\026\040\261\306  
\254\032\274\366\211\060\017\006\003\125\035\023\001\001\377\004  
\005\060\003\001\001\377\060\016\006\003\125\035\017\001\001\377  
\004\004\003\002\001\006\060\015\006\011\052\206\110\206\367\015  
\001\001\013\005\000\003\202\002\001\000\051\272\222\111\247\255  
\360\361\160\303\344\227\360\237\251\045\325\153\236\064\376\346  
\032\144\366\072\153\122\262\020\170\032\237\114\332\212\332\354  
\034\067\122\340\102\113\373\154\166\312\044\013\071\022\025\235  
\237\021\055\374\171\144\334\340\340\365\335\340\127\311\245\262  
\166\160\120\244\376\267\012\160\325\240\064\361\165\327\115\111  
\272\021\321\263\330\354\202\377\353\016\304\277\144\055\175\143  
\156\027\170\354\135\174\210\310\353\216\127\166\331\131\004\372  
\274\122\037\105\254\360\172\200\354\354\157\166\256\221\333\020  
\216\004\334\222\337\240\366\346\256\111\323\301\154\022\033\314  
\051\252\371\010\245\342\067\024\312\261\270\146\357\032\202\344  
\360\370\361\247\026\151\267\333\251\141\074\237\365\061\313\344

```
\000\106\302\057\164\261\261\327\201\356\250\046\225\274\210\257
\114\065\007\052\002\312\170\024\155\107\053\100\126\351\313\052
\140\241\147\003\240\316\214\274\260\162\147\304\061\316\333\064
\345\045\003\140\045\173\161\230\344\300\033\053\137\164\102\322
\113\305\131\010\007\207\276\305\303\177\347\226\331\341\334\050
\227\326\217\005\343\365\233\116\312\035\120\107\005\123\260\312
\071\347\205\240\211\301\005\073\001\067\323\077\111\342\167\353
\043\310\210\146\073\075\071\166\041\106\361\354\137\043\270\353
\242\146\165\164\301\100\367\330\150\232\223\342\055\251\056\275
\034\243\036\310\164\306\244\055\172\040\253\073\270\260\106\375
\157\335\137\122\125\165\142\360\227\240\174\327\070\375\045\337
\315\240\233\020\317\213\270\070\136\136\305\264\246\002\066\241
\036\137\034\317\342\226\235\051\252\375\230\256\122\341\363\101
\122\373\251\056\162\226\237\047\343\252\163\175\370\032\043\146
\173\073\253\145\260\062\001\113\025\076\075\242\117\014\053\065
\242\306\331\147\022\065\060\315\166\056\026\263\231\236\115\117
\116\055\073\064\103\341\232\016\015\244\146\227\272\322\034\112
\114\054\052\213\213\201\117\161\032\251\335\134\173\173\010\305
\000\015\067\100\343\174\173\124\137\057\205\137\166\366\367\247
\260\034\127\126\301\162\350\255\242\257\215\063\111\272\037\212
\334\346\164\174\140\206\157\207\227\173
```

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "vTrus Root CA"

# Issuer: CN=vTrus Root CA,O="iTrusChina Co.,Ltd.",C=CN

# Serial Number:43:e3:71:13:d8:b3:59:14:5d:b7:ce:8c:fd:35:fd:6f:bc:05:8d:45

# Subject: CN=vTrus Root CA,O="iTrusChina Co.,Ltd.",C=CN

# Not Valid Before: Tue Jul 31 07:24:05 2018

# Not Valid After : Fri Jul 31 07:24:05 2043

# Fingerprint (SHA-256):

8A:71:DE:65:59:33:6F:42:6C:26:E5:38:80:D0:0D:88:A1:8D:A4:C6:A9:1F:0D:CB:61:94:E2:06:C5:C9:63:87

# Fingerprint (SHA1): 84:1A:69:FB:F5:CD:1A:25:34:13:3D:E3:F8:FC:B8:99:D0:C9:14:B7

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "vTrus Root CA"

CKA\_CERT\_SHA1\_HASH

MULTILINE\_OCTAL

```
\204\032\151\373\365\315\032\045\064\023\075\343\370\374\270\231
\320\311\024\267
```

END

CKA\_CERT\_MD5\_HASH MULTILINE\_OCTAL

```
\270\311\067\337\372\153\061\204\144\305\352\021\152\033\165\374
```



```

END
CKA_ISSUER MULTILINE_OCTAL
\060\103\061\013\060\011\006\003\125\004\006\023\002\103\116\061
\034\060\032\006\003\125\004\012\023\023\151\124\162\165\163\103
\150\151\156\141\040\103\157\056\054\114\164\144\056\061\026\060
\024\006\003\125\004\003\023\015\166\124\162\165\163\040\122\157
\157\164\040\103\101
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\024\103\343\161\023\330\263\131\024\135\267\316\214\375\065
\375\157\274\005\215\105
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "ISRG Root X2"
#
# Issuer: CN=ISRG Root X2,O=Internet Security Research Group,C=US
# Serial Number:41:d2:9d:d1:72:ea:ee:a7:80:c1:2c:6c:e9:2f:87:52
#
# Subject: CN=ISRG Root X2,O=Internet Security Research Group,C=US
# Not Valid Before: Fri Sep 04 00:00:00 2020
# Not Valid After : Mon Sep 17 16:00:00 2040
# Fingerprint (SHA-256):
69:72:9B:8E:15:A8:6E:FC:17:7A:57:AF:B7:17:1D:FC:64:AD:D2:8C:2F:CA:8C:F1:50:7E:34:45:3C:CB:14:70
# Fingerprint (SHA1): BD:B1:B9:3C:D5:97:8D:45:C6:26:14:55:F8:DB:95:C7:5A:D1:53:AF
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "ISRG Root X2"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\117\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\051\060\047\006\003\125\004\012\023\040\111\156\164\145\162\156
\145\164\040\123\145\143\165\162\151\164\171\040\122\145\163\145
\141\162\143\150\040\107\162\157\165\160\061\025\060\023\006\003
\125\004\003\023\014\111\123\122\107\040\122\157\157\164\040\130
\062
END
CKA_ID UTF8 "0"
CKA_ISSUER
MULTILINE_OCTAL
\060\117\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\051\060\047\006\003\125\004\012\023\040\111\156\164\145\162\156

```

\145\164\040\123\145\143\165\162\151\164\171\040\122\145\163\145  
\141\162\143\150\040\107\162\157\165\160\061\025\060\023\006\003  
\125\004\003\023\014\111\123\122\107\040\122\157\157\164\040\130  
\062

END

CKA\_SERIAL\_NUMBER MULTILINE\_OCTAL

\002\020\101\322\235\321\162\352\356\247\200\301\054\154\351\057  
\207\122

END

CKA\_VALUE MULTILINE\_OCTAL

\060\202\002\033\060\202\001\241\240\003\002\001\002\002\020\101  
\322\235\321\162\352\356\247\200\301\054\154\351\057\207\122\060  
\012\006\010\052\206\110\316\075\004\003\003\060\117\061\013\060  
\011\006\003\125\004\006\023\002\125\123\061\051\060\047\006\003  
\125\004\012\023\040\111\156\164\145\162\156\145\164\040\123\145  
\143\165\162\151\164\171\040\122\145\163\145\141\162\143\150\040  
\107\162\157\165\160\061\025\060\023\006\003\125\004\003\023\014  
\111\123\122\107\040\122\157\157\164\040\130\062\060\036\027\015  
\062\060\060\071\060\064\060\060\060\060\060\132\027\015\064  
\060\060\071\061\067\061\066\060\060\060\060\132\060\117\061\013  
\060\011\006\003\125\004\006\023\002\125\123\061\051\060\047\006  
\003\125\004\012\023\040\111\156\164\145\162\156\145\164\040\123  
\145\143\165\162\151\164\171\040\122\145\163\145\141\162\143\150  
\040\107\162\157\165\160\061\025\060\023\006\003\125\004\003\023  
\014\111\123\122\107\040\122\157\157\164\040\130\062\060\166\060  
\020\006\007\052\206\110\316\075\002\001\006\005\053\201\004\000  
\042\003\142\000\004\315\233\325\237\200\203\012\354\011\112\363  
\026\112\076\134\317\167\254\336\147\005\015\035\007\266\334\026  
\373\132\213\024\333\342\161\140\304\272\105\225\021\211\216\352  
\006\337\367\052\026\034\244\271\305\305\062\340\003\340\036\202  
\030\070\213\327\105\330\012\152\156\346\000\167\373\002\121\175  
\042\330\012\156\232\133\167\337\360\372\101\354\071\334\165\312  
\150\007\014\037\352\243\102\060\100\060\016\006\003\125\035\017  
\001\001\377\004\004\003\002\001\006\060\017\006\003\125\035\023  
\001\001\377\004\005\060\003\001\001\377\060\035\006\003\125\035  
\016\004\026\004\024\174\102\226\256\336\113\110\073\372\222\370  
\236\214\317\155\213\251\162\067\225\060\012\006\010\052\206\110  
\316\075\004\003\003\003\150\000\060\145\002\060\173\171\116\106  
\120\204\302\104\207\106\033\105\160\377\130\231\336\364\375\244  
\322\125\246\040\055\164\326\064\274\101\243\120\137\001\047\126  
\264\276\047\165\006\257\022\056\165\230\215\374\002\061\000\213  
\365\167\154\324\310\145\252\340\013\054\356\024\235\047\067\244  
\371\123\245\121\344\051\203\327\370\220\061\133\102\237\012\365  
\376\256\000\150\347\214\111\017\266\157\133\133\025\362\347

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "ISRG Root X2"

# Issuer: CN=ISRG Root X2,O=Internet Security Research Group,C=US

# Serial Number:41:d2:9d:d1:72:ea:ee:a7:80:c1:2c:6c:e9:2f:87:52

#

Subject: CN=ISRG Root X2,O=Internet Security Research Group,C=US

# Not Valid Before: Fri Sep 04 00:00:00 2020

# Not Valid After : Mon Sep 17 16:00:00 2040

# Fingerprint (SHA-256):

69:72:9B:8E:15:A8:6E:FC:17:7A:57:AF:B7:17:1D:FC:64:AD:D2:8C:2F:CA:8C:F1:50:7E:34:45:3C:CB:14:70

# Fingerprint (SHA1): BD:B1:B9:3C:D5:97:8D:45:C6:26:14:55:F8:DB:95:C7:5A:D1:53:AF

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "ISRG Root X2"

CKA\_CERT\_SHA1\_HASH MULTILINE\_OCTAL

\275\261\271\074\325\227\215\105\306\046\024\125\370\333\225\307

\132\321\123\257

END

CKA\_CERT\_MD5\_HASH MULTILINE\_OCTAL

\323\236\304\036\043\074\246\337\317\243\176\155\340\024\346\345

END

CKA\_ISSUER MULTILINE\_OCTAL

\060\117\061\013\060\011\006\003\125\004\006\023\002\125\123\061

\051\060\047\006\003\125\004\012\023\040\111\156\164\145\162\156

\145\164\040\123\145\143\165\162\151\164\171\040\122\145\163\145

\141\162\143\150\040\107\162\157\165\160\061\025\060\023\006\003

\125\004\003\023\014\111\123\122\107\040\122\157\157\164\040\130

\062

END

CKA\_SERIAL\_NUMBER

MULTILINE\_OCTAL

\002\020\101\322\235\321\162\352\356\247\200\301\054\154\351\057

\207\122

END

CKA\_TRUST\_SERVER\_AUTH CK\_TRUST CKT\_NSS\_TRUSTED\_DELEGATOR

CKA\_TRUST\_EMAIL\_PROTECTION CK\_TRUST CKT\_NSS\_MUST\_VERIFY\_TRUST

CKA\_TRUST\_CODE\_SIGNING CK\_TRUST CKT\_NSS\_MUST\_VERIFY\_TRUST

CKA\_TRUST\_STEP\_UP\_APPROVED CK\_BBOOL CK\_FALSE

#

# Certificate "HiPKI Root CA - G1"

#

# Issuer: CN=HiPKI Root CA - G1,O="Chunghwa Telecom Co., Ltd.",C=TW

# Serial Number:2d:dd:ac:ce:62:97:94:a1:43:e8:b0:cd:76:6a:5e:60

# Subject: CN=HiPKI Root CA - G1,O="Chunghwa Telecom Co., Ltd.",C=TW

```
# Not Valid Before: Fri Feb 22 09:46:04 2019
# Not Valid After : Thu Dec 31 15:59:59 2037
# Fingerprint (SHA-256):
F0:15:CE:3C:C2:39:BF:EF:06:4B:E9:F1:D2:C4:17:E1:A0:26:4A:0A:94:BE:1F:0C:8D:12:18:64:EB:69:49:CC
# Fingerprint (SHA1): 6A:92:E4:A8:EE:1B:EC:96:45:37:E3:29:57:49:CD:96:E3:E5:D2:60
CKA_CLASS CK_OBJECT_CLASS
CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "HiPKI Root CA - G1"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\117\061\013\060\011\006\003\125\004\006\023\002\124\127\061
\043\060\041\006\003\125\004\012\014\032\103\150\165\156\147\150
\167\141\040\124\145\154\145\143\157\155\040\103\157\056\054\040
\114\164\144\056\061\033\060\031\006\003\125\004\003\014\022\110
\151\120\113\111\040\122\157\157\164\040\103\101\040\055\040\107
\061
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\117\061\013\060\011\006\003\125\004\006\023\002\124\127\061
\043\060\041\006\003\125\004\012\014\032\103\150\165\156\147\150
\167\141\040\124\145\154\145\143\157\155\040\103\157\056\054\040
\114\164\144\056\061\033\060\031\006\003\125\004\003\014\022\110
\151\120\113\111\040\122\157\157\164\040\103\101\040\055\040\107
\061
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\020\055\335\254\316\142\227\224\241\103\350\260\315\166\152
\136\140
END
CKA_VALUE
MULTILINE_OCTAL
\060\202\005\152\060\202\003\122\240\003\002\001\002\002\020\055
\335\254\316\142\227\224\241\103\350\260\315\166\152\136\140\060
\015\006\011\052\206\110\206\367\015\001\001\013\005\000\060\117
\061\013\060\011\006\003\125\004\006\023\002\124\127\061\043\060
\041\006\003\125\004\012\014\032\103\150\165\156\147\150\167\141
\040\124\145\154\145\143\157\155\040\103\157\056\054\040\114\164
\144\056\061\033\060\031\006\003\125\004\003\014\022\110\151\120
\113\111\040\122\157\157\164\040\103\101\040\055\040\107\061\060
\036\027\015\061\071\060\062\062\062\060\071\064\066\060\064\132
\027\015\063\067\061\062\063\061\061\065\065\071\065\071\132\060
\117\061\013\060\011\006\003\125\004\006\023\002\124\127\061\043
\060\041\006\003\125\004\012\014\032\103\150\165\156\147\150\167
\141\040\124\145\154\145\143\157\155\040\103\157\056\054\040\114
```

\164\144\056\061\033\060\031\006\003\125\004\003\014\022\110\151  
\120\113\111\040\122\157\157\164\040\103\101\040\055\040\107\061  
\060\202\002\042\060\015\006\011\052\206\110\206\367\015\001\001  
\001\005\000\003\202\002\017\000\060\202\002\012\002\202\002\001  
\000\364\036\177\122\163\062\014\163\344\275\023\164\243\324\060  
\250\320\256\113\330\266\337\165\107\146\364\174\347\071\004\036  
\152\160\040\322\132\107\162\147\125\364\245\350\235\325\036\041  
\241\360\147\272\314\041\150\276\104\123\277\215\371\342\334\057  
\125\310\067\077\037\244\300\234\263\344\167\134\240\106\376\167  
\372\032\240\070\352\355\232\162\336\053\275\224\127\072\272\354  
\171\347\137\175\102\144\071\172\046\066\367\044\360\325\057\272  
\225\230\021\146\255\227\065\326\165\001\200\340\257\364\204\141  
\214\015\036\137\174\207\226\136\101\257\353\207\352\370\135\361  
\056\210\005\076\114\042\273\332\037\052\335\122\106\144\071\363  
\102\316\331\236\014\263\260\167\227\144\234\300\364\243\056\037  
\225\007\260\027\337\060\333\000\030\226\114\241\201\113\335\004  
\155\123\243\075\374\007\254\324\305\067\202\353\344\225\010\031  
\050\202\322\102\072\243\330\123\354\171\211\140\110\140\310\162  
\222\120\334\003\217\203\077\262\102\127\132\333\152\351\021\227  
\335\205\050\274\060\114\253\343\302\261\105\104\107\037\340\212  
\026\007\226\322\041\017\123\300\355\251\176\324\116\354\233\011  
\354\257\102\254\060\326\277\321\020\105\340\246\026\262\245\305  
\323\117\163\224\063\161\002\241\152\243\326\063\227\117\041\143  
\036\133\217\331\301\136\105\161\167\017\201\135\137\041\232\255  
\203\314\372\136\326\215\043\137\033\075\101\257\040\165\146\132  
\112\366\237\373\253\030\367\161\300\266\035\061\354\073\040\353  
\313\342\270\365\256\222\262\367\341\204\113\362\242\362\223\232  
\042\236\323\024\157\066\124\275\037\136\131\025\271\163\250\301  
\174\157\173\142\351\026\154\107\132\145\363\016\021\233\106\331  
\375\155\334\326\234\300\264\175\245\260\335\077\126\157\241\371  
\366\344\022\110\375\006\177\022\127\266\251\043\117\133\003\303  
\340\161\052\043\267\367\260\261\073\274\230\275\326\230\250\014  
\153\366\216\022\147\246\362\262\130\344\002\011\023\074\251\273  
\020\264\322\060\105\361\354\367\000\021\337\145\370\334\053\103  
\125\277\026\227\304\017\325\054\141\204\252\162\206\376\346\072  
\176\302\077\175\356\374\057\024\076\346\205\335\120\157\267\111  
\355\002\003\001\000\001\243\102\060\100\060\017\006\003\125\035  
\023\001\001\377\004\005\060\003\001\001\377\060\035\006\003\125  
\035\016\004\026\004\024\362\167\027\372\136\250\376\366\075\161  
\325\150\272\311\106\014\070\330\257\260\060\016\006\003\125\035  
\017\001\001\377\004\004\003\002\001\206\060\015\006\011\052\206  
\110\206\367\015\001\001\013\005\000\003\202\002\001\000\120\121  
\360\165\334\160\004\343\377\252\165\324\161\242\313\236\217\250  
\251\323\257\165\307\124\317\072\034\004\231\042\254\304\021\342  
\357\063\112\246\043\035\016\015\107\330\067\307\157\257\064\177  
\117\201\153\065\117\351\162\245\061\342\170\347\367\116\224\030  
\133\100\175\317\153\041\124\206\346\225\172\373\306\312\352\234  
\110\116\127\011\135\057\254\364\245\264\227\063\130\325\254\171

\251\314\137\371\205\372\122\305\215\370\221\024\353\072\015\027  
\320\122\302\173\343\302\163\216\106\170\006\070\054\350\134\332  
\146\304\364\244\360\126\031\063\051\132\145\222\005\107\106\112  
\253\204\303\036\047\241\037\021\222\231\047\165\223\017\274\066  
\073\227\127\217\046\133\014\273\234\017\324\156\060\007\324\334  
\137\066\150\146\071\203\226\047\046\212\310\304\071\376\232\041  
\157\325\162\206\351\177\142\345\227\116\320\044\320\100\260\320  
\165\010\216\275\150\356\010\327\156\174\020\160\106\033\174\340  
\210\262\236\162\206\231\001\343\277\237\111\031\264\045\276\126  
\145\256\027\143\345\036\337\350\377\107\245\277\341\046\005\204  
\344\260\300\257\347\010\231\250\014\136\046\200\105\324\370\150  
\057\226\217\256\342\112\034\234\026\014\023\157\070\207\366\273  
\310\064\137\222\003\121\171\160\246\337\313\365\231\115\171\315  
\116\274\127\237\103\116\153\056\053\030\370\152\163\214\272\305  
\065\357\071\152\101\036\317\161\250\242\262\206\007\133\072\311  
\341\357\077\145\004\200\107\062\104\160\225\116\061\147\152\164  
\133\020\105\165\352\260\237\320\346\065\376\116\237\213\314\053  
\222\105\133\156\045\140\205\106\315\321\252\260\166\146\223\167  
\226\276\203\276\070\266\044\116\046\013\314\355\172\126\032\340  
\351\132\306\144\255\114\172\000\110\104\057\271\100\273\023\076  
\276\025\170\235\205\201\112\052\127\336\325\031\103\332\333\312  
\133\107\206\203\013\077\266\015\166\170\163\171\042\136\261\200  
\037\317\276\321\077\126\020\230\053\225\207\241\037\235\144\024  
\140\071\054\263\000\125\056\344\365\263\016\127\304\221\101\000  
\234\077\350\245\337\352\366\377\310\360\255\155\122\250\027\253  
\233\141\374\022\121\065\344\045\375\257\252\152\206\071

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "HiPKI Root CA - G1"

# Issuer: CN=HiPKI Root CA - G1,O="Chunghwa Telecom Co., Ltd.",C=TW

# Serial Number:2d:dd:ac:ce:62:97:94:a1:43:e8:b0:cd:76:6a:5e:60

#

Subject: CN=HiPKI Root CA - G1,O="Chunghwa Telecom Co., Ltd.",C=TW

# Not Valid Before: Fri Feb 22 09:46:04 2019

# Not Valid After : Thu Dec 31 15:59:59 2037

# Fingerprint (SHA-256):

F0:15:CE:3C:C2:39:BF:EF:06:4B:E9:F1:D2:C4:17:E1:A0:26:4A:0A:94:BE:1F:0C:8D:12:18:64:EB:69:49:CC

# Fingerprint (SHA1): 6A:92:E4:A8:EE:1B:EC:96:45:37:E3:29:57:49:CD:96:E3:E5:D2:60

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "HiPKI Root CA - G1"

CKA\_CERT\_SHA1\_HASH MULTILINE\_OCTAL

\152\222\344\250\356\033\354\226\105\067\343\051\127\111\315\226

\343\345\322\140

END

CKA\_CERT\_MD5\_HASH MULTILINE\_OCTAL

\151\105\337\026\145\113\350\150\232\217\166\137\377\200\236\323

END

CKA\_ISSUER MULTILINE\_OCTAL

\060\117\061\013\060\011\006\003\125\004\006\023\002\124\127\061

\043\060\041\006\003\125\004\012\014\032\103\150\165\156\147\150

\167\141\040\124\145\154\145\143\157\155\040\103\157\056\054\040

\114\164\144\056\061\033\060\031\006\003\125\004\003\014\022\110

\151\120\113\111\040\122\157\157\164\040\103\101\040\055\040\107

\061

END

CKA\_SERIAL\_NUMBER

MULTILINE\_OCTAL

\002\020\055\335\254\316\142\227\224\241\103\350\260\315\166\152

\136\140

END

CKA\_TRUST\_SERVER\_AUTH CK\_TRUST CKT\_NSS\_TRUSTED\_DELEGATOR

CKA\_TRUST\_EMAIL\_PROTECTION CK\_TRUST CKT\_NSS\_MUST\_VERIFY\_TRUST

CKA\_TRUST\_CODE\_SIGNING CK\_TRUST CKT\_NSS\_MUST\_VERIFY\_TRUST

CKA\_TRUST\_STEP\_UP\_APPROVED CK\_BBOOL CK\_FALSE

#

# Certificate "GlobalSign ECC Root CA - R4"

#

# Issuer: CN=GlobalSign,O=GlobalSign,OU=GlobalSign ECC Root CA - R4

# Serial Number:02:03:e5:7e:f5:3f:93:fd:a5:09:21:b2:a6

# Subject: CN=GlobalSign,O=GlobalSign,OU=GlobalSign ECC Root CA - R4

# Not Valid Before: Tue Nov 13 00:00:00 2012

# Not Valid After : Tue Jan 19 03:14:07 2038

# Fingerprint (SHA-256):

B0:85:D7:0B:96:4F:19:1A:73:E4:AF:0D:54:AE:7A:0E:07:AA:FD:AF:9B:71:DD:08:62:13:8A:B7:32:5A:24:A2

# Fingerprint (SHA1): 6B:A0:B0:98:E1:71:EF:5A:AD:FE:48:15:80:77:10:F4:BD:6F:0B:28

CKA\_CLASS

CK\_OBJECT\_CLASS CKO\_CERTIFICATE

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "GlobalSign ECC Root CA - R4"

CKA\_CERTIFICATE\_TYPE CK\_CERTIFICATE\_TYPE CKC\_X\_509

CKA\_SUBJECT MULTILINE\_OCTAL

\060\120\061\044\060\042\006\003\125\004\013\023\033\107\154\157

\142\141\154\123\151\147\156\040\105\103\103\040\122\157\157\164

\040\103\101\040\055\040\122\064\061\023\060\021\006\003\125\004

\012\023\012\107\154\157\142\141\154\123\151\147\156\061\023\060

\021\006\003\125\004\003\023\012\107\154\157\142\141\154\123\151

```
\147\156
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\120\061\044\060\042\006\003\125\004\013\023\033\107\154\157
\142\141\154\123\151\147\156\040\105\103\103\040\122\157\157\164
\040\103\101\040\055\040\122\064\061\023\060\021\006\003\125\004
\012\023\012\107\154\157\142\141\154\123\151\147\156\061\023\060
\021\006\003\125\004\003\023\012\107\154\157\142\141\154\123\151
\147\156
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\015\002\003\345\176\365\077\223\375\245\011\041\262\246
END
CKA_VALUE MULTILINE_OCTAL
\060\202\001\334\060\202\001\203\240\003\002\001\002\002\015\002
\003\345\176\365\077\223\375\245\011\041\262\246\060\012\006\010
\052\206\110\316\075\004\003\002\060\120\061\044\060\042\006\003
\125\004\013\023\033\107\154\157\142\141\154\123\151\147\156\040
\105\103\103\040\122\157\157\164\040\103\101\040\055\040\122\064
\061\023\060\021\006\003\125\004\012\023\012\107\154\157\142\141
\154\123\151\147\156\061\023\060\021\006\003\125\004\003\023\012
\107\154\157\142\141\154\123\151\147\156\060\036\027\015\061\062
\061\061\061\063\060\060\060\060\060\060\132\027\015\063\070\060
\061\061\071\060\063\061\064\060\067\132\060\120\061\044\060\042
\006\003\125\004\013\023\033\107\154\157\142\141\154\123\151\147
\156\040\105\103\103\040\122\157\157\164\040\103\101\040\055\040
\122\064\061\023\060\021\006\003\125\004\012\023\012\107\154\157
\142\141\154\123\151\147\156\061\023\060\021\006\003\125\004\003
\023\012\107\154\157\142\141\154\123\151\147\156\060\131\060\023
\006\007\052\206\110\316\075\002\001\006\010\052\206\110\316\075
\003\001\007\003\102\000\004\270\306\171\323\217\154\045\016\237
\056\071\031\034\003\244\256\232\345\071\007\011\026\312\143\261
\271\206\370\212\127\301\127\316\102\372\163\241\367\145\102\377
\036\301\000\262\156\163\016\377\307\041\345\030\244\252\331\161
\077\250\324\271\316\214\035\243\102\060\100\060\016\006\003\125
\035\017\001\001\377\004\004\003\002\001\206\060\017\006\003\125
\035\023\001\001\377\004\005\060\003\001\001\377\060\035\006\003
\125\035\016\004\026\004\024\124\260\173\255\105\270\342\100\177
\373\012\156\373\276\063\311\074\243\204\325\060\012\006\010\052
\206\110\316\075\004\003\002\003\107\000\060\104\002\040\042\117
\164\162\271\140\257\361\346\234\240\026\005\120\137\303\136\073
\156\141\164\357\276\001\304\276\030\110\131\141\202\062\002\040
\046\235\124\143\100\336\067\140\120\317\310\330\355\235\202\256
\067\230\274\243\217\114\114\251\064\053\154\357\373\225\233\046
END
CKA_NSS_MOZILLA_CA_POLICY
```



```

CK_BBOOL CK_TRUE
CKA_NSS_SERVER_DISTRUST_AFTER CK_BBOOL CK_FALSE
CKA_NSS_EMAIL_DISTRUST_AFTER CK_BBOOL CK_FALSE

# Trust for "GlobalSign ECC Root CA - R4"
# Issuer: CN=GlobalSign,O=GlobalSign,OU=GlobalSign ECC Root CA - R4
# Serial Number:02:03:e5:7e:f5:3f:93:fd:a5:09:21:b2:a6
# Subject: CN=GlobalSign,O=GlobalSign,OU=GlobalSign ECC Root CA - R4
# Not Valid Before: Tue Nov 13 00:00:00 2012
# Not Valid After : Tue Jan 19 03:14:07 2038
# Fingerprint (SHA-256):
B0:85:D7:0B:96:4F:19:1A:73:E4:AF:0D:54:AE:7A:0E:07:AA:FD:AF:9B:71:DD:08:62:13:8A:B7:32:5A:24:A2
# Fingerprint (SHA1): 6B:A0:B0:98:E1:71:EF:5A:AD:FE:48:15:80:77:10:F4:BD:6F:0B:28
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "GlobalSign ECC Root CA - R4"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\153\240\260\230\341\161\357\132\255\376\110\025\200\167\020\364
\275\157\013\050
END
CKA_CERT_MD5_HASH
MULTILINE_OCTAL
\046\051\370\155\341\210\277\242\145\177\252\304\315\017\177\374
END
CKA_ISSUER MULTILINE_OCTAL
\060\120\061\044\060\042\006\003\125\004\013\023\033\107\154\157
\142\141\154\123\151\147\156\040\105\103\103\040\122\157\157\164
\040\103\101\040\055\040\122\064\061\023\060\021\006\003\125\004
\012\023\012\107\154\157\142\141\154\123\151\147\156\061\023\060
\021\006\003\125\004\003\023\012\107\154\157\142\141\154\123\151
\147\156
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\015\002\003\345\176\365\077\223\375\245\011\041\262\246
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "GTS Root R1"
#
# Issuer: CN=GTS Root R1,O=Google Trust Services LLC,C=US
# Serial Number:02:03:e5:93:6f:31:b0:13:49:88:6b:a2:17
# Subject: CN=GTS Root R1,O=Google Trust

```

```
Services LLC,C=US
# Not Valid Before: Wed Jun 22 00:00:00 2016
# Not Valid After : Sun Jun 22 00:00:00 2036
# Fingerprint (SHA-256):
D9:47:43:2A:BD:E7:B7:FA:90:FC:2E:6B:59:10:1B:12:80:E0:E1:C7:E4:E4:0F:A3:C6:88:7F:FF:57:A7:F4:CF
# Fingerprint (SHA1): E5:8C:1C:C4:91:3B:38:63:4B:E9:10:6E:E3:AD:8E:6B:9D:D9:81:4A
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "GTS Root R1"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\107\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\042\060\040\006\003\125\004\012\023\031\107\157\157\147\154\145
\040\124\162\165\163\164\040\123\145\162\166\151\143\145\163\040
\114\114\103\061\024\060\022\006\003\125\004\003\023\013\107\124
\123\040\122\157\157\164\040\122\061
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\107\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\042\060\040\006\003\125\004\012\023\031\107\157\157\147\154\145
\040\124\162\165\163\164\040\123\145\162\166\151\143\145\163\040
\114\114\103\061\024\060\022\006\003\125\004\003\023\013\107\124
\123\040\122\157\157\164\040\122\061
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\015\002\003\345\223\157\061\260\023\111\210\153\242\027
END
CKA_VALUE MULTILINE_OCTAL
\060\202\005\127\060\202\003\077\240\003\002\001\002\002\015\002
\003\345\223\157\061\260\023\111\210\153\242\027\060\015\006\011
\052\206\110\206\367\015\001\001\014\005\000\060\107\061\013\060
\011\006\003\125\004\006\023\002\125\123\061\042\060\040\006\003
\125\004\012\023\031\107\157\157\147\154\145\040\124\162\165\163
\164\040\123\145\162\166\151\143\145\163\040\114\114\103\061\024
\060\022\006\003\125\004\003\023\013\107\124\123\040\122\157\157
\164\040\122\061\060\036\027\015\061\066\060\066\062\062\060\060
\060\060\060\060\132\027\015\063\066\060\066\062\062\060\060\060
\060\060\060\132\060\107\061\013\060\011\006\003\125\004\006\023
\002\125\123\061\042\060\040\006\003\125\004\012\023\031\107\157
\157\147\154\145\040\124\162\165\163\164\040\123\145\162\166\151
\143\145\163\040\114\114\103\061\024\060\022\006\003\125\004\003
\023\013\107\124\123\040\122\157\157\164\040\122\061\060\202\002
\042\060\015\006\011\052\206\110\206\367\015\001\001\001\005\000
\003\202\002\017\000\060\202\002\012\002\202\002\001\000\266\021
```

\002\213\036\343\241\167\233\073\334\277\224\076\267\225\247\100  
\074\241\375\202\371\175\062\006\202\161\366\366\214\177\373\350  
\333\274\152\056\227\227\243\214\113\371\053\366\261\371\316\204  
\035\261\371\305\227\336\357\271\362\243\351\274\022\211\136\247  
\252\122\253\370\043\047\313\244\261\234\143\333\327\231\176\360  
\012\136\353\150\246\364\306\132\107\015\115\020\063\343\116\261  
\023\243\310\030\154\113\354\374\011\220\337\235\144\051\045\043  
\007\241\264\322\075\056\140\340\317\322\011\207\273\315\110\360  
\115\302\302\172\210\212\273\272\317\131\031\326\257\217\260\007  
\260\236\061\361\202\301\300\337\056\246\155\154\031\016\265\330  
\176\046\032\105\003\075\260\171\244\224\050\255\017\177\046\345  
\250\010\376\226\350\074\150\224\123\356\203\072\210\053\025\226  
\011\262\340\172\214\056\165\326\234\353\247\126\144\217\226\117  
\150\256\075\227\302\204\217\300\274\100\300\013\134\275\366\207  
\263\065\154\254\030\120\177\204\340\114\315\222\323\040\351\063  
\274\122\231\257\062\265\051\263\045\052\264\110\371\162\341\312  
\144\367\346\202\020\215\350\235\302\212\210\372\070\146\212\374  
\143\371\001\371\170\375\173\134\167\372\166\207\372\354\337\261  
\016\171\225\127\264\275\046\357\326\001\321\353\026\012\273\216  
\013\265\305\305\212\125\253\323\254\352\221\113\051\314\031\244  
\062\045\116\052\361\145\104\320\002\316\252\316\111\264\352\237  
\174\203\260\100\173\347\103\253\247\154\243\217\175\211\201\372  
\114\245\377\325\216\303\316\113\340\265\330\263\216\105\317\166  
\300\355\100\053\375\123\017\260\247\325\073\015\261\212\242\003  
\336\061\255\314\167\352\157\173\076\326\337\221\042\022\346\276  
\372\330\062\374\020\143\024\121\162\336\135\326\026\223\275\051  
\150\063\357\072\146\354\007\212\046\337\023\327\127\145\170\047  
\336\136\111\024\000\242\000\177\232\250\041\266\251\261\225\260  
\245\271\015\026\021\332\307\154\110\074\100\340\176\015\132\315  
\126\074\321\227\005\271\313\113\355\071\113\234\304\077\322\125  
\023\156\044\260\326\161\372\364\301\272\314\355\033\365\376\201  
\101\330\000\230\075\072\310\256\172\230\067\030\005\225\002\003  
\001\000\001\243\102\060\100\060\016\006\003\125\035\017\001\001  
\377\004\004\003\002\001\206\060\017\006\003\125\035\023\001\001  
\377\004\005\060\003\001\001\377\060\035\006\003\125\035\016\004  
\026\004\024\344\257\053\046\161\032\053\110\047\205\057\122\146  
\054\357\360\211\023\161\076\060\015\006\011\052\206\110\206\367  
\015\001\001\014\005\000\003\202\002\001\000\237\252\102\046\333  
\013\233\276\377\036\226\222\056\076\242\145\112\152\230\272\042  
\313\175\301\072\330\202\012\006\306\366\245\336\300\116\207\146  
\171\241\371\246\130\234\252\371\265\346\140\347\340\350\261\036  
\102\101\063\013\067\075\316\211\160\025\312\265\044\250\317\153  
\265\322\100\041\230\317\042\064\317\073\305\042\204\340\305\016  
\212\174\135\210\344\065\044\316\233\076\032\124\036\156\333\262  
\207\247\374\363\372\201\125\024\142\012\131\251\042\005\061\076  
\202\326\356\333\127\064\274\063\225\323\027\033\350\047\242\213  
\173\116\046\032\172\132\144\266\321\254\067\361\375\240\363\070  
\354\162\360\021\165\235\313\064\122\215\346\166\153\027\306\337

```
\206\253\047\216\111\053\165\146\201\020\041\246\352\076\364\256
\045\377\174\025\336\316\214\045\077\312\142\160\012\367\057\011
\146\007\310\077\034\374\360\333\105\060\337\142\210\301\265\017
\235\303\237\112\336\131\131\107\305\207\042\066\346\202\247\355
\012\271\342\007\240\215\173\172\112\074\161\322\342\003\241\037
\062\007\335\033\344\102\316\014\000\105\141\200\265\013\040\131
\051\170\275\371\125\313\143\305\074\114\364\266\377\333\152\137
\061\153\231\236\054\301\153\120\244\327\346\030\024\275\205\077
\147\253\106\237\240\377\102\247\072\177\134\313\135\260\160\035
\053\064\365\324\166\011\014\353\170\114\131\005\363\063\102\303
\141\025\020\033\167\115\316\042\214\324\205\362\105\175\267\123
\352\357\100\132\224\012\134\040\137\116\100\135\142\042\166\337
\377\316\141\275\214\043\170\322\067\002\340\216\336\321\021\067
\211\366\277\355\111\007\142\256\222\354\100\032\257\024\011\331
\320\116\262\242\367\276\356\356\330\377\334\032\055\336\270\066
\161\342\374\171\267\224\045\321\110\163\133\241\065\347\263\231
\147\165\301\031\072\053\107\116\323\102\216\375\061\310\026\146
\332\322\014\074\333\263\216\311\241\015\200\017\173\026\167\024
\277\377\333\011\224\262\223\274\040\130\025\351\333\161\103\363
\336\020\303\000\334\250\052\225\266\302\326\077\220\153\166\333
\154\376\214\274\362\160\065\014\334\231\031\065\334\327\310\106
\143\325\066\161\256\127\373\267\202\155\334
```

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER

CK\_BBOOL CK\_FALSE

# Trust for "GTS Root R1"

# Issuer: CN=GTS Root R1,O=Google Trust Services LLC,C=US

# Serial Number:02:03:e5:93:6f:31:b0:13:49:88:6b:a2:17

# Subject: CN=GTS Root R1,O=Google Trust Services LLC,C=US

# Not Valid Before: Wed Jun 22 00:00:00 2016

# Not Valid After : Sun Jun 22 00:00:00 2036

# Fingerprint (SHA-256):

D9:47:43:2A:BD:E7:B7:FA:90:FC:2E:6B:59:10:1B:12:80:E0:E1:C7:E4:E4:0F:A3:C6:88:7F:FF:57:A7:F4:CF

# Fingerprint (SHA1): E5:8C:1C:C4:91:3B:38:63:4B:E9:10:6E:E3:AD:8E:6B:9D:D9:81:4A

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "GTS Root R1"

CKA\_CERT\_SHA1\_HASH MULTILINE\_OCTAL

```
\345\214\034\304\221\073\070\143\113\351\020\156\343\255\216\153
\235\331\201\112
```

END

CKA\_CERT\_MD5\_HASH MULTILINE\_OCTAL

\005\376\320\277\161\250\243\166\143\332\001\340\330\122\334\100

END

CKA\_ISSUER MULTILINE\_OCTAL

\060\107\061\013\060\011\006\003\125\004\006\023\002\125\123\061

\042\060\040\006\003\125\004\012\023\031\107\157\157\147\154\145

\040\124\162\165\163\164\040\123\145\162\166\151\143\145\163\040

\114\114\103\061\024\060\022\006\003\125\004\003\023\013\107\124

\123\040\122\157\157\164\040\122\061

END

CKA\_SERIAL\_NUMBER

MULTILINE\_OCTAL

\002\015\002\003\345\223\157\061\260\023\111\210\153\242\027

END

CKA\_TRUST\_SERVER\_AUTH CK\_TRUST CKT\_NSS\_TRUSTED\_DELEGATOR

CKA\_TRUST\_EMAIL\_PROTECTION CK\_TRUST CKT\_NSS\_TRUSTED\_DELEGATOR

CKA\_TRUST\_CODE\_SIGNING CK\_TRUST CKT\_NSS\_MUST\_VERIFY\_TRUST

CKA\_TRUST\_STEP\_UP\_APPROVED CK\_BBOOL CK\_FALSE

#

# Certificate "GTS Root R2"

#

# Issuer: CN=GTS Root R2,O=Google Trust Services LLC,C=US

# Serial Number:02:03:e5:ae:c5:8d:04:25:1a:ab:11:25:aa

# Subject: CN=GTS Root R2,O=Google Trust Services LLC,C=US

# Not Valid Before: Wed Jun 22 00:00:00 2016

# Not Valid After : Sun Jun 22 00:00:00 2036

# Fingerprint (SHA-256):

8D:25:CD:97:22:9D:BF:70:35:6B:DA:4E:B3:CC:73:40:31:E2:4C:F0:0F:AF:CF:D3:2D:C7:6E:B5:84:1C:7E:A8

# Fingerprint (SHA1): 9A:44:49:76:32:DB:DE:FA:D0:BC:FB:5A:7B:17:BD:9E:56:09:24:94

CKA\_CLASS

CK\_OBJECT\_CLASS CKO\_CERTIFICATE

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "GTS Root R2"

CKA\_CERTIFICATE\_TYPE CK\_CERTIFICATE\_TYPE CKC\_X\_509

CKA\_SUBJECT MULTILINE\_OCTAL

\060\107\061\013\060\011\006\003\125\004\006\023\002\125\123\061

\042\060\040\006\003\125\004\012\023\031\107\157\157\147\154\145

\040\124\162\165\163\164\040\123\145\162\166\151\143\145\163\040

\114\114\103\061\024\060\022\006\003\125\004\003\023\013\107\124

\123\040\122\157\157\164\040\122\062

END

CKA\_ID UTF8 "0"

CKA\_ISSUER MULTILINE\_OCTAL

\060\107\061\013\060\011\006\003\125\004\006\023\002\125\123\061

\042\060\040\006\003\125\004\012\023\031\107\157\157\147\154\145

\040\124\162\165\163\164\040\123\145\162\166\151\143\145\163\040

\114\114\103\061\024\060\022\006\003\125\004\003\023\013\107\124  
\123\040\122\157\157\164\040\122\062

END

CKA\_SERIAL\_NUMBER MULTILINE\_OCTAL

\002\015\002\003\345\256\305\215\004\045\032\253\021\045\252

END

CKA\_VALUE

MULTILINE\_OCTAL

\060\202\005\127\060\202\003\077\240\003\002\001\002\002\015\002  
\003\345\256\305\215\004\045\032\253\021\045\252\060\015\006\011  
\052\206\110\206\367\015\001\001\014\005\000\060\107\061\013\060  
\011\006\003\125\004\006\023\002\125\123\061\042\060\040\006\003  
\125\004\012\023\031\107\157\157\147\154\145\040\124\162\165\163  
\164\040\123\145\162\166\151\143\145\163\040\114\114\103\061\024  
\060\022\006\003\125\004\003\023\013\107\124\123\040\122\157\157  
\164\040\122\062\060\036\027\015\061\066\060\066\062\062\060\060  
\060\060\060\060\132\027\015\063\066\060\066\062\062\060\060\060  
\060\060\060\132\060\107\061\013\060\011\006\003\125\004\006\023  
\002\125\123\061\042\060\040\006\003\125\004\012\023\031\107\157  
\157\147\154\145\040\124\162\165\163\164\040\123\145\162\166\151  
\143\145\163\040\114\114\103\061\024\060\022\006\003\125\004\003  
\023\013\107\124\123\040\122\157\157\164\040\122\062\060\202\002  
\042\060\015\006\011\052\206\110\206\367\015\001\001\001\005\000  
\003\202\002\017\000\060\202\002\012\002\202\002\001\000\316\336  
\375\246\373\354\354\024\064\074\007\006\132\154\131\367\031\065  
\335\367\301\235\125\252\323\315\073\244\223\162\357\012\372\155  
\235\366\360\205\200\133\241\110\122\237\071\305\267\356\050\254  
\357\313\166\150\024\271\337\255\001\154\231\037\304\042\035\237  
\376\162\167\340\054\133\257\344\004\277\117\162\240\032\064\230  
\350\071\150\354\225\045\173\166\241\346\151\271\205\031\275\211  
\214\376\255\355\066\352\163\274\377\203\342\313\175\301\322\316  
\112\263\215\005\236\213\111\223\337\301\133\320\156\136\360\056  
\060\056\202\374\372\274\264\027\012\110\345\210\233\305\233\153  
\336\260\312\264\003\360\332\364\220\270\145\144\367\134\114\255  
\350\176\146\136\231\327\270\302\076\310\320\023\235\255\356\344  
\105\173\211\125\367\212\037\142\122\204\022\263\302\100\227\343  
\212\037\107\221\246\164\132\322\370\261\143\050\020\270\263\011  
\270\126\167\100\242\046\230\171\306\376\337\045\356\076\345\240  
\177\324\141\017\121\113\074\077\214\332\341\160\164\330\302\150  
\241\371\301\014\351\241\342\177\273\125\074\166\006\356\152\116  
\314\222\210\060\115\232\275\117\013\110\232\204\265\230\243\325  
\373\163\301\127\141\335\050\126\165\023\256\207\216\347\014\121  
\011\020\165\210\114\274\215\371\173\074\324\042\110\037\052\334  
\353\153\273\104\261\313\063\161\062\106\257\255\112\361\214\350  
\164\072\254\347\032\042\163\200\322\060\367\045\102\307\042\073  
\073\022\255\226\056\306\303\166\007\252\040\267\065\111\127\351  
\222\111\350\166\026\162\061\147\053\226\176\212\243\307\224\126  
\042\277\152\113\176\001\041\262\043\062\337\344\232\104\155\131

\133\135\365\000\240\034\233\306\170\227\215\220\377\233\310\252  
\264\257\021\121\071\136\331\373\147\255\325\133\021\235\062\232  
\033\275\325\272\133\245\311\313\045\151\123\125\047\134\340\312  
\066\313\210\141\373\036\267\320\313\356\026\373\323\246\114\336  
\222\245\324\342\337\365\006\124\336\056\235\113\264\223\060\252  
\201\316\335\032\334\121\163\015\117\160\351\345\266\026\041\031  
\171\262\346\211\013\165\144\312\325\253\274\011\301\030\241\377  
\324\124\241\205\074\375\024\044\003\262\207\323\244\267\002\003  
\001\000\001\243\102\060\100\060\016\006\003\125\035\017\001\001  
\377\004\004\003\002\001\206\060\017\006\003\125\035\023\001\001  
\377\004\005\060\003\001\001\377\060\035\006\003\125\035\016\004  
\026\004\024\273\377\312\216\043\237\117\231\312\333\342\150\246  
\245\025\047\027\036\331\016\060\015\006\011\052\206\110\206\367  
\015\001\001\014\005\000\003\202\002\001\000\037\312\316\335\307  
\276\241\237\331\047\114\013\334\027\230\021\152\210\336\075\346  
\161\126\162\262\236\032\116\234\325\053\230\044\135\233\153\173  
\260\063\202\011\275\337\045\106\352\230\236\266\033\376\203\074  
\322\142\141\301\004\355\316\340\305\311\310\023\023\125\347\250  
\143\255\214\173\001\376\167\060\341\316\150\233\005\370\022\356  
\171\061\240\101\105\065\050\012\161\244\044\117\214\334\074\202  
\007\137\146\334\175\020\376\014\141\263\005\225\356\341\256\201  
\017\250\370\307\217\115\250\043\002\046\153\035\203\122\125\316  
\265\057\000\312\200\100\340\341\164\254\140\365\207\200\235\256  
\066\144\221\135\260\150\030\352\212\141\311\167\250\227\304\311  
\307\245\374\125\113\363\360\177\271\145\075\047\150\320\314\153  
\372\123\235\341\221\032\311\135\032\226\155\062\207\355\003\040  
\310\002\316\132\276\331\352\375\262\115\304\057\033\337\137\172  
\365\370\213\306\356\061\072\045\121\125\147\215\144\062\173\351  
\236\303\202\272\052\055\351\036\264\340\110\006\242\374\147\257  
\037\042\002\163\373\040\012\257\235\124\113\241\315\377\140\107  
\260\077\135\357\033\126\275\227\041\226\055\012\321\136\235\070  
\002\107\154\271\364\366\043\045\270\240\152\232\053\167\010\372  
\304\261\050\220\046\130\010\074\342\176\252\327\075\157\272\061  
\210\012\005\353\047\265\241\111\356\240\105\124\173\346\047\145  
\231\040\041\250\243\274\373\030\226\273\122\157\014\355\203\121  
\114\351\131\342\040\140\305\302\145\222\202\214\363\020\037\016  
\212\227\276\167\202\155\077\217\035\135\274\111\047\275\314\117  
\017\341\316\166\206\004\043\305\300\214\022\133\375\333\204\240  
\044\361\110\377\144\174\320\276\134\026\321\357\231\255\300\037  
\373\313\256\274\070\042\006\046\144\332\332\227\016\077\050\025  
\104\250\117\000\312\360\232\314\317\164\152\264\076\074\353\225  
\354\265\323\132\330\201\231\351\103\030\067\353\263\273\321\130  
\142\101\363\146\322\217\252\170\225\124\040\303\132\056\164\053  
\325\321\276\030\151\300\254\325\244\317\071\272\121\204\003\145  
\351\142\300\142\376\330\115\125\226\342\320\021\372\110\064\021  
\354\236\355\005\035\344\310\326\035\206\313

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

```

CK_BBOOL CK_TRUE
CKA_NSS_SERVER_DISTRUST_AFTER CK_BBOOL CK_FALSE
CKA_NSS_EMAIL_DISTRUST_AFTER CK_BBOOL CK_FALSE

# Trust for "GTS Root R2"
# Issuer: CN=GTS Root R2,O=Google Trust Services LLC,C=US
# Serial Number:02:03:e5:ae:c5:8d:04:25:1a:ab:11:25:aa
# Subject: CN=GTS Root R2,O=Google Trust Services LLC,C=US
# Not Valid Before: Wed
Jun 22 00:00:00 2016
# Not Valid After : Sun Jun 22 00:00:00 2036
# Fingerprint (SHA-256):
8D:25:CD:97:22:9D:BF:70:35:6B:DA:4E:B3:CC:73:40:31:E2:4C:F0:0F:AF:CF:D3:2D:C7:6E:B5:84:1C:7E:A8
# Fingerprint (SHA1): 9A:44:49:76:32:DB:DE:FA:D0:BC:FB:5A:7B:17:BD:9E:56:09:24:94
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "GTS Root R2"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\232\104\111\166\062\333\336\372\320\274\373\132\173\027\275\236
\126\011\044\224
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\036\071\300\123\346\036\051\202\013\312\122\125\066\135\127\334
END
CKA_ISSUER MULTILINE_OCTAL
\060\107\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\042\060\040\006\003\125\004\012\023\031\107\157\157\147\154\145
\040\124\162\165\163\164\040\123\145\162\166\151\143\145\163\040
\114\114\103\061\024\060\022\006\003\125\004\003\023\013\107\124
\123\040\122\157\157\164\040\122\062
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\015\002\003\345\256\305\215\004\045\032\253\021\045\252
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "GTS Root R3"
#
# Issuer: CN=GTS Root R3,O=Google Trust Services LLC,C=US
# Serial Number:02:03:e5:b8:82:eb:20:f8:25:27:6d:3d:66
# Subject: CN=GTS Root R3,O=Google Trust Services LLC,C=US

```



```
# Not Valid Before: Wed Jun 22 00:00:00 2016
# Not Valid After : Sun Jun 22 00:00:00 2036
# Fingerprint (SHA-256):
34:D8:A7:3E:E2:08:D9:BC:DB:0D:95:65:20:93:4B:4E:40:E6:94:82:59:6E:8B:6F:73:C8:42:6B:01:0A:6F:48
# Fingerprint (SHA1): ED:E5:71:80:2B:C8:92:B9:5B:83:3C:D2:32:68:3F:09:CD:A0:1E:46
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "GTS Root R3"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE
CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\107\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\042\060\040\006\003\125\004\012\023\031\107\157\157\147\154\145
\040\124\162\165\163\164\040\123\145\162\166\151\143\145\163\040
\114\114\103\061\024\060\022\006\003\125\004\003\023\013\107\124
\123\040\122\157\157\164\040\122\063
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\107\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\042\060\040\006\003\125\004\012\023\031\107\157\157\147\154\145
\040\124\162\165\163\164\040\123\145\162\166\151\143\145\163\040
\114\114\103\061\024\060\022\006\003\125\004\003\023\013\107\124
\123\040\122\157\157\164\040\122\063
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\015\002\003\345\270\202\353\040\370\045\047\155\075\146
END
CKA_VALUE MULTILINE_OCTAL
\060\202\002\011\060\202\001\216\240\003\002\001\002\002\015\002
\003\345\270\202\353\040\370\045\047\155\075\146\060\012\006\010
\052\206\110\316\075\004\003\003\060\107\061\013\060\011\006\003
\125\004\006\023\002\125\123\061\042\060\040\006\003\125\004\012
\023\031\107\157\157\147\154\145\040\124\162\165\163\164\040\123
\145\162\166\151\143\145\163\040\114\114\103\061\024\060\022\006
\003\125\004\003\023\013\107\124\123\040\122\157\157\164\040\122
\063\060\036\027\015\061\066\060\066\062\062\060\060\060\060\060
\060\132\027\015\063\066\060\066\062\062\060\060\060\060\060\060
\132\060\107\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\042\060\040\006\003\125\004\012\023\031\107\157\157\147\154
\145\040\124\162\165\163\164\040\123\145\162\166\151\143\145\163
\040\114\114\103\061\024\060\022\006\003\125\004\003\023\013\107
\124\123\040\122\157\157\164\040\122\063\060\166\060\020\006\007
\052\206\110\316\075\002\001\006\005\053\201\004\000\042\003\142
\000\004\037\117\063\207\063\051\212\241\204\336\313\307\041\130
\101\211\352\126\235\053\113\205\306\035\114\047\274\177\046\121
```

```
\162\157\342\237\326\243\312\314\105\024\106\213\255\357\176\206
\214\354\261\176\057\377\251\161\235\030\204\105\004\101\125\156
\053\352\046\177\273\220\001\343\113\031\272\344\124\226\105\011
\261\325\154\221\104\255\204\023\216\232\214\015\200\014\062\366
\340\047\243\102\060\100\060\016\006\003\125\035\017\001\001\377
\004\004\003\002\001\206\060\017\006\003\125\035\023\001\001\377
\004\005\060\003\001\001\377\060\035\006\003\125\035\016\004\026
\004\024\301\361\046\272\240\055\256\205\201\317\323\361\052\022
\275\270\012\147\375\274\060\012\006\010\052\206\110\316\075\004
\003\003\003\151\000\060\146\002\061\000\366\341\040\225\024\173
\124\243\220\026\021\277\204\310\352\157\153\027\236\036\106\230
\040\233\237\323\015\331\254\323\057\315\174\370\133\056\125\273
\277\335\222\367\244\014\334\061\341\242\002\061\000\374\227\146
\146\345\103\026\023\203\335\307\337\057\276\024\070\355\001\316
\261\027\032\021\165\351\275\003\217\046\176\204\345\311\140\246
\225\327\124\131\267\347\021\054\211\324\271\356\027
```

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER

CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "GTS Root R3"

# Issuer: CN=GTS Root R3,O=Google Trust Services LLC,C=US

# Serial Number:02:03:e5:b8:82:eb:20:f8:25:27:6d:3d:66

# Subject: CN=GTS Root R3,O=Google Trust Services LLC,C=US

# Not Valid Before: Wed Jun 22 00:00:00 2016

# Not Valid After : Sun Jun 22 00:00:00 2036

# Fingerprint (SHA-256):

34:D8:A7:3E:E2:08:D9:BC:DB:0D:95:65:20:93:4B:4E:40:E6:94:82:59:6E:8B:6F:73:C8:42:6B:01:0A:6F:48

# Fingerprint (SHA1): ED:E5:71:80:2B:C8:92:B9:5B:83:3C:D2:32:68:3F:09:CD:A0:1E:46

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "GTS Root R3"

CKA\_CERT\_SHA1\_HASH MULTILINE\_OCTAL

```
\355\345\161\200\053\310\222\271\133\203\074\322\062\150\077\011
\315\240\036\106
```

END

CKA\_CERT\_MD5\_HASH MULTILINE\_OCTAL

```
\076\347\235\130\002\224\106\121\224\345\340\042\112\213\347\163
```

END

CKA\_ISSUER MULTILINE\_OCTAL

```
\060\107\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\042\060\040\006\003\125\004\012\023\031\107\157\157\147\154\145
\040\124\162\165\163\164\040\123\145\162\166\151\143\145\163\040
```

```

\114\114\103\061\024\060\022\006\003\125\004\003\023\013\107\124
\123\040\122\157\157\164\040\122\063
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\015\002\003\345\270\202\353\040\370\045\047\155\075\146
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "GTS Root R4"
#
# Issuer: CN=GTS Root R4,O=Google Trust Services LLC,C=US
# Serial Number:02:03:e5:c0:68:ef:63:1a:9c:72:90:50:52
# Subject: CN=GTS Root R4,O=Google Trust Services LLC,C=US
# Not Valid Before: Wed Jun 22 00:00:00 2016
# Not Valid After : Sun Jun 22 00:00:00 2036
# Fingerprint (SHA-256):
34:9D:FA:40:58:C5:E2:63:12:3B:39:8A:E7:95:57:3C:4E:13:13:C8:3F:E6:8F:93:55:6C:D5:E8:03:1B:3C:7D
#
Fingerprint (SHA1): 77:D3:03:67:B5:E0:0C:15:F6:0C:38:61:DF:7C:E1:3B:92:46:4D:47
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "GTS Root R4"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\107\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\042\060\040\006\003\125\004\012\023\031\107\157\157\147\154\145
\040\124\162\165\163\164\040\123\145\162\166\151\143\145\163\040
\114\114\103\061\024\060\022\006\003\125\004\003\023\013\107\124
\123\040\122\157\157\164\040\122\064
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\107\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\042\060\040\006\003\125\004\012\023\031\107\157\157\147\154\145
\040\124\162\165\163\164\040\123\145\162\166\151\143\145\163\040
\114\114\103\061\024\060\022\006\003\125\004\003\023\013\107\124
\123\040\122\157\157\164\040\122\064
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\015\002\003\345\300\150\357\143\032\234\162\220\120\122

```

END

CKA\_VALUE MULTILINE\_OCTAL

```
\060\202\002\011\060\202\001\216\240\003\002\001\002\002\015\002
\003\345\300\150\357\143\032\234\162\220\120\122\060\012\006\010
\052\206\110\316\075\004\003\003\060\107\061\013\060\011\006\003
\125\004\006\023\002\125\123\061\042\060\040\006\003\125\004\012
\023\031\107\157\157\147\154\145\040\124\162\165\163\164\040\123
\145\162\166\151\143\145\163\040\114\114\103\061\024\060\022\006
\003\125\004\003\023\013\107\124\123\040\122\157\157\164\040\122
\064\060\036\027\015\061\066\060\066\062\062\060\060\060\060\060
\060\132\027\015\063\066\060\066\062\062\060\060\060\060\060\060
\132\060\107\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\042\060\040\006\003\125\004\012\023\031\107\157\157\147\154
\145\040\124\162\165\163\164\040\123\145\162\166\151\143\145\163
\040\114\114\103\061\024\060\022\006\003\125\004\003\023\013\107
\124\123\040\122\157\157\164\040\122\064\060\166\060\020\006\007
\052\206\110\316\075\002\001\006\005\053\201\004\000\042\003\142
\000\004\363\164\163\247\150\213\140\256\103\270\065\305\201\060
\173\113\111\235\373\301\141\316\346\336\106\275\153\325\141\030
\065\256\100\335\163\367\211\221\060\132\353\074\356\205\174\242
\100\166\073\251\306\270\107\330\052\347\222\221\152\163\351\261
\162\071\237\051\237\242\230\323\137\136\130\206\145\017\241\204
\145\006\321\334\213\311\307\163\310\214\152\057\345\304\253\321
\035\212\243\102\060\100\060\016\006\003\125\035\017\001\001\377
\004\004\003\002\001\206\060\017\006\003\125\035\023\001\001\377
\004\005\060\003\001\001\377\060\035\006\003\125\035\016\004\026
\004\024\200\114\326\353\164\377\111\066\243\325\330\374\265\076
\305\152\360\224\035\214\060\012\006\010\052\206\110\316\075\004
\003\003\003\151\000\060\146\002\061\000\350\100\377\203\336\003
\364\237\256\035\172\247\056\271\257\117\366\203\035\016\055\205
\001\035\321\331\152\354\017\302\257\307\136\126\136\134\325\034
\130\042\050\013\367\060\266\057\261\174\002\061\000\360\141\074
\247\364\240\202\343\041\325\204\035\163\206\234\055\257\312\064
\233\361\237\271\043\066\342\274\140\003\235\200\263\232\126\310
\341\342\273\024\171\312\315\041\324\224\265\111\103
```

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "GTS Root R4"

# Issuer: CN=GTS Root R4,O=Google Trust Services LLC,C=US

# Serial Number:02:03:e5:c0:68:ef:63:1a:9c:72:90:50:52

# Subject: CN=GTS Root R4,O=Google Trust Services LLC,C=US

# Not Valid Before: Wed Jun 22 00:00:00 2016

# Not Valid After : Sun Jun 22 00:00:00 2036

# Fingerprint (SHA-256):

```

34:9D:FA:40:58:C5:E2:63:12:3B:39:8A:E7:95:57:3C:4E:13:13:C8:3F:E6:8F:93:55:6C:D5:E8:03:1B:3C:7D
# Fingerprint (SHA1): 77:D3:03:67:B5:E0:0C:15:F6:0C:38:61:DF:7C:E1:3B:92:46:4D:47
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL
CK_FALSE
CKA_LABEL UTF8 "GTS Root R4"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\167\323\003\147\265\340\014\025\366\014\070\141\337\174\341\073
\222\106\115\107
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\103\226\203\167\031\115\166\263\235\145\122\344\035\042\245\350
END
CKA_ISSUER MULTILINE_OCTAL
\060\107\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\042\060\040\006\003\125\004\012\023\031\107\157\157\147\154\145
\040\124\162\165\163\164\040\123\145\162\166\151\143\145\163\040
\114\114\103\061\024\060\022\006\003\125\004\003\023\013\107\124
\123\040\122\157\157\164\040\122\064
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\015\002\003\345\300\150\357\143\032\234\162\220\120\122
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "Telia Root CA v2"
#
# Issuer: CN=Telia Root CA v2,O=Telia Finland
Oyj,C=FI
# Serial Number:01:67:5f:27:d6:fe:7a:e3:e4:ac:be:09:5b:05:9e
# Subject: CN=Telia Root CA v2,O=Telia Finland Oyj,C=FI
# Not Valid Before: Thu Nov 29 11:55:54 2018
# Not Valid After : Sun Nov 29 11:55:54 2043
# Fingerprint (SHA-256):
24:2B:69:74:2F:CB:1E:5B:2A:BF:98:89:8B:94:57:21:87:54:4E:5B:4D:99:11:78:65:73:62:1F:6A:74:B8:2C
# Fingerprint (SHA1): B9:99:CD:D1:73:50:8A:C4:47:05:08:9C:8C:88:FB:BE:A0:2B:40:CD
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Telia Root CA v2"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509

```

CKA\_SUBJECT MULTILINE\_OCTAL

\060\104\061\013\060\011\006\003\125\004\006\023\002\106\111\061  
\032\060\030\006\003\125\004\012\014\021\124\145\154\151\141\040  
\106\151\156\154\141\156\144\040\117\171\152\061\031\060\027\006  
\003\125\004\003\014\020\124\145\154\151\141\040\122\157\157\164  
\040\103\101\040\166\062

END

CKA\_ID UTF8 "0"

CKA\_ISSUER MULTILINE\_OCTAL

\060\104\061\013\060\011\006\003\125\004\006\023\002\106\111\061  
\032\060\030\006\003\125\004\012\014\021\124\145\154\151\141\040  
\106\151\156\154\141\156\144\040\117\171\152\061\031\060\027\006  
\003\125\004\003\014\020\124\145\154\151\141\040\122\157\157\164  
\040\103\101\040\166\062

END

CKA\_SERIAL\_NUMBER

MULTILINE\_OCTAL

\002\017\001\147\137\047\326\376\172\343\344\254\276\011\133\005  
\236

END

CKA\_VALUE MULTILINE\_OCTAL

\060\202\005\164\060\202\003\134\240\003\002\001\002\002\017\001  
\147\137\047\326\376\172\343\344\254\276\011\133\005\236\060\015  
\006\011\052\206\110\206\367\015\001\001\013\005\000\060\104\061  
\013\060\011\006\003\125\004\006\023\002\106\111\061\032\060\030  
\006\003\125\004\012\014\021\124\145\154\151\141\040\106\151\156  
\154\141\156\144\040\117\171\152\061\031\060\027\006\003\125\004  
\003\014\020\124\145\154\151\141\040\122\157\157\164\040\103\101  
\040\166\062\060\036\027\015\061\070\061\061\062\071\061\061\065  
\065\065\064\132\027\015\064\063\061\061\062\071\061\061\065\065  
\065\064\132\060\104\061\013\060\011\006\003\125\004\006\023\002  
\106\111\061\032\060\030\006\003\125\004\012\014\021\124\145\154  
\151\141\040\106\151\156\154\141\156\144\040\117\171\152\061\031  
\060\027\006\003\125\004\003\014\020\124\145\154\151\141\040\122  
\157\157\164\040\103\101\040\166\062\060\202\002\042\060\015\006  
\011\052\206\110\206\367\015\001\001\001\005\000\003\202\002\017  
\000\060\202\002\012\002\202\002\001\000\262\320\077\007\274\342  
\173\320\153\231\370\342\167\151\347\316\235\244\003\274\202\155  
\241\376\201\145\037\114\047\254\216\000\272\026\173\353\060\152  
\000\300\263\164\150\176\262\257\307\325\142\263\172\077\120\312  
\214\066\104\044\143\322\066\351\014\205\366\103\166\325\114\241  
\140\162\147\342\050\063\245\313\061\270\072\042\043\064\270\175  
\275\126\042\100\235\352\364\173\003\255\150\374\262\201\117\230  
\320\164\352\215\345\175\315\143\303\243\366\336\222\302\130\031  
\340\226\273\305\304\251\075\245\164\226\376\257\371\211\252\275  
\225\027\124\330\170\104\361\014\167\025\222\340\230\102\247\244  
\326\252\040\222\315\301\240\263\226\262\072\204\102\215\175\325  
\225\344\326\333\351\142\304\130\263\171\305\214\323\065\063\203

\237\165\241\122\047\141\070\361\131\075\216\120\340\275\171\074  
\347\154\226\376\136\331\002\145\264\216\134\320\021\064\337\135  
\277\122\247\201\000\303\177\231\105\231\025\325\027\310\012\123  
\354\143\363\231\175\314\151\022\206\302\027\360\001\236\277\204  
\274\321\122\313\033\222\146\316\244\123\345\241\277\304\333\011  
\326\346\211\126\053\310\343\174\336\343\377\211\345\065\156\050  
\350\154\013\043\121\251\045\005\353\110\370\335\261\312\372\154  
\010\121\357\267\030\154\104\312\046\341\163\306\211\006\201\345  
\212\254\260\342\051\306\271\044\263\153\104\021\364\245\103\302  
\114\103\345\160\066\214\266\063\127\172\225\056\202\240\364\134  
\020\263\141\203\366\002\005\206\056\174\055\154\334\003\106\156  
\065\223\325\172\225\057\336\040\330\133\176\224\220\004\152\272  
\131\075\004\005\165\235\067\242\016\056\075\353\301\244\122\203  
\376\320\153\324\146\216\334\306\351\022\116\035\052\127\252\020  
\274\174\136\202\175\246\246\311\362\055\271\365\027\047\255\321  
\016\211\124\053\225\372\300\255\035\230\024\170\063\102\206\012  
\251\163\265\373\164\015\267\033\060\031\304\132\016\034\047\267  
\332\030\320\377\212\310\005\272\361\252\034\242\067\267\346\110  
\244\106\054\224\352\250\166\142\107\213\020\123\007\110\127\154  
\342\222\115\266\256\005\313\334\301\112\136\217\254\075\031\116  
\302\355\140\165\053\333\301\312\102\325\002\003\001\000\001\243  
\143\060\141\060\037\006\003\125\035\043\004\030\060\026\200\024  
\162\254\344\063\171\252\105\207\366\375\254\035\236\326\307\057  
\206\330\044\071\060\035\006\003\125\035\016\004\026\004\024\162  
\254\344\063\171\252\105\207\366\375\254\035\236\326\307\057\206  
\330\044\071\060\016\006\003\125\035\017\001\001\377\004\004\003  
\002\001\006\060\017\006\003\125\035\023\001\001\377\004\005\060  
\003\001\001\377\060\015\006\011\052\206\110\206\367\015\001\001  
\013\005\000\003\202\002\001\000\240\073\131\247\011\224\076\066  
\204\322\176\057\071\245\226\227\372\021\255\374\147\363\161\011  
\362\262\211\204\147\104\257\271\357\355\226\354\234\144\333\062  
\060\157\147\232\254\176\137\262\253\001\066\176\201\372\344\204  
\136\322\254\066\340\153\142\305\175\113\016\202\155\322\166\142  
\321\376\227\370\237\060\174\030\371\264\122\167\202\035\166\333  
\323\035\251\360\301\232\000\275\155\165\330\175\347\372\307\070  
\243\234\160\350\106\171\003\257\056\164\333\165\370\156\123\014  
\003\310\231\032\211\065\031\074\323\311\124\174\250\360\054\346  
\156\007\171\157\152\341\346\352\221\202\151\012\035\303\176\131  
\242\236\153\106\025\230\133\323\257\106\035\142\310\316\200\122  
\111\021\077\311\004\022\303\023\174\077\073\212\226\333\074\240  
\036\012\264\213\124\262\044\147\015\357\202\313\276\074\175\321  
\342\177\256\026\326\126\130\271\332\040\261\203\025\241\357\212  
\115\062\157\101\057\023\122\202\224\327\032\301\170\242\121\335  
\053\160\155\267\032\371\367\260\340\147\227\126\333\174\141\123  
\011\003\050\002\100\307\263\330\375\234\160\152\306\050\303\205  
\351\342\355\032\223\240\336\113\230\242\204\076\005\167\001\226  
\075\373\264\040\017\234\162\002\172\022\057\325\243\272\121\170  
\257\052\053\104\145\116\265\375\012\350\301\315\171\207\141\053

```
\336\200\127\105\277\147\361\233\221\136\245\244\354\131\110\020
\015\070\307\260\372\303\104\155\004\365\170\120\034\222\226\133
\332\365\270\056\272\133\317\345\360\152\235\113\057\130\163\055
\117\055\304\034\076\364\263\077\253\025\016\073\031\101\212\244
\301\127\022\146\161\114\372\123\343\127\353\142\225\011\236\124
\335\321\302\074\127\074\275\070\255\230\144\267\270\003\232\123
\126\140\135\263\330\102\033\134\113\022\212\034\353\353\175\306
\172\151\307\047\177\244\370\213\362\344\224\146\207\113\351\224
\007\011\022\171\212\262\353\164\004\334\316\364\104\131\340\026
\312\305\054\130\327\074\173\317\142\206\152\120\175\065\066\146
\247\373\067\347\050\307\330\320\255\245\151\224\217\350\301\337
\044\370\033\007\061\207\201\330\135\366\350\050\330\112\122\200
\254\023\356\120\024\036\230\307
```

END

CKA\_NSS\_Mozilla\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "Telia Root CA v2"

# Issuer: CN=Telia Root CA v2,O=Telia Finland Oyj,C=FI

# Serial Number:01:67:5f:27:d6:fe:7a:e3:e4:ac:be:09:5b:05:9e

# Subject: CN=Telia Root CA v2,O=Telia Finland Oyj,C=FI

# Not Valid Before: Thu Nov 29 11:55:54 2018

# Not Valid After : Sun Nov 29 11:55:54 2043

# Fingerprint (SHA-256):

24:2B:69:74:2F:CB:1E:5B:2A:BF:98:89:8B:94:57:21:87:54:4E:5B:4D:99:11:78:65:73:62:1F:6A:74:B8:2C

# Fingerprint (SHA1): B9:99:CD:D1:73:50:8A:C4:47:05:08:9C:8C:88:FB:BE:A0:2B:40:CD

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "Telia Root CA v2"

CKA\_CERT\_SHA1\_HASH MULTILINE\_OCTAL

```
\271\231\315\321\163\120\212\304\107\005\010\234\214\210\373\276
\240\053\100\315
```

END

CKA\_CERT\_MD5\_HASH

MULTILINE\_OCTAL

```
\016\217\254\252\202\337\205\261\364\334\020\034\374\231\331\110
```

END

CKA\_ISSUER MULTILINE\_OCTAL

```
\060\104\061\013\060\011\006\003\125\004\006\023\002\106\111\061
\032\060\030\006\003\125\004\012\014\021\124\145\154\151\141\040
\106\151\156\154\141\156\144\040\117\171\152\061\031\060\027\006
\003\125\004\003\014\020\124\145\154\151\141\040\122\157\157\164
\040\103\101\040\166\062
```

END



```

CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\017\001\147\137\047\326\376\172\343\344\254\276\011\133\005
\236
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "D-TRUST BR Root CA 1 2020"
#
# Issuer: CN=D-TRUST BR Root CA 1 2020,O=D-Trust GmbH,C=DE
# Serial Number:7c:c9:8f:2b:84:d7:df:ea:0f:c9:65:9a:d3:4b:4d:96
# Subject: CN=D-TRUST BR Root CA 1 2020,O=D-Trust
GmbH,C=DE
# Not Valid Before: Tue Feb 11 09:45:00 2020
# Not Valid After : Sun Feb 11 09:44:59 2035
# Fingerprint (SHA-256):
E5:9A:AA:81:60:09:C2:2B:FF:5B:25:BA:D3:7D:F3:06:F0:49:79:7C:1F:81:D8:5A:B0:89:E6:57:BD:8F:00:44
# Fingerprint (SHA1): 1F:5B:98:F0:E3:B5:F7:74:3C:ED:E6:B0:36:7D:32:CD:F4:09:41:67
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "D-TRUST BR Root CA 1 2020"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\110\061\013\060\011\006\003\125\004\006\023\002\104\105\061
\025\060\023\006\003\125\004\012\023\014\104\055\124\162\165\163
\164\040\107\155\142\110\061\042\060\040\006\003\125\004\003\023
\031\104\055\124\122\125\123\124\040\102\122\040\122\157\157\164
\040\103\101\040\061\040\062\060\062\060
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\110\061\013\060\011\006\003\125\004\006\023\002\104\105\061
\025\060\023\006\003\125\004\012\023\014\104\055\124\162\165\163
\164\040\107\155\142\110\061\042\060\040\006\003\125\004\003\023
\031\104\055\124\122\125\123\124\040\102\122\040\122\157\157\164
\040\103\101\040\061\040\062\060\062\060
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\020\174\311\217\053\204\327\337\352\017\311\145\232\323\113
\115\226
END
CKA_VALUE MULTILINE_OCTAL

```

\060\202\002\333\060\202\002\140\240\003\002\001\002\002\020\174  
\311\217\053\204\327\337\352\017\311\145\232\323\113\115\226\060  
\012\006\010\052\206\110\316\075\004\003\003\060\110\061\013\060  
\011\006\003\125\004\006\023\002\104\105\061\025\060\023\006\003  
\125\004\012\023\014\104\055\124\162\165\163\164\040\107\155\142  
\110\061\042\060\040\006\003\125\004\003\023\031\104\055\124\122  
\125\123\124\040\102\122\040\122\157\157\164\040\103\101\040\061  
\040\062\060\062\060\060\036\027\015\062\060\060\062\061\061\060  
\071\064\065\060\060\132\027\015\063\065\060\062\061\061\060\071  
\064\064\065\071\132\060\110\061\013\060\011\006\003\125\004\006  
\023\002\104\105\061\025\060\023\006\003\125\004\012\023\014\104  
\055\124\162\165\163\164\040\107\155\142\110\061\042\060\040\006  
\003\125\004\003\023\031\104\055\124\122\125\123\124\040\102\122  
\040\122\157\157\164\040\103\101\040\061\040\062\060\062\060\060  
\166\060\020\006\007\052\206\110\316\075\002\001\006\005\053\201  
\004\000\042\003\142\000\004\306\313\307\050\321\373\204\365\232  
\357\102\024\040\341\103\153\156\165\255\374\053\003\204\324\166  
\223\045\327\131\073\101\145\153\036\346\064\052\273\164\366\022  
\316\350\155\347\253\344\074\116\077\104\010\213\315\026\161\313  
\277\222\231\364\244\327\074\120\124\122\220\205\203\170\224\147  
\147\243\034\011\031\075\165\064\205\336\355\140\175\307\014\264  
\101\122\271\156\345\356\102\243\202\001\015\060\202\001\011\060  
\017\006\003\125\035\023\001\001\377\004\005\060\003\001\001\377  
\060\035\006\003\125\035\016\004\026\004\024\163\221\020\253\377  
\125\263\132\174\011\045\325\262\272\010\240\153\253\037\155\060  
\016\006\003\125\035\017\001\001\377\004\004\003\002\001\006\060  
\201\306\006\003\125\035\037\004\201\276\060\201\273\060\076\240  
\074\240\072\206\070\150\164\164\160\072\057\057\143\162\154\056  
\144\055\164\162\165\163\164\056\156\145\164\057\143\162\154\057  
\144\055\164\162\165\163\164\137\142\162\137\162\157\157\164\137  
\143\141\137\061\137\062\060\062\060\056\143\162\154\060\171\240  
\167\240\165\206\163\154\144\141\160\072\057\057\144\151\162\145  
\143\164\157\162\171\056\144\055\164\162\165\163\164\056\156\145  
\164\057\103\116\075\104\055\124\122\125\123\124\045\062\060\102  
\122\045\062\060\122\157\157\164\045\062\060\103\101\045\062\060  
\061\045\062\060\062\060\062\060\054\117\075\104\055\124\162\165  
\163\164\045\062\060\107\155\142\110\054\103\075\104\105\077\143  
\145\162\164\151\146\151\143\141\164\145\162\145\166\157\143\141  
\164\151\157\156\154\151\163\164\060\012\006\010\052\206\110\316  
\075\004\003\003\003\151\000\060\146\002\061\000\224\220\055\023  
\372\341\143\370\141\143\350\255\205\170\124\221\234\270\223\070  
\076\032\101\332\100\026\123\102\010\312\057\216\361\076\201\126  
\300\252\330\355\030\304\260\256\364\076\372\046\002\061\000\363  
\050\342\306\333\053\231\373\267\121\270\044\243\244\224\172\032  
\077\346\066\342\003\127\063\212\060\313\202\307\326\024\021\325  
\165\143\133\024\225\234\037\001\317\330\325\162\247\017\073

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

```
CK_BBOOL CK_TRUE
CKA_NSS_SERVER_DISTRUST_AFTER CK_BBOOL CK_FALSE
CKA_NSS_EMAIL_DISTRUST_AFTER CK_BBOOL CK_FALSE

# Trust for "D-TRUST BR Root CA 1 2020"
# Issuer: CN=D-TRUST BR Root CA 1 2020,O=D-Trust GmbH,C=DE
# Serial Number:7c:c9:8f:2b:84:d7:df:ea:0f:c9:65:9a:d3:4b:4d:96
# Subject: CN=D-TRUST BR Root CA 1 2020,O=D-Trust GmbH,C=DE
# Not Valid Before: Tue Feb 11 09:45:00 2020
# Not Valid After : Sun Feb 11 09:44:59 2035
# Fingerprint (SHA-256):
E5:9A:AA:81:60:09:C2:2B:FF:5B:25:BA:D3:7D:F3:06:F0:49:79:7C:1F:81:D8:5A:B0:89:E6:57:BD:8F:00:44
# Fingerprint (SHA1): 1F:5B:98:F0:E3:B5:F7:74:3C:ED:E6:B0:36:7D:32:CD:F4:09:41:67
CKA_CLASS
CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "D-TRUST BR Root CA 1 2020"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\037\133\230\360\343\265\367\164\074\355\346\260\066\175\062\315
\364\011\101\147
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\265\252\113\325\355\367\343\125\056\217\162\012\363\165\270\355
END
CKA_ISSUER MULTILINE_OCTAL
\060\110\061\013\060\011\006\003\125\004\006\023\002\104\105\061
\025\060\023\006\003\125\004\012\023\014\104\055\124\162\165\163
\164\040\107\155\142\110\061\042\060\040\006\003\125\004\003\023
\031\104\055\124\122\125\123\124\040\102\122\040\122\157\157\164
\040\103\101\040\061\040\062\060\062\060
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\020\174\311\217\053\204\327\337\352\017\311\145\232\323\113
\115\226
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED
CK_BBOOL CK_FALSE

#
# Certificate "D-TRUST EV Root CA 1 2020"
#
# Issuer: CN=D-TRUST EV Root CA 1 2020,O=D-Trust GmbH,C=DE
# Serial Number:5f:02:41:d7:7a:87:7c:4c:03:a3:ac:96:8d:fb:ff:d0
```

```
# Subject: CN=D-TRUST EV Root CA 1 2020,O=D-Trust GmbH,C=DE
# Not Valid Before: Tue Feb 11 10:00:00 2020
# Not Valid After : Sun Feb 11 09:59:59 2035
# Fingerprint (SHA-256):
08:17:0D:1A:A3:64:53:90:1A:2F:95:92:45:E3:47:DB:0C:8D:37:AB:AA:BC:56:B8:1A:A1:00:DC:95:89:70:DB
# Fingerprint (SHA1): 61:DB:8C:21:59:69:03:90:D8:7C:9C:12:86:54:CF:9D:3D:F4:DD:07
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "D-TRUST EV Root CA 1 2020"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\110\061\013\060\011\006\003\125\004\006\023\002\104\105\061
\025\060\023\006\003\125\004\012\023\014\104\055\124\162\165\163
\164\040\107\155\142\110\061\042\060\040\006\003\125\004\003\023
\031\104\055\124\122\125\123\124\040\105\126\040\122\157\157\164
\040\103\101\040\061\040\062\060\062\060
END
CKA_ID
UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\110\061\013\060\011\006\003\125\004\006\023\002\104\105\061
\025\060\023\006\003\125\004\012\023\014\104\055\124\162\165\163
\164\040\107\155\142\110\061\042\060\040\006\003\125\004\003\023
\031\104\055\124\122\125\123\124\040\105\126\040\122\157\157\164
\040\103\101\040\061\040\062\060\062\060
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\020\137\002\101\327\172\207\174\114\003\243\254\226\215\373
\377\320
END
CKA_VALUE MULTILINE_OCTAL
\060\202\002\333\060\202\002\140\240\003\002\001\002\002\020\137
\002\101\327\172\207\174\114\003\243\254\226\215\373\377\320\060
\012\006\010\052\206\110\316\075\004\003\003\060\110\061\013\060
\011\006\003\125\004\006\023\002\104\105\061\025\060\023\006\003
\125\004\012\023\014\104\055\124\162\165\163\164\040\107\155\142
\110\061\042\060\040\006\003\125\004\003\023\031\104\055\124\122
\125\123\124\040\105\126\040\122\157\157\164\040\103\101\040\061
\040\062\060\062\060\060\036\027\015\062\060\060\062\061\061\061
\060\060\060\060\060\132\027\015\063\065\060\062\061\061\060\071
\065\071\065\071\132\060\110\061\013\060\011\006\003\125\004\006
\023\002\104\105\061\025\060\023\006\003\125\004\012\023\014\104
\055\124\162\165\163\164\040\107\155\142\110\061\042\060\040\006
\003\125\004\003\023\031\104\055\124\122\125\123\124\040\105\126
\040\122\157\157\164\040\103\101\040\061\040\062\060\062\060\060
\166\060\020\006\007\052\206\110\316\075\002\001\006\005\053\201
```

\004\000\042\003\142\000\004\361\013\335\206\103\040\031\337\227  
\205\350\042\112\233\317\235\230\277\264\005\046\311\313\343\246  
\322\217\305\236\170\173\061\211\251\211\255\047\074\145\020\202  
\374\337\303\235\116\360\063\043\304\322\062\365\034\260\337\063  
\027\135\305\360\261\212\371\357\271\267\024\312\051\112\302\017  
\251\177\165\145\111\052\060\147\364\144\367\326\032\167\332\303  
\302\227\141\102\173\111\255\243\202\001\015\060\202\001\011\060  
\017\006\003\125\035\023\001\001\377\004\005\060\003\001\001\377  
\060\035\006\003\125\035\016\004\026\004\024\177\020\001\026\067  
\072\244\050\344\120\370\244\367\354\153\062\266\376\351\213\060  
\016\006\003\125\035\017\001\001\377\004\004\003\002\001\006\060  
\201\306\006\003\125\035\037\004\201\276\060\201\273\060\076\240  
\074\240\072\206\070\150\164\164\160\072\057\057\143\162\154\056  
\144\055\164\162\165\163\164\056\156\145\164\057\143\162\154\057  
\144\055\164\162\165\163\164\137\145\166\137\162\157\157\164\137  
\143\141\137\061\137\062\060\062\060\056\143\162\154\060\171\240  
\167\240\165\206\163\154\144\141\160\072\057\057\144\151\162\145  
\143\164\157\162\171\056\144\055\164\162\165\163\164\056\156\145  
\164\057\103\116\075\104\055\124\122\125\123\124\045\062\060\105  
\126\045\062\060\122\157\157\164\045\062\060\103\101\045\062\060  
\061\045\062\060\062\060\062\060\054\117\075\104\055\124\162\165  
\163\164\045\062\060\107\155\142\110\054\103\075\104\105\077\143  
\145\162\164\151\146\151\143\141\164\145\162\145\166\157\143\141  
\164\151\157\156\154\151\163\164\060\012\006\010\052\206\110\316  
\075\004\003\003\003\151\000\060\146\002\061\000\312\074\306\052  
\165\302\136\165\142\071\066\000\140\132\213\301\223\231\314\331  
\333\101\073\073\207\231\027\073\325\314\117\312\042\367\240\200  
\313\371\264\261\033\126\365\162\322\374\031\321\002\061\000\221  
\367\060\223\077\020\106\053\161\244\320\073\104\233\300\051\002  
\005\262\101\167\121\363\171\132\236\216\024\240\116\102\322\133  
\201\363\064\152\003\347\042\070\120\133\355\031\117\103\026

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "D-TRUST EV Root CA 1 2020"

# Issuer: CN=D-TRUST EV Root CA 1 2020,O=D-Trust GmbH,C=DE

# Serial Number:5f:02:41:d7:7a:87:7c:4c:03:a3:ac:96:8d:fb:ff:d0

# Subject: CN=D-TRUST EV Root CA 1 2020,O=D-Trust GmbH,C=DE

# Not Valid Before: Tue

Feb 11 10:00:00 2020

# Not Valid After : Sun Feb 11 09:59:59 2035

# Fingerprint (SHA-256):

08:17:0D:1A:A3:64:53:90:1A:2F:95:92:45:E3:47:DB:0C:8D:37:AB:AA:BC:56:B8:1A:A1:00:DC:95:89:70:DB

# Fingerprint (SHA1): 61:DB:8C:21:59:69:03:90:D8:7C:9C:12:86:54:CF:9D:3D:F4:DD:07

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

```

CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "D-TRUST EV Root CA 1 2020"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\141\333\214\041\131\151\003\220\330\174\234\022\206\124\317\235
\075\364\335\007
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\214\055\235\160\237\110\231\021\006\021\373\351\313\060\300\156
END
CKA_ISSUER MULTILINE_OCTAL
\060\110\061\013\060\011\006\003\125\004\006\023\002\104\105\061
\025\060\023\006\003\125\004\012\023\014\104\055\124\162\165\163
\164\040\107\155\142\110\061\042\060\040\006\003\125\004\003\023
\031\104\055\124\122\125\123\124\040\105\126\040\122\157\157\164
\040\103\101\040\061\040\062\060\062\060
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\020\137\002\101\327\172\207\174\114\003\243\254\226\215\373
\377\320
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "DigiCert TLS ECC P384 Root G5"
#
# Issuer: CN=DigiCert TLS ECC P384 Root G5,O="DigiCert, Inc.",C=US
# Serial Number:09:e0:93:65:ac:f7:d9:c8:b9:3e:1c:0b:04:2a:2e:f3
# Subject: CN=DigiCert TLS ECC P384 Root G5,O="DigiCert, Inc.",C=US
# Not Valid Before: Fri Jan 15 00:00:00 2021
# Not Valid After : Sun Jan 14 23:59:59 2046
# Fingerprint (SHA-256):
01:8E:13:F0:77:25:32:CF:80:9B:D1:B1:72:81:86:72:83:FC:48:C6:E1:3B:E9:C6:98:12:85:4A:49:0C:1B:05
# Fingerprint (SHA1): 17:F3:DE:5E:9F:0F:19:E9:8E:F6:1F:32:26:6E:20:C4:07:AE:30:EE
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL
CK_FALSE
CKA_LABEL UTF8 "DigiCert TLS ECC P384 Root G5"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\116\061\013\060\011\006\003\125\004\006\023\002\125\123\061

```

\027\060\025\006\003\125\004\012\023\016\104\151\147\151\103\145  
\162\164\054\040\111\156\143\056\061\046\060\044\006\003\125\004  
\003\023\035\104\151\147\151\103\145\162\164\040\124\114\123\040  
\105\103\103\040\120\063\070\064\040\122\157\157\164\040\107\065  
END

CKA\_ID UTF8 "0"

CKA\_ISSUER MULTILINE\_OCTAL

\060\116\061\013\060\011\006\003\125\004\006\023\002\125\123\061  
\027\060\025\006\003\125\004\012\023\016\104\151\147\151\103\145  
\162\164\054\040\111\156\143\056\061\046\060\044\006\003\125\004  
\003\023\035\104\151\147\151\103\145\162\164\040\124\114\123\040  
\105\103\103\040\120\063\070\064\040\122\157\157\164\040\107\065  
END

CKA\_SERIAL\_NUMBER MULTILINE\_OCTAL

\002\020\011\340\223\145\254\367\331\310\271\076\034\013\004\052  
\056\363  
END

CKA\_VALUE MULTILINE\_OCTAL

\060\202\002\031\060\202\001\237\240\003\002\001\002\002\020\011  
\340\223\145\254\367\331\310\271\076\034\013\004\052\056\363\060  
\012\006\010\052\206\110\316\075\004\003\003\060\116\061\013\060  
\011\006\003\125\004\006\023\002\125\123\061\027\060\025\006\003  
\125\004\012\023\016\104\151\147\151\103\145\162\164\054\040\111  
\156\143\056\061\046\060\044\006\003\125\004\003\023\035\104\151  
\147\151\103\145\162\164\040\124\114\123\040\105\103\103\040\120  
\063\070\064\040\122\157\157\164\040\107\065\060\036\027\015\062  
\061\060\061\061\065\060\060\060\060\060\060\132\027\015\064\066  
\060\061\061\064\062\063\065\071\065\071\132\060\116\061\013\060  
\011\006\003\125\004\006\023\002\125\123\061\027\060\025\006\003  
\125\004\012\023\016\104\151\147\151\103\145\162\164\054\040\111  
\156\143\056\061\046\060\044\006\003\125\004\003\023\035\104\151  
\147\151\103\145\162\164\040\124\114\123\040\105\103\103\040\120  
\063\070\064\040\122\157\157\164\040\107\065\060\166\060\020\006  
\007\052\206\110\316\075\002\001\006\005\053\201\004\000\042\003  
\142\000\004\301\104\241\317\021\227\120\232\336\043\202\065\007  
\315\320\313\030\235\322\361\177\167\065\117\073\335\224\162\122  
\355\302\073\370\354\372\173\153\130\040\354\231\256\311\374\150  
\263\165\271\333\011\354\310\023\365\116\306\012\035\146\060\114  
\273\037\107\012\074\141\020\102\051\174\245\010\016\340\042\351  
\323\065\150\316\233\143\237\204\265\231\115\130\240\216\365\124  
\347\225\311\243\102\060\100\060\035\006\003\125\035\016\004\026  
\004\024\301\121\105\120\131\253\076\347\054\132\372\040\042\022  
\007\200\210\174\021\152\060\016\006\003\125\035\017\001\001\377  
\004\004\003\002\001\206\060\017\006\003\125\035\023\001\001\377  
\004\005\060\003\001\001\377\060\012\006\010\052\206\110\316\075  
\004\003\003\003\150\000\060\145\002\061\000\211\152\215\107\347  
\354\374\156\125\003\331\147\154\046\116\203\306\375\311\373\053  
\023\274\267\172\214\264\145\322\151\151\143\023\143\073\046\120

```
\056\001\241\171\006\221\235\110\277\302\276\002\060\107\303\025
\173\261\240\221\231\111\223\250\074\174\350\106\006\213\054\362
\061\000\224\235\142\310\211\275\031\204\024\351\245\373\001\270
\015\166\103\214\056\123\313\174\337\014\027\226\120
```

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "DigiCert TLS ECC P384 Root G5"

# Issuer: CN=DigiCert TLS ECC P384 Root G5,O="DigiCert, Inc.",C=US

# Serial Number:09:e0:93:65:ac:f7:d9:c8:b9:3e:1c:0b:04:2a:2e:f3

# Subject: CN=DigiCert TLS ECC P384 Root G5,O="DigiCert, Inc.",C=US

# Not Valid Before: Fri Jan 15 00:00:00 2021

# Not Valid After : Sun Jan 14 23:59:59 2046

# Fingerprint (SHA-256):

01:8E:13:F0:77:25:32:CF:80:9B:D1:B1:72:81:86:72:83:FC:48:C6:E1:3B:E9:C6:98:12:85:4A:49:0C:1B:05

# Fingerprint (SHA1): 17:F3:DE:5E:9F:0F:19:E9:8E:F6:1F:32:26:6E:20:C4:07:AE:30:EE

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "DigiCert

TLS ECC P384 Root G5"

CKA\_CERT\_SHA1\_HASH MULTILINE\_OCTAL

```
\027\363\336\136\237\017\031\351\216\366\037\062\046\156\040\304
\007\256\060\356
```

END

CKA\_CERT\_MD5\_HASH MULTILINE\_OCTAL

```
\323\161\004\152\103\034\333\246\131\341\250\243\252\305\161\355
```

END

CKA\_ISSUER MULTILINE\_OCTAL

```
\060\116\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\027\060\025\006\003\125\004\012\023\016\104\151\147\151\103\145
\162\164\054\040\111\156\143\056\061\046\060\044\006\003\125\004
\003\023\035\104\151\147\151\103\145\162\164\040\124\114\123\040
\105\103\103\040\120\063\070\064\040\122\157\157\164\040\107\065
```

END

CKA\_SERIAL\_NUMBER MULTILINE\_OCTAL

```
\002\020\011\340\223\145\254\367\331\310\271\076\034\013\004\052
\056\363
```

END

CKA\_TRUST\_SERVER\_AUTH CK\_TRUST CKT\_NSS\_TRUSTED\_DELEGATOR

CKA\_TRUST\_EMAIL\_PROTECTION CK\_TRUST CKT\_NSS\_MUST\_VERIFY\_TRUST

CKA\_TRUST\_CODE\_SIGNING CK\_TRUST CKT\_NSS\_MUST\_VERIFY\_TRUST

CKA\_TRUST\_STEP\_UP\_APPROVED CK\_BBOOL CK\_FALSE



```

#
# Certificate "DigiCert TLS RSA4096 Root G5"
#
# Issuer:
  CN=DigiCert TLS RSA4096 Root G5,O="DigiCert, Inc.",C=US
# Serial Number:08:f9:b4:78:a8:fa:7e:da:6a:33:37:89:de:7c:cf:8a
# Subject: CN=DigiCert TLS RSA4096 Root G5,O="DigiCert, Inc.",C=US
# Not Valid Before: Fri Jan 15 00:00:00 2021
# Not Valid After : Sun Jan 14 23:59:59 2046
# Fingerprint (SHA-256):
37:1A:00:DC:05:33:B3:72:1A:7E:EB:40:E8:41:9E:70:79:9D:2B:0A:0F:2C:1D:80:69:31:65:F7:CE:C4:AD:75
# Fingerprint (SHA1): A7:88:49:DC:5D:7C:75:8C:8C:DE:39:98:56:B3:AA:D0:B2:A5:71:35
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "DigiCert TLS RSA4096 Root G5"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\115\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\027\060\025\006\003\125\004\012\023\016\104\151\147\151\103\145
\162\164\054\040\111\156\143\056\061\045\060\043\006\003\125\004
\003\023\034\104\151\147\151\103\145\162\164\040\124\114\123\040
\122\123\101\064\060\071\066\040\122\157\157\164\040\107\065
END
CKA_ID
  UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\115\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\027\060\025\006\003\125\004\012\023\016\104\151\147\151\103\145
\162\164\054\040\111\156\143\056\061\045\060\043\006\003\125\004
\003\023\034\104\151\147\151\103\145\162\164\040\124\114\123\040
\122\123\101\064\060\071\066\040\122\157\157\164\040\107\065
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\020\010\371\264\170\250\372\176\332\152\063\067\211\336\174
\317\212
END
CKA_VALUE MULTILINE_OCTAL
\060\202\005\146\060\202\003\116\240\003\002\001\002\002\020\010
\371\264\170\250\372\176\332\152\063\067\211\336\174\317\212\060
\015\006\011\052\206\110\206\367\015\001\001\014\005\000\060\115
\061\013\060\011\006\003\125\004\006\023\002\125\123\061\027\060
\025\006\003\125\004\012\023\016\104\151\147\151\103\145\162\164
\054\040\111\156\143\056\061\045\060\043\006\003\125\004\003\023
\034\104\151\147\151\103\145\162\164\040\124\114\123\040\122\123
\101\064\060\071\066\040\122\157\157\164\040\107\065\060\036\027
\015\062\061\060\061\061\065\060\060\060\060\060\060\132\027\015

```

\064\066\060\061\061\064\062\063\065\071\065\071\132\060\115\061  
\013\060\011\006\003\125\004\006\023\002\125\123\061\027\060\025  
\006\003\125\004\012\023\016\104\151\147\151\103\145\162\164\054  
\040\111\156\143\056\061\045\060\043\006\003\125\004\003\023\034  
\104\151\147\151\103\145\162\164\040\124\114\123\040\122\123\101  
\064\060\071\066\040\122\157\157\164\040\107\065\060\202\002\042  
\060\015\006\011\052\206\110\206\367\015\001\001\001\005\000\003  
\202\002\017\000\060\202\002\012\002\202\002\001\000\263\320\364  
\311\171\021\235\375\374\146\201\347\314\325\344\274\354\201\076  
\152\065\216\056\267\347\336\257\371\007\115\317\060\235\352\011  
\013\231\275\154\127\332\030\112\270\170\254\072\071\250\246\110  
\254\056\162\345\275\353\361\032\315\347\244\003\251\077\021\264  
\330\057\211\026\373\224\001\075\273\057\370\023\005\241\170\034  
\216\050\340\105\340\203\364\131\033\225\263\256\176\003\105\345  
\276\302\102\376\356\362\074\266\205\023\230\062\235\026\250\051  
\302\013\034\070\334\237\061\167\134\277\047\243\374\047\254\267  
\053\275\164\233\027\055\362\201\332\135\260\341\043\027\076\210  
\112\022\043\320\352\317\235\336\003\027\261\102\112\240\026\114  
\244\155\223\351\077\072\356\072\174\235\130\235\364\116\217\374  
\073\043\310\155\270\342\005\332\314\353\354\303\061\364\327\247  
\051\124\200\317\104\133\114\157\060\236\363\314\335\037\224\103  
\235\115\177\160\160\015\324\072\321\067\360\154\235\233\300\024  
\223\130\357\315\101\070\165\274\023\003\225\174\177\343\134\351  
\325\015\325\342\174\020\142\252\153\360\075\166\363\077\243\350  
\260\301\375\357\252\127\115\254\206\247\030\264\051\301\054\016  
\277\144\276\051\214\330\002\055\315\134\057\362\177\357\025\364  
\014\025\254\012\260\361\323\015\117\152\115\167\227\001\240\361  
\146\267\267\316\357\316\354\354\245\165\312\254\343\341\143\367  
\270\241\004\310\274\173\077\135\055\026\042\126\355\110\111\376  
\247\057\171\060\045\233\272\153\055\077\235\073\304\027\347\035  
\056\373\362\317\246\374\343\024\054\226\230\041\214\264\221\351  
\031\140\203\362\060\053\006\163\120\325\230\073\006\351\307\212  
\014\140\214\050\370\122\233\156\341\366\115\273\006\044\233\327  
\053\046\077\375\052\057\161\365\326\044\276\177\061\236\017\155  
\350\217\117\115\243\077\377\065\352\337\111\136\101\217\206\371  
\361\167\171\113\033\264\243\136\057\373\106\002\320\146\023\136  
\136\205\117\316\330\160\210\173\316\001\265\226\227\327\315\175  
\375\202\370\302\044\301\312\001\071\117\215\242\301\024\100\037  
\234\146\325\014\011\106\326\362\320\321\110\166\126\072\103\313  
\266\012\021\071\272\214\023\154\006\265\236\317\353\002\003\001  
\000\001\243\102\060\100\060\035\006\003\125\035\016\004\026\004  
\024\121\063\034\355\066\100\257\027\323\045\315\151\150\362\257  
\116\043\076\263\101\060\016\006\003\125\035\017\001\001\377\004  
\004\003\002\001\206\060\017\006\003\125\035\023\001\001\377\004  
\005\060\003\001\001\377\060\015\006\011\052\206\110\206\367\015  
\001\001\014\005\000\003\202\002\001\000\140\246\257\133\137\127  
\332\211\333\113\120\251\304\043\065\041\377\320\141\060\204\221  
\267\077\020\317\045\216\311\277\106\064\331\301\041\046\034\160

\031\162\036\243\311\207\376\251\103\144\226\072\310\123\004\012  
\266\101\273\304\107\000\331\237\030\030\073\262\016\363\064\352  
\044\367\335\257\040\140\256\222\050\137\066\347\135\344\336\307  
\074\333\120\071\255\273\075\050\115\226\174\166\306\133\364\301  
\333\024\245\253\031\142\007\030\100\137\227\221\334\234\307\253  
\265\121\015\346\151\123\125\314\071\175\332\305\021\125\162\305  
\073\213\211\370\064\055\244\027\345\027\346\231\175\060\210\041  
\067\315\060\027\075\270\362\274\250\165\240\103\334\076\211\113  
\220\256\155\003\340\034\243\240\226\011\273\175\243\267\052\020  
\104\113\106\007\064\143\355\061\271\004\356\243\233\232\256\346  
\061\170\364\352\044\141\073\253\130\144\377\273\207\047\142\045  
\201\337\334\241\057\366\355\247\377\172\217\121\056\060\370\244  
\001\322\205\071\137\001\231\226\157\132\133\160\031\106\376\206  
\140\076\255\200\020\011\335\071\045\057\130\177\273\322\164\360  
\367\106\037\106\071\112\330\123\320\363\056\073\161\245\324\157  
\374\363\147\344\007\217\335\046\031\341\215\133\372\243\223\021  
\233\351\310\072\303\125\150\232\222\341\122\166\070\350\341\272  
\275\373\117\325\357\263\347\110\203\061\360\202\041\343\266\276  
\247\253\157\357\237\337\114\317\001\270\142\152\043\075\347\011  
\115\200\033\173\060\244\303\335\007\177\064\276\244\046\262\366  
\101\350\011\035\343\040\230\252\067\117\377\367\361\342\051\160  
\061\107\077\164\320\024\026\372\041\212\002\325\212\011\224\167  
\056\362\131\050\213\174\120\222\012\146\170\070\203\165\304\265  
\132\250\021\306\345\301\235\146\125\317\123\304\257\327\165\205  
\251\102\023\126\354\041\167\201\223\132\014\352\226\331\111\312  
\241\010\362\227\073\155\233\004\030\044\104\216\174\001\362\334  
\045\330\136\206\232\261\071\333\365\221\062\152\321\246\160\212  
\242\367\336\244\105\205\046\250\036\214\135\051\133\310\113\330  
\232\152\003\136\160\362\205\117\154\113\150\057\312\124\366\214  
\332\062\376\303\153\203\077\070\306\176

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "DigiCert TLS RSA4096 Root G5"

# Issuer: CN=DigiCert TLS RSA4096 Root G5,O="DigiCert, Inc.",C=US

# Serial Number:08:f9:b4:78:a8:fa:7e:da:6a:33:37:89:de:7c:cf:8a

# Subject: CN=DigiCert TLS RSA4096 Root G5,O="DigiCert, Inc.",C=US

# Not Valid Before: Fri Jan 15 00:00:00 2021

# Not Valid After : Sun Jan 14 23:59:59 2046

# Fingerprint (SHA-256):

37:1A:00:DC:05:33:B3:72:1A:7E:EB:40:E8:41:9E:70:79:9D:2B:0A:0F:2C:1D:80:69:31:65:F7:CE:C4:AD:75

# Fingerprint (SHA1): A7:88:49:DC:5D:7C:75:8C:8C:DE:39:98:56:B3:AA:D0:B2:A5:71:35

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

```

CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL
  UTF8 "DigiCert TLS RSA4096 Root G5"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\247\210\111\334\135\174\165\214\214\336\071\230\126\263\252\320
\262\245\161\065
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\254\376\367\064\226\251\362\263\264\022\113\344\047\101\157\341
END
CKA_ISSUER MULTILINE_OCTAL
\060\115\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\027\060\025\006\003\125\004\012\023\016\104\151\147\151\103\145
\162\164\054\040\111\156\143\056\061\045\060\043\006\003\125\004
\003\023\034\104\151\147\151\103\145\162\164\040\124\114\123\040
\122\123\101\064\060\071\066\040\122\157\157\164\040\107\065
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\020\010\371\264\170\250\372\176\332\152\063\067\211\336\174
\317\212
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "DigiCert SMIME ECC
  P384 Root G5"
#
# Issuer: CN=DigiCert SMIME ECC P384 Root G5,O="DigiCert, Inc.",C=US
# Serial Number:05:3f:6e:a0:06:01:72:7d:ed:3f:c3:a3:b6:a3:d6:ef
# Subject: CN=DigiCert SMIME ECC P384 Root G5,O="DigiCert, Inc.",C=US
# Not Valid Before: Fri Jan 15 00:00:00 2021
# Not Valid After : Sun Jan 14 23:59:59 2046
# Fingerprint (SHA-256):
E8:E8:17:65:36:A6:0C:C2:C4:E1:01:87:C3:BE:FC:A2:0E:F2:63:49:70:18:F5:66:D5:BE:A0:F9:4D:0C:11:1B
# Fingerprint (SHA1): 1C:B8:A7:08:C9:0D:20:79:01:A0:B2:36:7F:F0:95:65:E4:53:24:FE
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "DigiCert SMIME ECC P384 Root G5"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\120\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\027\060\025\006\003\125\004\012\023\016\104\151\147\151\103\145
\162\164\054\040\111\156\143\056\061\050\060\046\006\003\125\004

```

```
\003\023\037\104\151\147\151\103\145\162\164\040\123\115\111\115
\105\040\105\103\103\040\120\063\070\064\040\122\157\157\164\040
\107\065
END
CKA_ID
UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\120\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\027\060\025\006\003\125\004\012\023\016\104\151\147\151\103\145
\162\164\054\040\111\156\143\056\061\050\060\046\006\003\125\004
\003\023\037\104\151\147\151\103\145\162\164\040\123\115\111\115
\105\040\105\103\103\040\120\063\070\064\040\122\157\157\164\040
\107\065
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\020\005\077\156\240\006\001\162\175\355\077\303\243\266\243
\326\357
END
CKA_VALUE MULTILINE_OCTAL
\060\202\002\034\060\202\001\243\240\003\002\001\002\002\020\005
\077\156\240\006\001\162\175\355\077\303\243\266\243\326\357\060
\012\006\010\052\206\110\316\075\004\003\003\060\120\061\013\060
\011\006\003\125\004\006\023\002\125\123\061\027\060\025\006\003
\125\004\012\023\016\104\151\147\151\103\145\162\164\054\040\111
\156\143\056\061\050\060\046\006\003\125\004\003\023\037\104\151
\147\151\103\145\162\164\040\123\115\111\115\105\040\105\103\103
\040\120\063\070\064\040\122\157\157\164\040\107\065\060\036\027
\015\062\061\060\061\061\065\060\060\060\060\060\060\132\027\015
\064\066\060\061\061\064\062\063\065\071\065\071\132\060\120\061
\013\060\011\006\003\125\004\006\023\002\125\123\061\027\060\025
\006\003\125\004\012\023\016\104\151\147\151\103\145\162\164\054
\040\111\156\143\056\061\050\060\046\006\003\125\004\003\023\037
\104\151\147\151\103\145\162\164\040\123\115\111\115\105\040\105
\103\103\040\120\063\070\064\040\122\157\157\164\040\107\065\060
\166\060\020\006\007\052\206\110\316\075\002\001\006\005\053\201
\004\000\042\003\142\000\004\026\235\125\345\266\324\373\373\147
\153\032\324\241\252\322\167\225\076\210\345\007\237\266\160\146
\040\050\244\210\354\160\065\257\263\062\377\067\023\112\236\274
\001\003\336\204\301\270\306\346\145\107\211\362\023\125\277\315
\245\036\010\140\177\255\177\350\141\222\051\317\011\107\136\013
\034\300\037\244\277\362\133\274\230\357\231\114\314\160\153\266
\272\320\050\035\277\276\004\243\102\060\100\060\035\006\003\125
\035\016\004\026\004\024\163\172\153\226\333\102\007\213\122\146
\302\144\062\027\376\340\147\220\056\255\060\016\006\003\125\035
\017\001\001\377\004\004\003\002\001\206\060\017\006\003\125\035
\023\001\001\377\004\005\060\003\001\001\377\060\012\006\010\052
\206\110\316\075\004\003\003\003\147\000\060\144\002\060\067\104
\365\062\200\343\161\353\364\155\317\174\314\221\232\303\156\161
```

```
\330\322\043\135\222\115\202\102\155\134\141\225\366\221\365\247
\010\366\152\227\351\234\224\055\230\160\375\063\266\011\002\060
\007\074\057\271\130\202\136\017\243\142\250\223\147\360\040\303
\151\277\003\054\073\120\247\073\257\101\070\311\122\110\221\326
\016\373\274\140\060\174\144\077\022\036\105\177\121\076\364\246
END
```

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRUST\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRUST\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "DigiCert

SMIME ECC P384 Root G5"

# Issuer: CN=DigiCert SMIME ECC P384 Root G5,O="DigiCert, Inc.",C=US

# Serial Number:05:3f:6e:a0:06:01:72:7d:ed:3f:c3:a3:b6:a3:d6:ef

# Subject: CN=DigiCert SMIME ECC P384 Root G5,O="DigiCert, Inc.",C=US

# Not Valid Before: Fri Jan 15 00:00:00 2021

# Not Valid After : Sun Jan 14 23:59:59 2046

# Fingerprint (SHA-256):

E8:E8:17:65:36:A6:0C:C2:C4:E1:01:87:C3:BE:FC:A2:0E:F2:63:49:70:18:F5:66:D5:BE:A0:F9:4D:0C:11:1B

# Fingerprint (SHA1): 1C:B8:A7:08:C9:0D:20:79:01:A0:B2:36:7F:F0:95:65:E4:53:24:FE

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "DigiCert SMIME ECC P384 Root G5"

CKA\_CERT\_SHA1\_HASH MULTILINE\_OCTAL

```
\034\270\247\010\311\015\040\171\001\240\262\066\177\360\225\145
\344\123\044\376
```

END

CKA\_CERT\_MD5\_HASH MULTILINE\_OCTAL

```
\246\376\364\122\066\104\330\356\015\267\003\013\357\164\263\003
```

END

CKA\_ISSUER MULTILINE\_OCTAL

```
\060\120\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\027\060\025\006\003\125\004\012\023\016\104\151\147\151\103\145
\162\164\054\040\111\156\143\056\061\050\060\046\006\003\125\004
\003\023\037\104\151\147\151\103\145\162\164\040\123\115\111\115
\105\040\105\103\103\040\120\063\070\064\040\122\157\157\164\040
\107\065
```

END

CKA\_SERIAL\_NUMBER

MULTILINE\_OCTAL

```
\002\020\005\077\156\240\006\001\162\175\355\077\303\243\266\243
\326\357
```

END

CKA\_TRUST\_SERVER\_AUTH CK\_TRUST CKT\_NSS\_MUST\_VERIFY\_TRUST

CKA\_TRUST\_EMAIL\_PROTECTION CK\_TRUST CKT\_NSS\_TRUSTED\_DELEGATOR

CKA\_TRUST\_CODE\_SIGNING CK\_TRUST CKT\_NSS\_MUST\_VERIFY\_TRUST  
CKA\_TRUST\_STEP\_UP\_APPROVED CK\_BBOOL CK\_FALSE

#

# Certificate "DigiCert SMIME RSA4096 Root G5"

#

# Issuer: CN=DigiCert SMIME RSA4096 Root G5,O="DigiCert, Inc.",C=US

# Serial Number:05:f6:ba:04:23:83:46:cb:7d:5c:e6:b9:5b:ba:1c:55

# Subject: CN=DigiCert SMIME RSA4096 Root G5,O="DigiCert, Inc.",C=US

# Not Valid Before: Fri Jan 15 00:00:00 2021

# Not Valid After : Sun Jan 14 23:59:59 2046

# Fingerprint (SHA-256):

90:37:0D:3E:FA:88:BF:58:C3:01:05:BA:25:10:4A:35:84:60:A7:FA:52:DF:C2:01:1D:F2:33:A0:F4:17:91:2A

#

Fingerprint (SHA1): 5B:C5:AD:E2:9A:A7:54:DA:84:89:53:A5:FE:D7:5B:46:86:D0:57:08

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_CERTIFICATE

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "DigiCert SMIME RSA4096 Root G5"

CKA\_CERTIFICATE\_TYPE CK\_CERTIFICATE\_TYPE CKC\_X\_509

CKA\_SUBJECT MULTILINE\_OCTAL

\060\117\061\013\060\011\006\003\125\004\006\023\002\125\123\061  
\027\060\025\006\003\125\004\012\023\016\104\151\147\151\103\145  
\162\164\054\040\111\156\143\056\061\047\060\045\006\003\125\004  
\003\023\036\104\151\147\151\103\145\162\164\040\123\115\111\115  
\105\040\122\123\101\064\060\071\066\040\122\157\157\164\040\107  
\065

END

CKA\_ID UTF8 "0"

CKA\_ISSUER MULTILINE\_OCTAL

\060\117\061\013\060\011\006\003\125\004\006\023\002\125\123\061  
\027\060\025\006\003\125\004\012\023\016\104\151\147\151\103\145  
\162\164\054\040\111\156\143\056\061\047\060\045\006\003\125\004  
\003\023\036\104\151\147\151\103\145\162\164\040\123\115\111\115  
\105\040\122\123\101\064\060\071\066\040\122\157\157\164\040\107  
\065

END

CKA\_SERIAL\_NUMBER

MULTILINE\_OCTAL

\002\020\005\366\272\004\043\203\106\313\175\134\346\271\133\272  
\034\125

END

CKA\_VALUE MULTILINE\_OCTAL

\060\202\005\152\060\202\003\122\240\003\002\001\002\002\020\005  
\366\272\004\043\203\106\313\175\134\346\271\133\272\034\125\060  
\015\006\011\052\206\110\206\367\015\001\001\014\005\000\060\117  
\061\013\060\011\006\003\125\004\006\023\002\125\123\061\027\060

\025\006\003\125\004\012\023\016\104\151\147\151\103\145\162\164  
\054\040\111\156\143\056\061\047\060\045\006\003\125\004\003\023  
\036\104\151\147\151\103\145\162\164\040\123\115\111\115\105\040  
\122\123\101\064\060\071\066\040\122\157\157\164\040\107\065\060  
\036\027\015\062\061\060\061\061\065\060\060\060\060\060\060\132  
\027\015\064\066\060\061\061\064\062\063\065\071\065\071\132\060  
\117\061\013\060\011\006\003\125\004\006\023\002\125\123\061\027  
\060\025\006\003\125\004\012\023\016\104\151\147\151\103\145\162  
\164\054\040\111\156\143\056\061\047\060\045\006\003\125\004\003  
\023\036\104\151\147\151\103\145\162\164\040\123\115\111\115\105  
\040\122\123\101\064\060\071\066\040\122\157\157\164\040\107\065  
\060\202\002\042\060\015\006\011\052\206\110\206\367\015\001\001  
\001\005\000\003\202\002\017\000\060\202\002\012\002\202\002\001  
\000\340\152\133\331\370\371\175\354\265\173\357\137\335\134\064  
\330\332\135\321\313\145\165\253\041\174\133\000\324\202\157\105  
\205\101\212\251\022\002\162\062\360\024\365\003\165\273\143\227  
\111\017\100\231\013\032\036\126\247\322\320\341\253\335\345\004  
\033\343\037\024\022\002\210\365\240\200\011\366\047\232\120\360  
\272\343\242\340\254\152\024\221\265\153\070\020\172\242\061\341  
\221\033\267\271\360\053\133\310\167\011\166\267\121\304\066\012  
\231\123\124\104\045\267\011\065\206\027\005\126\223\075\101\267  
\002\327\142\037\212\222\021\207\352\021\155\352\010\021\334\261  
\170\110\111\222\366\264\121\200\170\043\330\376\341\126\032\072  
\220\023\126\064\211\325\342\225\213\137\336\262\314\373\077\070  
\267\205\367\352\236\277\056\241\056\057\115\175\152\021\056\066  
\240\377\021\010\004\225\125\340\033\073\147\223\251\224\125\352  
\062\355\006\072\177\302\177\343\255\023\047\321\064\101\263\060  
\303\277\264\210\370\003\202\244\337\076\253\170\167\240\131\223  
\161\347\335\353\000\004\173\314\110\071\050\340\036\243\025\151  
\310\066\262\241\013\227\337\125\326\357\221\234\244\366\026\367  
\121\012\356\003\043\221\334\004\377\340\335\070\366\042\003\000  
\302\007\161\032\022\311\327\106\052\224\033\315\326\273\033\356  
\277\276\115\120\130\260\013\315\060\166\051\365\317\345\266\152  
\057\166\260\260\151\152\320\155\145\030\065\176\223\274\162\027  
\301\125\102\315\057\302\045\273\364\375\035\241\144\042\124\135  
\342\236\162\101\204\156\161\226\352\105\007\266\136\172\112\206  
\235\163\144\167\070\003\322\017\123\245\125\040\304\115\377\150  
\157\125\251\352\335\161\344\117\331\205\243\174\116\051\002\236  
\013\011\362\032\123\314\000\246\335\321\064\366\015\301\060\261  
\234\002\144\254\065\355\245\260\051\261\322\225\063\017\322\040  
\063\275\354\043\113\362\031\371\332\230\144\344\054\061\037\056  
\341\215\034\004\225\050\115\214\130\315\113\345\163\202\206\214  
\354\250\326\171\134\373\144\273\334\014\114\050\366\027\257\342  
\150\326\026\206\230\333\374\001\334\061\272\370\234\016\371\050  
\106\112\341\375\226\006\105\171\021\150\027\145\134\213\046\207  
\133\002\003\001\000\001\243\102\060\100\060\035\006\003\125\035  
\016\004\026\004\024\321\243\324\127\035\117\125\333\165\114\134  
\102\236\143\026\316\264\306\073\037\060\016\006\003\125\035\017



\001\001\377\004\004\003\002\001\206\060\017\006\003\125\035\023  
\001\001\377\004\005\060\003\001\001\377\060\015\006\011\052\206  
\110\206\367\015\001\001\014\005\000\003\202\002\001\000\007\247  
\012\336\123\273\232\353\160\277\262\066\220\315\344\247\270\361  
\014\344\135\132\035\170\145\374\311\270\036\043\021\127\174\151  
\065\155\001\377\123\120\277\007\016\272\307\001\077\130\052\224  
\165\003\253\034\013\043\334\033\212\036\067\075\035\130\217\163  
\331\263\052\157\337\020\240\133\014\247\312\260\177\271\044\242  
\001\065\062\345\136\106\101\353\330\177\163\347\102\351\244\121  
\046\167\201\012\250\353\017\012\120\235\176\212\040\147\374\013  
\216\072\021\323\305\214\140\030\331\113\261\374\324\361\264\111  
\116\256\207\341\321\373\166\241\137\363\006\317\227\226\014\351  
\236\165\201\134\123\015\042\374\066\346\111\156\164\333\000\205  
\215\174\042\240\216\373\020\114\324\142\023\133\357\113\162\046  
\213\374\116\212\217\376\227\020\123\305\170\213\102\144\033\137  
\340\211\375\273\011\177\120\340\124\205\046\021\152\035\145\371  
\111\051\334\174\066\337\373\075\367\322\254\356\062\215\156\246  
\175\071\234\105\304\312\015\365\073\264\171\123\245\057\126\307  
\121\305\212\114\144\135\220\103\043\216\153\114\027\170\314\350  
\277\365\073\344\250\110\317\255\233\014\337\062\112\323\331\022  
\216\043\170\015\055\257\237\257\236\074\011\302\227\000\355\072  
\151\034\161\077\071\337\323\217\304\146\365\357\066\224\017\363  
\335\222\266\226\137\220\246\335\163\252\246\040\224\224\045\152  
\011\014\162\344\023\043\140\114\243\312\027\056\173\147\000\333  
\320\315\352\172\037\071\046\127\211\060\167\313\116\345\225\105  
\117\137\373\066\134\075\371\040\265\072\020\045\117\223\062\132  
\356\301\226\350\351\126\004\260\111\141\115\354\170\250\235\030  
\301\377\330\352\057\126\357\225\053\173\004\136\147\343\125\100  
\355\071\004\371\013\171\365\152\214\134\017\211\232\220\307\315  
\213\336\333\046\065\241\156\315\263\102\362\242\017\073\014\216  
\223\377\024\317\374\367\223\367\344\101\010\156\031\122\021\017  
\123\031\163\170\014\317\330\205\201\370\255\125\310\260\236\106  
\143\257\234\122\356\134\277\360\300\133\067\036\011\040\322\076  
\043\306\241\025\112\016\066\176\060\305\171\152\274\042\210\331  
\014\122\100\037\335\116\017\147\046\026\322\255\027\034

END

CKA\_NSS\_Mozilla\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER

CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "DigiCert SMIME RSA4096 Root G5"

# Issuer: CN=DigiCert SMIME RSA4096 Root G5,O="DigiCert, Inc.",C=US

# Serial Number:05:f6:ba:04:23:83:46:cb:7d:5c:e6:b9:5b:ba:1c:55

# Subject: CN=DigiCert SMIME RSA4096 Root G5,O="DigiCert, Inc.",C=US

# Not Valid Before: Fri Jan 15 00:00:00 2021

# Not Valid After : Sun Jan 14 23:59:59 2046

```

# Fingerprint (SHA-256):
90:37:0D:3E:FA:88:BF:58:C3:01:05:BA:25:10:4A:35:84:60:A7:FA:52:DF:C2:01:1D:F2:33:A0:F4:17:91:2A
# Fingerprint (SHA1): 5B:C5:AD:E2:9A:A7:54:DA:84:89:53:A5:FE:D7:5B:46:86:D0:57:08
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "DigiCert SMIME RSA4096 Root G5"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\133\305\255\342\232\247\124\332\204\211\123\245\376\327\133\106
\206\320\127\010
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\321\173\340\265\077\065\162\237\175\276\013\245\244\035\251\156
END
CKA_ISSUER
MULTILINE_OCTAL
\060\117\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\027\060\025\006\003\125\004\012\023\016\104\151\147\151\103\145
\162\164\054\040\111\156\143\056\061\047\060\045\006\003\125\004
\003\023\036\104\151\147\151\103\145\162\164\040\123\115\111\115
\105\040\122\123\101\064\060\071\066\040\122\157\157\164\040\107
\065
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\020\005\366\272\004\043\203\106\313\175\134\346\271\133\272
\034\125
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "Certainly Root R1"
#
# Issuer: CN=Certainly Root R1,O=Certainly,C=US
# Serial Number:00:8e:0f:f9:4b:90:71:68:65:33:54:f4:d4:44:39:b7:e0
# Subject: CN=Certainly Root R1,O=Certainly,C=US
# Not Valid Before: Thu Apr 01 00:00:00 2021
# Not Valid After : Sun Apr 01 00:00:00 2046
#
Fingerprint (SHA-256):
77:B8:2C:D8:64:4C:43:05:F7:AC:C5:CB:15:6B:45:67:50:04:03:3D:51:C6:0C:62:02:A8:E0:C3:34:67:D3:A0
# Fingerprint (SHA1): A0:50:EE:0F:28:71:F4:27:B2:12:6D:6F:50:96:25:BA:CC:86:42:AF
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE

```

```
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Certainly Root R1"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\075\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\022\060\020\006\003\125\004\012\023\011\103\145\162\164\141\151
\156\154\171\061\032\060\030\006\003\125\004\003\023\021\103\145
\162\164\141\151\156\154\171\040\122\157\157\164\040\122\061
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\075\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\022\060\020\006\003\125\004\012\023\011\103\145\162\164\141\151
\156\154\171\061\032\060\030\006\003\125\004\003\023\021\103\145
\162\164\141\151\156\154\171\040\122\157\157\164\040\122\061
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\021\000\216\017\371\113\220\161\150\145\063\124\364\324\104
\071\267\340
END
CKA_VALUE MULTILINE_OCTAL
\060\202\005\107\060\202\003\057\240\003\002\001\002\002\021\000
\216\017\371\113\220\161\150\145\063\124\364\324\104\071\267\340
\060\015\006\011\052\206\110\206\367\015\001\001\013\005\000\060
\075\061\013\060\011\006\003\125\004\006\023\002\125\123\061\022
\060\020\006\003\125\004\012\023\011\103\145\162\164\141\151\156
\154\171\061\032\060\030\006\003\125\004\003\023\021\103\145\162
\164\141\151\156\154\171\040\122\157\157\164\040\122\061\060\036
\027\015\062\061\060\064\060\061\060\060\060\060\060\132\027
\015\064\066\060\064\060\061\060\060\060\060\060\132\060\075
\061\013\060\011\006\003\125\004\006\023\002\125\123\061\022\060
\020\006\003\125\004\012\023\011\103\145\162\164\141\151\156\154
\171\061\032\060\030\006\003\125\004\003\023\021\103\145\162\164
\141\151\156\154\171\040\122\157\157\164\040\122\061\060\202\002
\042\060\015\006\011\052\206\110\206\367\015\001\001\001\005\000
\003\202\002\017\000\060\202\002\012\002\202\002\001\000\320\066
\324\037\352\335\253\344\321\266\346\373\042\300\335\023\015\152
\173\042\023\034\227\074\150\143\146\062\234\003\265\215\244\201
\203\332\170\060\021\317\334\262\053\276\222\277\216\344\304\023
\276\244\150\114\332\002\150\026\164\276\262\335\004\344\153\052
\335\067\037\140\054\333\365\367\241\174\225\267\014\160\206\056
\361\072\357\122\367\314\323\233\371\213\276\016\337\061\267\235
\150\134\222\246\365\345\363\012\064\265\377\173\242\344\207\241
\306\257\027\000\357\003\221\355\251\034\116\161\075\322\213\154
\211\364\170\206\346\152\111\240\316\265\322\260\253\233\366\364
\324\056\343\162\371\066\306\353\025\267\045\214\072\374\045\015
\263\042\163\041\164\310\112\226\141\222\365\057\013\030\245\364
```

\255\342\356\101\275\001\171\372\226\214\215\027\002\060\264\371  
\257\170\032\214\264\066\020\020\007\005\160\320\364\061\220\212  
\121\305\206\046\171\262\021\210\136\305\360\012\124\315\111\246  
\277\002\234\322\104\247\355\343\170\357\106\136\155\161\321\171  
\160\034\106\137\121\351\311\067\334\137\176\151\173\101\337\064  
\105\340\073\204\364\241\212\012\066\236\067\314\142\122\341\211  
\015\050\371\172\043\261\015\075\075\232\375\235\201\357\054\220  
\300\173\104\116\273\111\340\016\112\126\222\274\313\265\335\171  
\027\211\221\336\141\211\164\222\250\343\062\205\276\116\205\244  
\113\131\313\053\305\170\216\161\124\320\002\067\231\214\345\111  
\352\340\124\162\244\021\006\057\013\214\301\133\276\265\241\260  
\123\156\234\270\140\221\037\131\153\371\055\364\224\012\227\265  
\354\305\166\003\124\033\145\122\272\114\222\126\121\065\240\100  
\330\051\333\256\122\166\073\055\060\100\233\212\320\102\126\264  
\267\210\001\244\207\073\123\226\315\243\026\217\363\146\252\027  
\261\307\140\340\301\103\005\014\356\233\133\140\157\006\134\207  
\133\047\371\100\021\236\234\063\301\267\345\065\127\005\177\047  
\316\027\040\214\034\374\361\373\332\061\051\111\355\365\013\204  
\247\117\301\366\116\302\050\234\372\356\340\257\007\373\063\021  
\172\041\117\013\041\020\266\100\072\253\042\072\004\234\213\233  
\204\206\162\232\322\247\245\304\264\165\221\251\053\043\002\003  
\001\000\001\243\102\060\100\060\016\006\003\125\035\017\001\001  
\377\004\004\003\002\001\006\060\017\006\003\125\035\023\001\001  
\377\004\005\060\003\001\001\377\060\035\006\003\125\035\016\004  
\026\004\024\340\252\077\045\215\237\104\134\301\072\350\056\256  
\167\114\204\076\147\014\364\060\015\006\011\052\206\110\206\367  
\015\001\001\013\005\000\003\202\002\001\000\271\127\257\270\022  
\332\127\203\217\150\013\063\035\003\123\125\364\225\160\344\053  
\075\260\071\353\372\211\142\375\367\326\030\004\057\041\064\335  
\361\150\360\325\226\132\336\302\200\243\301\215\306\152\367\131  
\167\256\025\144\317\133\171\005\167\146\352\214\323\153\015\335  
\361\131\054\301\063\245\060\200\025\105\007\105\032\061\042\266  
\222\000\253\231\115\072\217\167\257\251\042\312\057\143\312\025  
\326\307\306\360\075\154\374\034\015\230\020\141\236\021\242\042  
\327\012\362\221\172\153\071\016\057\060\303\066\111\237\340\351  
\017\002\104\120\067\224\125\175\352\237\366\073\272\224\245\114  
\351\274\076\121\264\350\312\222\066\124\155\134\045\050\332\335  
\255\024\375\323\356\342\042\005\353\320\362\267\150\022\327\132  
\212\101\032\306\222\245\132\073\143\105\117\277\341\072\167\042  
\057\134\277\106\371\132\003\205\023\102\137\312\336\123\327\142  
\265\246\065\004\302\107\377\231\375\204\337\134\316\351\136\200  
\050\101\362\175\347\036\220\330\117\166\076\202\074\015\374\245  
\003\372\173\032\331\105\036\140\332\304\216\371\374\053\311\173  
\225\305\052\377\252\211\337\202\061\017\162\377\014\047\327\012  
\036\126\000\120\036\014\220\301\226\265\330\024\205\273\247\015  
\026\301\370\007\044\033\272\205\241\032\005\011\200\272\225\143  
\311\072\354\045\237\177\235\272\244\107\025\233\104\160\361\152  
\113\326\070\136\103\363\030\176\120\156\351\132\050\346\145\346

```
\167\033\072\375\035\276\003\046\243\333\324\341\273\176\226\047
\053\035\356\244\373\332\045\124\023\003\336\071\306\303\037\115
\220\354\217\033\112\322\034\355\205\225\070\120\171\106\326\301
\220\120\061\251\134\232\156\035\365\063\126\213\247\231\322\362
\310\054\063\223\222\060\307\116\214\145\063\020\144\027\375\044
\027\226\321\215\302\072\152\053\353\023\213\104\362\041\363\112
\032\267\167\137\327\355\210\244\162\345\071\037\225\235\276\147
\301\160\021\075\273\364\370\111\267\343\046\227\072\237\322\137
\174\373\300\231\174\071\051\340\173\035\277\015\247\217\322\051
\064\156\044\025\313\336\220\136\277\032\304\146\352\302\346\272
\071\137\212\231\251\101\131\007\260\054\257
```

END

CKA\_NSS\_Mozilla\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "Certainly Root R1"

# Issuer: CN=Certainly Root R1,O=Certainly,C=US

# Serial Number:00:8e:0f:f9:4b:90:71:68:65:33:54:f4:d4:44:39:b7:e0

# Subject: CN=Certainly Root R1,O=Certainly,C=US

# Not

Valid Before: Thu Apr 01 00:00:00 2021

# Not Valid After : Sun Apr 01 00:00:00 2046

# Fingerprint (SHA-256):

77:B8:2C:D8:64:4C:43:05:F7:AC:C5:CB:15:6B:45:67:50:04:03:3D:51:C6:0C:62:02:A8:E0:C3:34:67:D3:A0

# Fingerprint (SHA1): A0:50:EE:0F:28:71:F4:27:B2:12:6D:6F:50:96:25:BA:CC:86:42:AF

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "Certainly Root R1"

CKA\_CERT\_SHA1\_HASH MULTILINE\_OCTAL

```
\240\120\356\017\050\161\364\047\262\022\155\157\120\226\045\272
\314\206\102\257
```

END

CKA\_CERT\_MD5\_HASH MULTILINE\_OCTAL

```
\007\160\324\076\202\207\240\372\063\066\023\364\372\063\347\022
```

END

CKA\_ISSUER MULTILINE\_OCTAL

```
\060\075\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\022\060\020\006\003\125\004\012\023\011\103\145\162\164\141\151
\156\154\171\061\032\060\030\006\003\125\004\003\023\021\103\145
\162\164\141\151\156\154\171\040\122\157\157\164\040\122\061
```

END

CKA\_SERIAL\_NUMBER MULTILINE\_OCTAL

```
\002\021\000\216\017\371\113\220\161\150\145\063\124\364\324\104
\071\267\340
```

```

END
CKA_TRUST_SERVER_AUTH
CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "Certainly Root E1"
#
# Issuer: CN=Certainly Root E1,O=Certainly,C=US
# Serial Number:06:25:33:b1:47:03:33:27:5c:f9:8d:9a:b9:bf:cc:f8
# Subject: CN=Certainly Root E1,O=Certainly,C=US
# Not Valid Before: Thu Apr 01 00:00:00 2021
# Not Valid After : Sun Apr 01 00:00:00 2046
# Fingerprint (SHA-256):
B4:58:5F:22:E4:AC:75:6A:4E:86:12:A1:36:1C:5D:9D:03:1A:93:FD:84:FE:BB:77:8F:A3:06:8B:0F:C4:2D:C2
# Fingerprint (SHA1): F9:E1:6D:DC:01:89:CF:D5:82:45:63:3E:C5:37:7D:C2:EB:93:6F:2B
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Certainly Root E1"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE
CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\075\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\022\060\020\006\003\125\004\012\023\011\103\145\162\164\141\151
\156\154\171\061\032\060\030\006\003\125\004\003\023\021\103\145
\162\164\141\151\156\154\171\040\122\157\157\164\040\105\061
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\075\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\022\060\020\006\003\125\004\012\023\011\103\145\162\164\141\151
\156\154\171\061\032\060\030\006\003\125\004\003\023\021\103\145
\162\164\141\151\156\154\171\040\122\157\157\164\040\105\061
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\020\006\045\063\261\107\003\063\047\134\371\215\232\271\277
\314\370
END
CKA_VALUE MULTILINE_OCTAL
\060\202\001\367\060\202\001\175\240\003\002\001\002\002\020\006
\045\063\261\107\003\063\047\134\371\215\232\271\277\314\370\060
\012\006\010\052\206\110\316\075\004\003\003\060\075\061\013\060
\011\006\003\125\004\006\023\002\125\123\061\022\060\020\006\003
\125\004\012\023\011\103\145\162\164\141\151\156\154\171\061\032

```

\060\030\006\003\125\004\003\023\021\103\145\162\164\141\151\156  
\154\171\040\122\157\157\164\040\105\061\060\036\027\015\062\061  
\060\064\060\061\060\060\060\060\060\060\132\027\015\064\066\060  
\064\060\061\060\060\060\060\060\060\132\060\075\061\013\060\011  
\006\003\125\004\006\023\002\125\123\061\022\060\020\006\003\125  
\004\012\023\011\103\145\162\164\141\151\156\154\171\061\032\060  
\030\006\003\125\004\003\023\021\103\145\162\164\141\151\156\154  
\171\040\122\157\157\164\040\105\061\060\166\060\020\006\007\052  
\206\110\316\075\002\001\006\005\053\201\004\000\042\003\142\000  
\004\336\157\370\177\034\337\355\371\107\207\206\261\244\300\212  
\370\202\227\200\352\217\310\112\136\052\175\210\150\247\001\142  
\024\221\044\172\134\236\243\027\175\212\206\041\064\030\120\033  
\020\336\320\067\113\046\307\031\140\200\351\064\275\140\031\066  
\100\326\051\207\011\074\221\172\366\274\023\043\335\131\116\004  
\136\317\310\002\034\030\123\301\061\330\332\040\351\104\215\344  
\166\243\102\060\100\060\016\006\003\125\035\017\001\001\377\004  
\004\003\002\001\006\060\017\006\003\125\035\023\001\001\377\004  
\005\060\003\001\001\377\060\035\006\003\125\035\016\004\026\004  
\024\363\050\030\313\144\165\356\051\052\353\355\256\043\130\070  
\205\353\310\042\007\060\012\006\010\052\206\110\316\075\004\003  
\003\003\150\000\060\145\002\061\000\261\216\132\040\303\262\031  
\142\115\336\260\117\337\156\322\160\212\361\237\176\152\214\346  
\272\336\203\151\312\151\263\251\005\265\226\222\027\207\302\322  
\352\320\173\316\330\101\133\174\256\002\060\106\336\352\313\135  
\232\354\062\302\145\026\260\114\060\134\060\363\332\116\163\206  
\006\330\316\211\004\110\067\067\370\335\063\121\235\160\257\173  
\125\330\001\056\175\005\144\016\206\270\221

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "Certainly Root E1"

# Issuer: CN=Certainly

Root E1,O=Certainly,C=US

# Serial Number:06:25:33:b1:47:03:33:27:5c:f9:8d:9a:b9:bf:cc:f8

# Subject: CN=Certainly Root E1,O=Certainly,C=US

# Not Valid Before: Thu Apr 01 00:00:00 2021

# Not Valid After : Sun Apr 01 00:00:00 2046

# Fingerprint (SHA-256):

B4:58:5F:22:E4:AC:75:6A:4E:86:12:A1:36:1C:5D:9D:03:1A:93:FD:84:FE:BB:77:8F:A3:06:8B:0F:C4:2D:C2

# Fingerprint (SHA1): F9:E1:6D:DC:01:89:CF:D5:82:45:63:3E:C5:37:7D:C2:EB:93:6F:2B

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "Certainly Root E1"

```

CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\371\341\155\334\001\211\317\325\202\105\143\076\305\067\175\302
\353\223\157\053
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\012\236\312\315\076\122\120\306\066\363\113\243\355\247\123\351
END
CKA_ISSUER MULTILINE_OCTAL
\060\075\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\022\060\020\006\003\125\004\012\023\011\103\145\162\164\141\151
\156\154\171\061\032\060\030\006\003\125\004\003\023\021\103\145
\162\164\141\151\156\154\171\040\122\157\157\164\040\105\061
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\020\006\045\063\261\107\003\063\047\134\371\215\232\271\277
\314\370
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "E-Tugra Global Root CA RSA v3"
#
# Issuer: CN=E-Tugra Global Root CA RSA v3,OU=E-Tugra Trust Center,O=E-Tugra EBG A.S.,L=Ankara,C=TR
# Serial Number:0d:4d:c5:cd:16:22:95:96:08:7e:b8:0b:7f:15:06:34:fb:79:10:34
# Subject: CN=E-Tugra Global Root CA RSA v3,OU=E-Tugra Trust Center,O=E-Tugra EBG
A.S.,L=Ankara,C=TR
# Not Valid Before: Wed Mar 18 09:07:17 2020
# Not Valid After : Sun Mar 12 09:07:17 2045
# Fingerprint (SHA-256):
EF:66:B0:B1:0A:3C:DB:9F:2E:36:48:C7:6B:D2:AF:18:EA:D2:BF:E6:F1:17:65:5E:28:C4:06:0D:A1:A3:F4:C2
# Fingerprint (SHA1):
E9:A8:5D:22:14:52:1C:5B:AA:0A:B4:BE:24:6A:23:8A:C9:BA:E2:A9
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "E-Tugra Global Root CA RSA v3"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\201\200\061\013\060\011\006\003\125\004\006\023\002\124\122
\061\017\060\015\006\003\125\004\007\023\006\101\156\153\141\162
\141\061\031\060\027\006\003\125\004\012\023\020\105\055\124\165
\147\162\141\040\105\102\107\040\101\056\123\056\061\035\060\033
\006\003\125\004\013\023\024\105\055\124\165\147\162\141\040\124

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\162\165\163\164\040\103\145\156\164\145\162\061\046\060\044\006  
\003\125\004\003\023\035\105\055\124\165\147\162\141\040\107\154  
\157\142\141\154\040\122\157\157\164\040\103\101\040\122\123\101  
\040\166\063

END

CKA\_ID UTF8 "0"

CKA\_ISSUER MULTILINE\_OCTAL

\060\201\200\061\013\060\011\006\003\125\004\006\023\002\124\122  
\061\017\060\015\006\003\125\004\007\023\006\101\156\153\141\162  
\141\061\031\060\027\006\003\125\004\012\023\020\105\055\124\165  
\147\162\141\040\105\102\107\040\101\056\123\056\061\035\060\033  
\006\003\125\004\013\023\024\105\055\124\165\147\162\141\040\124  
\162\165\163\164\040\103\145\156\164\145\162\061\046\060\044\006  
\003\125\004\003\023\035\105\055\124\165\147\162\141\040\107\154  
\157\142\141\154\040\122\157\157\164\040\103\101\040\122\123\101  
\040\166\063

END

CKA\_SERIAL\_NUMBER

MULTILINE\_OCTAL

\002\024\015\115\305\315\026\042\225\226\010\176\270\013\177\025  
\006\064\373\171\020\064

END

CKA\_VALUE MULTILINE\_OCTAL

\060\202\005\363\060\202\003\333\240\003\002\001\002\002\024\015  
\115\305\315\026\042\225\226\010\176\270\013\177\025\006\064\373  
\171\020\064\060\015\006\011\052\206\110\206\367\015\001\001\013  
\005\000\060\201\200\061\013\060\011\006\003\125\004\006\023\002  
\124\122\061\017\060\015\006\003\125\004\007\023\006\101\156\153  
\141\162\141\061\031\060\027\006\003\125\004\012\023\020\105\055  
\124\165\147\162\141\040\105\102\107\040\101\056\123\056\061\035  
\060\033\006\003\125\004\013\023\024\105\055\124\165\147\162\141  
\040\124\162\165\163\164\040\103\145\156\164\145\162\061\046\060  
\044\006\003\125\004\003\023\035\105\055\124\165\147\162\141\040  
\107\154\157\142\141\154\040\122\157\157\164\040\103\101\040\122  
\123\101\040\166\063\060\036\027\015\062\060\060\063\061\070\060  
\071\060\067\061\067\132\027\015\064\065\060\063\061\062\060\071  
\060\067\061\067\132\060\201\200\061\013\060\011\006\003\125\004  
\006\023\002\124\122\061\017\060\015\006\003\125\004\007\023\006  
\101\156\153\141\162\141\061\031\060\027\006\003\125\004\012\023  
\020\105\055\124\165\147\162\141\040\105\102\107\040\101\056\123  
\056\061\035\060\033\006\003\125\004\013\023\024\105\055\124\165  
\147\162\141\040\124\162\165\163\164\040\103\145\156\164\145\162  
\061\046\060\044\006\003\125\004\003\023\035\105\055\124\165\147  
\162\141\040\107\154\157\142\141\154\040\122\157\157\164\040\103  
\101\040\122\123\101\040\166\063\060\202\002\042\060\015\006\011  
\052\206\110\206\367\015\001\001\001\005\000\003\202\002\017\000  
\060\202\002\012\002\202\002\001\000\242\146\360\211\267\162\173  
\356\011\311\143\322\323\103\335\136\303\246\204\070\112\361\215

\201\273\024\275\107\350\100\027\363\075\303\170\105\162\246\056  
\220\336\232\072\324\040\161\312\274\237\035\113\227\012\307\061  
\272\076\327\376\045\251\052\216\066\364\321\057\307\267\251\135  
\063\334\060\160\370\100\154\113\262\246\061\141\321\064\074\075  
\061\172\307\257\304\247\247\204\341\227\244\350\113\366\027\174  
\356\074\007\355\342\212\127\334\266\373\370\103\045\120\352\047  
\201\250\206\274\217\122\112\226\072\140\032\226\273\375\163\364  
\205\375\203\375\177\204\155\064\154\177\152\267\113\001\003\277  
\255\151\267\327\062\331\365\127\152\351\206\202\076\245\146\061  
\263\026\075\302\363\046\140\062\323\122\036\260\154\244\067\076  
\364\365\257\353\341\337\200\006\317\052\101\347\146\011\341\113  
\227\347\167\275\041\155\051\266\147\303\055\176\355\326\171\145  
\321\317\072\266\321\261\136\126\141\120\172\132\316\116\120\061  
\200\003\230\107\347\344\030\174\104\132\306\244\263\073\306\306  
\303\072\360\154\303\213\310\244\221\005\363\365\331\266\252\006  
\241\267\253\344\261\352\041\024\134\203\244\374\377\266\120\323  
\214\022\046\231\166\160\351\300\017\246\164\374\273\320\033\170  
\316\162\222\342\050\234\274\346\351\011\330\072\323\211\346\276  
\056\167\337\001\012\157\226\366\345\215\074\115\122\166\032\126  
\341\163\176\027\254\075\255\154\243\122\022\030\160\346\200\116  
\063\362\176\046\062\254\005\215\070\244\346\166\074\237\020\151  
\016\155\235\322\301\171\040\153\133\317\063\215\321\224\166\065  
\347\135\125\307\267\254\050\253\106\314\347\073\041\265\012\012  
\344\112\131\334\201\065\113\104\225\022\012\147\245\241\377\133  
\000\007\322\300\314\371\077\374\237\063\362\000\370\214\154\207  
\235\006\055\361\357\343\346\006\372\305\146\023\133\374\120\007  
\236\161\206\262\332\157\164\060\317\223\123\350\334\042\326\336  
\040\037\141\215\243\056\243\170\062\220\154\334\254\062\265\005  
\344\365\074\063\015\326\340\207\167\027\114\235\260\330\011\250  
\015\127\367\104\205\360\310\004\276\134\135\132\343\027\216\124  
\143\151\177\111\164\144\005\214\243\002\003\001\000\001\243\143  
\060\141\060\017\006\003\125\035\023\001\001\377\004\005\060\003  
\001\001\377\060\037\006\003\125\035\043\004\030\060\026\200\024  
\262\264\256\346\055\367\046\325\252\165\055\166\113\300\033\123  
\041\320\110\357\060\035\006\003\125\035\016\004\026\004\024\262  
\264\256\346\055\367\046\325\252\165\055\166\113\300\033\123\041  
\320\110\357\060\016\006\003\125\035\017\001\001\377\004\004\003  
\002\001\006\060\015\006\011\052\206\110\206\367\015\001\001\013  
\005\000\003\202\002\001\000\211\250\162\177\214\353\316\056\030  
\304\020\200\055\020\014\377\373\024\315\004\340\024\074\116\232  
\373\237\051\277\042\236\127\271\202\163\022\143\046\265\314\220  
\351\322\052\051\356\234\055\314\054\231\276\105\047\344\261\161  
\355\344\070\225\061\101\362\175\172\143\170\337\312\066\026\057  
\202\210\237\274\021\107\117\166\115\310\055\216\353\337\055\174  
\116\073\332\256\366\343\332\135\024\246\256\350\205\104\235\006  
\156\216\373\357\172\112\152\055\053\050\030\376\277\220\054\165  
\026\237\017\352\226\175\005\356\233\023\245\104\154\370\003\320  
\335\043\341\375\003\022\022\010\364\030\064\263\340\067\013\167

```
\021\001\110\277\141\264\265\370\031\331\313\115\352\243\214\357
\375\360\006\265\155\222\364\112\141\120\204\355\354\111\323\344
\276\150\346\056\343\061\013\124\013\032\222\326\202\330\266\242
\145\074\146\004\371\125\332\154\373\333\265\024\146\115\224\203
\073\315\036\246\053\262\376\167\100\206\253\347\337\012\311\375
\366\335\207\126\030\330\260\054\125\140\226\372\010\176\122\220
\365\113\246\056\207\174\313\040\333\006\076\240\135\003\167\175
\242\074\023\033\051\242\023\125\240\075\024\042\257\157\270\320
\232\033\162\335\005\001\215\206\140\277\244\147\356\265\245\015
\321\177\346\032\053\142\146\303\007\272\347\240\110\034\070\303
\351\105\373\247\177\374\355\002\150\032\312\167\022\167\246\000
\125\050\024\354\326\307\022\242\033\145\102\351\221\350\313\076
\207\211\124\135\331\257\235\227\234\151\347\012\377\017\132\170
\213\143\052\114\175\107\224\077\336\113\351\123\320\060\361\305
\366\236\111\337\073\240\221\243\243\376\315\130\314\352\337\257
\157\050\073\240\151\233\217\354\254\256\053\124\235\233\004\261
\107\040\257\226\022\076\143\224\035\004\347\056\273\206\307\014
\232\210\277\166\107\357\367\260\013\227\146\322\104\317\140\122
\007\341\325\054\112\072\047\141\167\312\327\217\347\207\016\060
\377\014\273\004\342\141\303\242\310\227\141\216\264\060\152\074
\155\302\007\137\112\163\057\077\371\026\212\001\146\357\272\221
\312\122\127\173\256\324\346\017\335\013\172\177\213\236\046\040
\317\073\357\201\161\203\131
```

END

CKA\_NSS\_Mozilla\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "E-Tugra Global Root CA RSA v3"

# Issuer: CN=E-Tugra

Global Root CA RSA v3,OU=E-Tugra Trust Center,O=E-Tugra EBG A.S.,L=Ankara,C=TR

# Serial Number:0d:4d:c5:cd:16:22:95:96:08:7e:b8:0b:7f:15:06:34:fb:79:10:34

# Subject: CN=E-Tugra Global Root CA RSA v3,OU=E-Tugra Trust Center,O=E-Tugra EBG A.S.,L=Ankara,C=TR

# Not Valid Before: Wed Mar 18 09:07:17 2020

# Not Valid After : Sun Mar 12 09:07:17 2045

# Fingerprint (SHA-256):

EF:66:B0:B1:0A:3C:DB:9F:2E:36:48:C7:6B:D2:AF:18:EA:D2:BF:E6:F1:17:65:5E:28:C4:06:0D:A1:A3:F4:C2

# Fingerprint (SHA1): E9:A8:5D:22:14:52:1C:5B:AA:0A:B4:BE:24:6A:23:8A:C9:BA:E2:A9

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "E-Tugra Global Root CA RSA v3"

CKA\_CERT\_SHA1\_HASH MULTILINE OCTAL

```
\351\250\135\042\024\122\034\133\252\012\264\276\044\152\043\212
```

```
\311\272\342\251
```

```
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\042\276\020\366\302\370\003\210\163\137\063\051\107\050\107\244
END
CKA_ISSUER MULTILINE_OCTAL
\060\201\200\061\013\060\011\006\003\125\004\006\023\002\124\122
\061\017\060\015\006\003\125\004\007\023\006\101\156\153\141\162
\141\061\031\060\027\006\003\125\004\012\023\020\105\055\124\165
\147\162\141\040\105\102\107\040\101\056\123\056\061\035\060\033
\006\003\125\004\013\023\024\105\055\124\165\147\162\141\040\124
\162\165\163\164\040\103\145\156\164\145\162\061\046\060\044\006
\003\125\004\003\023\035\105\055\124\165\147\162\141\040\107\154
\157\142\141\154\040\122\157\157\164\040\103\101\040\122\123\101
\040\166\063
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\024\015\115\305\315\026\042\225\226\010\176\270\013\177\025
\006\064\373\171\020\064
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "E-Tugra Global Root CA ECC v3"
#
# Issuer: CN=E-Tugra Global Root CA ECC v3,OU=E-Tugra Trust Center,O=E-Tugra EBG
A.S.,L=Ankara,C=TR
# Serial Number:26:46:19:77:31:e1:4f:6f:28:36:de:39:51:86:e6:d4:97:88:22:c1
# Subject: CN=E-Tugra Global Root CA ECC v3,OU=E-Tugra Trust Center,O=E-Tugra EBG
A.S.,L=Ankara,C=TR
# Not Valid Before: Wed Mar 18 09:46:58 2020
# Not Valid After : Sun Mar 12 09:46:58 2045
# Fingerprint (SHA-256):
87:3F:46:85:FA:7F:56:36:25:25:2E:6D:36:BC:D7:F1:6F:C2:49:51:F2:64:E4:7E:1B:95:4F:49:08:CD:CA:13
# Fingerprint (SHA1): 8A:2F:AF:57:53:B1:B0:E6:A1:04:EC:5B:6A:69:71:6D:F6:1C:E2:84
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "E-Tugra Global Root CA ECC v3"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\201\200\061\013\060\011\006\003\125\004\006\023\002\124\122
\061\017\060\015\006\003\125\004\007\023\006\101\156\153\141\162
\141\061\031\060\027\006\003\125\004\012\023\020\105\055\124\165
```

\147\162\141\040\105\102\107\040\101\056\123\056\061\035\060\033  
\006\003\125\004\013\023\024\105\055\124\165\147\162\141\040\124  
\162\165\163\164\040\103\145\156\164\145\162\061\046\060\044\006  
\003\125\004\003\023\035\105\055\124\165\147\162\141\040\107\154  
\157\142\141\154\040\122\157\157\164\040\103\101\040\105\103\103  
\040\166\063

END

CKA\_ID

UTF8 "0"

CKA\_ISSUER MULTILINE\_OCTAL

\060\201\200\061\013\060\011\006\003\125\004\006\023\002\124\122  
\061\017\060\015\006\003\125\004\007\023\006\101\156\153\141\162  
\141\061\031\060\027\006\003\125\004\012\023\020\105\055\124\165  
\147\162\141\040\105\102\107\040\101\056\123\056\061\035\060\033  
\006\003\125\004\013\023\024\105\055\124\165\147\162\141\040\124  
\162\165\163\164\040\103\145\156\164\145\162\061\046\060\044\006  
\003\125\004\003\023\035\105\055\124\165\147\162\141\040\107\154  
\157\142\141\154\040\122\157\157\164\040\103\101\040\105\103\103  
\040\166\063

END

CKA\_SERIAL\_NUMBER MULTILINE\_OCTAL

\002\024\046\106\031\167\061\341\117\157\050\066\336\071\121\206  
\346\324\227\210\042\301

END

CKA\_VALUE

MULTILINE\_OCTAL

\060\202\002\245\060\202\002\052\240\003\002\001\002\002\024\046  
\106\031\167\061\341\117\157\050\066\336\071\121\206\346\324\227  
\210\042\301\060\012\006\010\052\206\110\316\075\004\003\003\060  
\201\200\061\013\060\011\006\003\125\004\006\023\002\124\122\061  
\017\060\015\006\003\125\004\007\023\006\101\156\153\141\162\141  
\061\031\060\027\006\003\125\004\012\023\020\105\055\124\165\147  
\162\141\040\105\102\107\040\101\056\123\056\061\035\060\033\006  
\003\125\004\013\023\024\105\055\124\165\147\162\141\040\124\162  
\165\163\164\040\103\145\156\164\145\162\061\046\060\044\006\003  
\125\004\003\023\035\105\055\124\165\147\162\141\040\107\154\157  
\142\141\154\040\122\157\157\164\040\103\101\040\105\103\103\040  
\166\063\060\036\027\015\062\060\060\063\061\070\060\071\064\066  
\065\070\132\027\015\064\065\060\063\061\062\060\071\064\066\065  
\070\132\060\201\200\061\013\060\011\006\003\125\004\006\023\002  
\124\122\061\017\060\015\006\003\125\004\007\023\006\101\156\153  
\141\162\141\061\031\060\027\006\003\125\004\012\023\020\105\055  
\124\165\147\162\141\040\105\102\107\040\101\056\123\056\061\035  
\060\033\006\003\125\004\013\023\024\105\055\124\165\147\162\141  
\040\124\162\165\163\164\040\103\145\156\164\145\162\061\046\060  
\044\006\003\125\004\003\023\035\105\055\124\165\147\162\141\040  
\107\154\157\142\141\154\040\122\157\157\164\040\103\101\040\105  
\103\103\040\166\063\060\166\060\020\006\007\052\206\110\316\075

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\002\001\006\005\053\201\004\000\042\003\142\000\004\216\230\051
\277\307\020\036\047\333\253\003\314\050\054\330\136\110\031\020
\051\314\313\131\201\314\214\270\222\027\211\203\052\222\366\303
\244\035\114\142\325\237\326\240\106\334\034\274\166\301\343\107
\320\133\023\332\347\245\263\146\110\347\041\232\112\117\206\012
\175\154\352\115\062\200\012\262\172\011\233\151\113\230\201\342
\056\354\002\160\226\037\375\365\106\316\312\334\202\243\143\060
\141\060\017\006\003\125\035\023\001\001\377\004\005\060\003\001
\001\377\060\037\006\003\125\035\043\004\030\060\026\200\024\377
\202\061\162\076\371\304\146\154\255\070\236\321\260\121\210\245
\220\314\365\060\035\006\003\125\035\016\004\026\004\024\377\202
\061\162\076\371\304\146\154\255\070\236\321\260\121\210\245\220
\314\365\060\016\006\003\125\035\017\001\001\377\004\004\003\002
\001\006\060\012\006\010\052\206\110\316\075\004\003\003\003\151
\000\060\146\002\061\000\346\005\130\151\141\345\055\312\015\313
\361\031\010\275\326\375\121\222\032\176\143\124\004\220\221\232
\065\221\071\231\372\007\251\146\223\272\310\150\324\212\077\372
\355\156\026\002\047\267\002\061\000\335\132\027\053\166\035\145
\102\226\246\254\135\212\171\126\330\212\033\337\232\336\137\307
\120\217\261\133\161\014\046\337\152\100\000\354\063\221\041\161
\276\150\344\043\244\331\255\241\067
```

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "E-Tugra Global Root CA ECC v3"

# Issuer: CN=E-Tugra Global

Root CA ECC v3,OU=E-Tugra Trust Center,O=E-Tugra EBG A.S.,L=Ankara,C=TR

# Serial Number:26:46:19:77:31:e1:4f:6f:28:36:de:39:51:86:e6:d4:97:88:22:c1

# Subject: CN=E-Tugra Global Root CA ECC v3,OU=E-Tugra Trust Center,O=E-Tugra EBG  
A.S.,L=Ankara,C=TR

# Not Valid Before: Wed Mar 18 09:46:58 2020

# Not Valid After : Sun Mar 12 09:46:58 2045

# Fingerprint (SHA-256):

87:3F:46:85:FA:7F:56:36:25:25:2E:6D:36:BC:D7:F1:6F:C2:49:51:F2:64:E4:7E:1B:95:4F:49:08:CD:CA:13

# Fingerprint (SHA1): 8A:2F:AF:57:53:B1:B0:E6:A1:04:EC:5B:6A:69:71:6D:F6:1C:E2:84

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "E-Tugra Global Root CA ECC v3"

CKA\_CERT\_SHA1\_HASH MULTILINE\_OCTAL

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\212\057\257\127\123\261\260\346\241\004\354\133\152\151\161\155
\366\034\342\204
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END

CKA\_CERT\_MD5\_HASH MULTILINE\_OCTAL

\106\274\201\273\361\265\036\367\113\226\274\024\342\347\047\144

END

CKA\_ISSUER MULTILINE\_OCTAL

\060\201\200\061\013\060\011\006\003\125\004\006\023\002\124\122  
\061\017\060\015\006\003\125\004\007\023\006\101\156\153\141\162  
\141\061\031\060\027\006\003\125\004\012\023\020\105\055\124\165  
\147\162\141\040\105\102\107\040\101\056\123\056\061\035\060\033  
\006\003\125\004\013\023\024\105\055\124\165\147\162\141\040\124  
\162\165\163\164\040\103\145\156\164\145\162\061\046\060\044\006  
\003\125\004\003\023\035\105\055\124\165\147\162\141\040\107\154  
\157\142\141\154\040\122\157\157\164\040\103\101\040\105\103\103  
\040\166\063

END

CKA\_SERIAL\_NUMBER

MULTILINE\_OCTAL

\002\024\046\106\031\167\061\341\117\157\050\066\336\071\121\206  
\346\324\227\210\042\301

END

CKA\_TRUST\_SERVER\_AUTH CK\_TRUST CKT\_NSS\_TRUSTED\_DELEGATOR

CKA\_TRUST\_EMAIL\_PROTECTION CK\_TRUST CKT\_NSS\_MUST\_VERIFY\_TRUST

CKA\_TRUST\_CODE\_SIGNING CK\_TRUST CKT\_NSS\_MUST\_VERIFY\_TRUST

CKA\_TRUST\_STEP\_UP\_APPROVED CK\_BBOOL CK\_FALSE

#

# Certificate "DIGITALSIGN GLOBAL ROOT RSA CA"

#

# Issuer: CN=DIGITALSIGN GLOBAL ROOT RSA CA,O=DigitalSign Certificadora Digital,C=PT

# Serial

Number:5d:59:c8:ca:ab:09:57:f5:e6:b5:da:29:94:04:6a:ff:c5:d4:95:87

# Subject: CN=DIGITALSIGN GLOBAL ROOT RSA CA,O=DigitalSign Certificadora Digital,C=PT

# Not Valid Before: Thu Jan 21 10:50:34 2021

# Not Valid After : Mon Jan 15 10:50:34 2046

# Fingerprint (SHA-256):

82:BD:5D:85:1A:CF:7F:6E:1B:A7:BF:CB:C5:30:30:D0:E7:BC:3C:21:DF:77:2D:85:8C:AB:41:D1:99:BD:F5:95

# Fingerprint (SHA1): B9:82:07:97:AE:52:A5:68:6F:46:07:DF:FD:03:72:3D:92:86:88:2D

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_CERTIFICATE

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "DIGITALSIGN GLOBAL ROOT RSA CA"

CKA\_CERTIFICATE\_TYPE CK\_CERTIFICATE\_TYPE CKC\_X\_509

CKA\_SUBJECT MULTILINE\_OCTAL

\060\142\061\013\060\011\006\003\125\004\006\023\002\120\124\061  
\052\060\050\006\003\125\004\012\014\041\104\151\147\151\164\141  
\154\123\151\147\156\040\103\145\162\164\151\146\151\143\141\144  
\157\162\141\040\104\151\147\151\164\141\154\061\047\060\045\006  
\003\125\004\003\014\036\104\111\107\111\124\101\114\123\111\107  
\116\040\107\114\117\102\101\114\040\122\117\117\124\040\122\123

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\101\040\103\101
END
CKA_ID
UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\142\061\013\060\011\006\003\125\004\006\023\002\120\124\061
\052\060\050\006\003\125\004\012\014\041\104\151\147\151\164\141
\154\123\151\147\156\040\103\145\162\164\151\146\151\143\141\144
\157\162\141\040\104\151\147\151\164\141\154\061\047\060\045\006
\003\125\004\003\014\036\104\111\107\111\124\101\114\123\111\107
\116\040\107\114\117\102\101\114\040\122\117\117\124\040\122\123
\101\040\103\101
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\024\135\131\310\312\253\011\127\365\346\265\332\051\224\004
\152\377\305\324\225\207
END
CKA_VALUE MULTILINE_OCTAL
\060\202\005\265\060\202\003\235\240\003\002\001\002\002\024\135
\131\310\312\253\011\127\365\346\265\332\051\224\004\152\377\305
\324\225\207\060\015\006\011\052\206\110\206\367\015\001\001\015
\005\000\060\142\061\013\060\011\006\003\125\004\006\023\002\120
\124\061\052\060\050\006\003\125\004\012\014\041\104\151\147\151
\164\141\154\123\151\147\156\040\103\145\162\164\151\146\151\143
\141\144\157\162\141\040\104\151\147\151\164\141\154\061\047\060
\045\006\003\125\004\003\014\036\104\111\107\111\124\101\114\123
\111\107\116\040\107\114\117\102\101\114\040\122\117\117\124\040
\122\123\101\040\103\101\060\036\027\015\062\061\060\061\062\061
\061\060\065\060\063\064\132\027\015\064\066\060\061\061\065\061
\060\065\060\063\064\132\060\142\061\013\060\011\006\003\125\004
\006\023\002\120\124\061\052\060\050\006\003\125\004\012\014\041
\104\151\147\151\164\141\154\123\151\147\156\040\103\145\162\164
\151\146\151\143\141\144\157\162\141\040\104\151\147\151\164\141
\154\061\047\060\045\006\003\125\004\003\014\036\104\111\107\111
\124\101\114\123\111\107\116\040\107\114\117\102\101\114\040\122
\117\117\124\040\122\123\101\040\103\101\060\202\002\042\060\015
\006\011\052\206\110\206\367\015\001\001\001\005\000\003\202\002
\017\000\060\202\002\012\002\202\002\001\000\310\207\266\070\323
\034\360\336\022\370\203\307\304\212\342\211\270\264\042\172\170
\370\014\146\121\150\166\067\012\325\117\302\132\010\270\026\134
\367\162\001\011\067\204\201\052\124\153\327\222\320\154\372\250
\247\103\022\064\353\016\333\067\017\051\376\212\061\121\102\350
\113\234\220\250\310\054\021\323\375\240\051\176\316\336\224\366
\202\340\130\264\116\105\045\361\042\362\075\323\017\173\124\032
\334\062\266\326\121\116\176\101\264\127\270\054\306\271\016\056
\312\127\361\325\310\323\130\347\245\351\102\021\256\323\040\045
\224\151\327\217\312\242\015\303\323\237\007\150\077\025\322\147
\056\123\375\166\202\233\013\163\251\051\015\236\021\223\024\010
```



\230\354\236\124\022\112\126\242\006\025\354\153\154\056\222\140  
\056\206\015\256\202\037\121\115\343\262\007\327\020\031\127\042  
\366\251\151\104\204\363\331\075\240\006\277\314\210\176\177\365  
\316\133\245\302\052\152\164\102\352\157\246\377\371\150\261\320  
\137\275\221\322\125\157\063\127\114\036\235\344\342\213\301\205  
\145\240\340\152\234\000\000\210\222\335\130\010\026\362\160\061  
\250\034\341\336\275\116\161\351\326\276\176\265\241\132\303\115  
\367\277\233\275\224\244\375\365\252\123\223\106\311\046\001\004  
\160\304\240\161\272\316\045\146\373\221\176\125\160\356\111\012  
\115\142\177\302\120\232\162\362\030\147\235\351\105\250\064\204  
\350\370\201\366\321\132\042\036\007\117\073\263\177\335\021\245  
\163\334\276\251\031\072\151\251\155\033\062\342\211\252\245\047  
\013\132\176\164\342\017\144\071\135\176\134\271\301\027\374\307  
\215\136\311\354\044\355\322\362\077\172\204\105\067\002\276\076  
\153\131\304\346\133\026\155\300\252\236\252\265\131\056\054\160  
\125\234\314\231\226\230\044\124\321\216\332\312\264\021\264\267  
\160\103\037\157\220\013\040\240\250\166\023\145\333\333\043\132  
\165\113\241\013\061\167\012\356\175\150\141\032\023\214\352\121  
\176\134\126\243\127\114\135\241\353\023\145\277\124\024\314\363  
\356\334\327\354\074\227\362\170\126\270\337\162\134\160\374\316  
\006\335\237\322\007\061\357\347\122\221\236\315\272\327\300\030  
\104\007\061\145\111\062\151\023\112\353\217\002\003\001\000\001  
\243\143\060\141\060\017\006\003\125\035\023\001\001\377\004\005  
\060\003\001\001\377\060\037\006\003\125\035\043\004\030\060\026  
\200\024\265\066\274\074\214\032\253\054\366\131\031\055\203\024  
\332\223\045\025\326\206\060\035\006\003\125\035\016\004\026\004  
\024\265\066\274\074\214\032\253\054\366\131\031\055\203\024\332  
\223\045\025\326\206\060\016\006\003\125\035\017\001\001\377\004  
\004\003\002\001\006\060\015\006\011\052\206\110\206\367\015\001  
\001\015\005\000\003\202\002\001\000\024\373\061\045\070\061\370  
\312\010\262\043\166\070\255\370\323\131\365\314\264\127\045\341  
\104\276\176\374\026\354\256\372\046\237\117\147\026\112\126\360  
\375\355\307\031\001\064\216\220\132\055\326\200\134\354\161\322  
\201\045\202\036\000\161\337\232\321\325\035\042\273\321\245\363  
\142\017\264\353\334\044\163\376\246\126\315\232\024\305\004\065  
\026\061\242\007\353\245\000\342\266\370\137\162\375\077\141\111  
\216\336\176\115\070\327\172\036\164\067\154\121\334\276\000\004  
\270\070\024\363\040\301\355\233\247\043\375\015\102\204\035\177  
\362\163\303\320\170\143\361\237\354\327\133\351\361\276\154\240  
\113\003\236\215\151\341\024\332\210\020\201\043\123\377\332\124  
\053\013\306\271\226\225\004\030\106\363\173\250\227\330\133\150  
\244\344\070\034\016\105\345\230\323\011\256\232\136\354\263\171  
\015\071\162\362\364\224\235\016\236\140\042\346\250\366\114\205  
\315\007\202\072\150\071\315\075\137\343\070\364\266\257\073\153  
\112\237\140\121\105\242\100\002\345\252\014\343\076\321\170\324  
\242\164\234\046\272\005\232\050\160\112\076\246\013\320\035\111  
\360\272\370\256\101\020\176\244\007\022\275\250\317\051\075\127  
\273\307\361\103\107\000\076\256\160\030\132\040\173\011\313\072

```
\072\160\200\345\114\140\230\301\025\301\035\112\367\310\360\233
\341\162\255\347\135\150\130\013\004\261\214\274\237\267\373\156
\213\133\004\125\373\353\043\125\327\170\120\332\045\313\276\047
\066\273\044\032\171\034\121\321\376\023\273\377\170\054\334\244
\276\057\366\305\113\123\317\247\114\231\136\160\254\131\210\004
\256\144\004\277\173\246\172\115\323\350\167\275\241\176\120\025
\363\357\111\060\205\115\041\127\252\333\054\165\227\255\201\001
\207\242\261\160\235\036\006\132\003\140\261\077\246\155\202\054
\324\024\261\201\245\350\075\210\035\264\162\054\130\067\212\216
\070\224\270\163\335\251\340\270\366\167\242\263\174\130\336\256
\151\072\265\213\245\032\273\362\330\164\006\234\375\142\163\040
\041\166\261\176\160\236\031\324\353\027\142\031\070\231\315\066
\053\107\376\061\313\337\271\344\254\010\323\330\246\353\324\236
\176\113\144\244\125\135\053\027\311
```

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "DIGITALSIGN GLOBAL ROOT RSA CA"

# Issuer: CN=DIGITALSIGN GLOBAL ROOT RSA CA,O=DigitalSign Certificadora Digital,C=PT

# Serial Number:5d:59:c8:ca:ab:09:57:f5:e6:b5:da:29:94:04:6a:ff:c5:d4:95:87

#

Subject: CN=DIGITALSIGN GLOBAL ROOT RSA CA,O=DigitalSign Certificadora Digital,C=PT

# Not Valid Before: Thu Jan 21 10:50:34 2021

# Not Valid After : Mon Jan 15 10:50:34 2046

# Fingerprint (SHA-256):

82:BD:5D:85:1A:CF:7F:6E:1B:A7:BF:CB:C5:30:30:D0:E7:BC:3C:21:DF:77:2D:85:8C:AB:41:D1:99:BD:F5:95

# Fingerprint (SHA1): B9:82:07:97:AE:52:A5:68:6F:46:07:DF:FD:03:72:3D:92:86:88:2D

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "DIGITALSIGN GLOBAL ROOT RSA CA"

CKA\_CERT\_SHA1\_HASH MULTILINE\_OCTAL

```
\271\202\007\227\256\122\245\150\157\106\007\337\375\003\162\075
\222\206\210\055
```

END

CKA\_CERT\_MD5\_HASH MULTILINE\_OCTAL

```
\033\032\275\032\171\306\333\264\355\263\207\314\251\323\116\170
```

END

CKA\_ISSUER MULTILINE\_OCTAL

```
\060\142\061\013\060\011\006\003\125\004\006\023\002\120\124\061
\052\060\050\006\003\125\004\012\014\041\104\151\147\151\164\141
\154\123\151\147\156\040\103\145\162\164\151\146\151\143\141\144
\157\162\141\040\104\151\147\151\164\141\154\061\047\060\045\006
\003\125\004\003\014\036\104\111\107\111\124\101\114\123\111\107
```

\116\040\107\114\117\102\101\114\040\122\117\117\124\040\122\123  
\101\040\103\101

END

CKA\_SERIAL\_NUMBER

MULTILINE\_OCTAL

\002\024\135\131\310\312\253\011\127\365\346\265\332\051\224\004

\152\377\305\324\225\207

END

CKA\_TRUST\_SERVER\_AUTH CK\_TRUST CKT\_NSS\_MUST\_VERIFY\_TRUST

CKA\_TRUST\_EMAIL\_PROTECTION CK\_TRUST CKT\_NSS\_TRUSTED\_DELEGATOR

CKA\_TRUST\_CODE\_SIGNING CK\_TRUST CKT\_NSS\_MUST\_VERIFY\_TRUST

CKA\_TRUST\_STEP\_UP\_APPROVED CK\_BBOOL CK\_FALSE

#

# Certificate "DIGITALSIGN GLOBAL ROOT ECDSA CA"

#

# Issuer: CN=DIGITALSIGN GLOBAL ROOT ECDSA CA,O=DigitalSign Certificadora Digital,C=PT

# Serial Number:36:2d:8f:72:88:a2:28:27:e4:00:ff:24:c6:2d:e4:eb:fa:9d:b6:e1

# Subject: CN=DIGITALSIGN GLOBAL ROOT ECDSA CA,O=DigitalSign Certificadora Digital,C=PT

# Not Valid Before: Thu Jan 21 11:07:50 2021

# Not Valid After : Mon Jan 15 11:07:50 2046

# Fingerprint

(SHA-256):

26:1D:71:14:AE:5F:8F:F2:D8:C7:20:9A:9D:E4:28:9E:6A:FC:9D:71:70:23:D8:54:50:90:91:99:F1:85:7C:FE

# Fingerprint (SHA1): 67:A8:08:EB:8F:88:F5:80:6C:05:45:1B:17:F3:D7:00:2F:D2:4A:8A

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_CERTIFICATE

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "DIGITALSIGN GLOBAL ROOT ECDSA CA"

CKA\_CERTIFICATE\_TYPE CK\_CERTIFICATE\_TYPE CKC\_X\_509

CKA\_SUBJECT MULTILINE\_OCTAL

\060\144\061\013\060\011\006\003\125\004\006\023\002\120\124\061

\052\060\050\006\003\125\004\012\014\041\104\151\147\151\164\141

\154\123\151\147\156\040\103\145\162\164\151\146\151\143\141\144

\157\162\141\040\104\151\147\151\164\141\154\061\051\060\047\006

\003\125\004\003\014\040\104\111\107\111\124\101\114\123\111\107

\116\040\107\114\117\102\101\114\040\122\117\117\124\040\105\103

\104\123\101\040\103\101

END

CKA\_ID UTF8 "0"

CKA\_ISSUER MULTILINE\_OCTAL

\060\144\061\013\060\011\006\003\125\004\006\023\002\120\124\061

\052\060\050\006\003\125\004\012\014\041\104\151\147\151\164\141

\154\123\151\147\156\040\103\145\162\164\151\146\151\143\141\144

\157\162\141\040\104\151\147\151\164\141\154\061\051\060\047\006

\003\125\004\003\014\040\104\111\107\111\124\101\114\123\111\107

\116\040\107\114\117\102\101\114\040\122\117\117\124\040\105\103

\104\123\101\040\103\101  
END  
CKA\_SERIAL\_NUMBER  
MULTILINE\_OCTAL  
\002\024\066\055\217\162\210\242\050\047\344\000\377\044\306\055  
\344\353\372\235\266\341  
END  
CKA\_VALUE MULTILINE\_OCTAL  
\060\202\002\152\060\202\001\360\240\003\002\001\002\002\024\066  
\055\217\162\210\242\050\047\344\000\377\044\306\055\344\353\372  
\235\266\341\060\012\006\010\052\206\110\316\075\004\003\003\060  
\144\061\013\060\011\006\003\125\004\006\023\002\120\124\061\052  
\060\050\006\003\125\004\012\014\041\104\151\147\151\164\141\154  
\123\151\147\156\040\103\145\162\164\151\146\151\143\141\144\157  
\162\141\040\104\151\147\151\164\141\154\061\051\060\047\006\003  
\125\004\003\014\040\104\111\107\111\124\101\114\123\111\107\116  
\040\107\114\117\102\101\114\040\122\117\117\124\040\105\103\104  
\123\101\040\103\101\060\036\027\015\062\061\060\061\062\061\061  
\061\060\067\065\060\132\027\015\064\066\060\061\061\065\061\061  
\060\067\065\060\132\060\144\061\013\060\011\006\003\125\004\006  
\023\002\120\124\061\052\060\050\006\003\125\004\012\014\041\104  
\151\147\151\164\141\154\123\151\147\156\040\103\145\162\164\151  
\146\151\143\141\144\157\162\141\040\104\151\147\151\164\141\154  
\061\051\060\047\006\003\125\004\003\014\040\104\111\107\111\124  
\101\114\123\111\107\116\040\107\114\117\102\101\114\040\122\117  
\117\124\040\105\103\104\123\101\040\103\101\060\166\060\020\006  
\007\052\206\110\316\075\002\001\006\005\053\201\004\000\042\003  
\142\000\004\156\013\243\253\063\115\034\352\112\350\374\004\215  
\024\240\175\360\010\054\137\203\253\223\321\322\173\272\327\111  
\175\217\354\022\120\137\324\271\313\345\360\371\063\143\037\311  
\127\354\100\330\021\013\227\350\122\026\314\051\216\364\006\206  
\036\070\334\075\127\304\356\252\275\310\124\004\046\132\047\023  
\121\107\075\037\037\032\216\250\225\244\063\320\314\107\314\155  
\270\374\110\243\143\060\141\060\017\006\003\125\035\023\001\001  
\377\004\005\060\003\001\001\377\060\037\006\003\125\035\043\004  
\030\060\026\200\024\316\257\112\213\032\165\342\361\070\347\002  
\360\026\255\136\352\144\325\173\264\060\035\006\003\125\035\016  
\004\026\004\024\316\257\112\213\032\165\342\361\070\347\002\360  
\026\255\136\352\144\325\173\264\060\016\006\003\125\035\017\001  
\001\377\004\004\003\002\001\006\060\012\006\010\052\206\110\316  
\075\004\003\003\003\150\000\060\145\002\060\012\210\304\161\234  
\104\003\115\215\264\307\274\250\256\331\060\047\065\152\153\026  
\143\327\374\347\131\341\247\211\033\114\061\232\043\125\104\346  
\363\103\041\325\107\047\157\155\127\001\252\002\061\000\373\262  
\352\342\227\177\121\265\237\110\353\274\157\065\211\250\144\160  
\253\127\166\315\300\306\024\140\312\177\342\202\000\163\367\314  
\065\352\216\044\233\345\010\131\307\004\214\163\170\376  
END

```

CKA_NSS_MOZILLA_CA_POLICY
CK_BBOOL CK_TRUE
CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE
CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

# Trust for "DIGITALSIGN GLOBAL ROOT ECDSA CA"
# Issuer: CN=DIGITALSIGN GLOBAL ROOT ECDSA CA,O=DigitalSign Certificadora Digital,C=PT
# Serial Number:36:2d:8f:72:88:a2:28:27:e4:00:ff:24:c6:2d:e4:eb:fa:9d:b6:e1
# Subject: CN=DIGITALSIGN GLOBAL ROOT ECDSA CA,O=DigitalSign Certificadora Digital,C=PT
# Not Valid Before: Thu Jan 21 11:07:50 2021
# Not Valid After : Mon Jan 15 11:07:50 2046
# Fingerprint (SHA-256):
26:1D:71:14:AE:5F:8F:F2:D8:C7:20:9A:9D:E4:28:9E:6A:FC:9D:71:70:23:D8:54:50:90:91:99:F1:85:7C:FE
# Fingerprint (SHA1): 67:A8:08:EB:8F:88:F5:80:6C:05:45:1B:17:F3:D7:00:2F:D2:4A:8A
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "DIGITALSIGN GLOBAL ROOT ECDSA CA"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\147\250\010\353\217\210\365\200\154\005\105\033\027\363\327\000
\057\322\112\212
END
CKA_CERT_MD5_HASH
MULTILINE_OCTAL
\252\055\241\316\377\041\302\210\313\132\036\214\341\311\222\217
END
CKA_ISSUER MULTILINE_OCTAL
\060\144\061\013\060\011\006\003\125\004\006\023\002\120\124\061
\052\060\050\006\003\125\004\012\014\041\104\151\147\151\164\141
\154\123\151\147\156\040\103\145\162\164\151\146\151\143\141\144
\157\162\141\040\104\151\147\151\164\141\154\061\051\060\047\006
\003\125\004\003\014\040\104\111\107\111\124\101\114\123\111\107
\116\040\107\114\117\102\101\114\040\122\117\117\124\040\105\103
\104\123\101\040\103\101
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\024\066\055\217\162\210\242\050\047\344\000\377\044\306\055
\344\353\372\235\266\341
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "Security Communication RootCA3"
#

```

#

Issuer: CN=Security Communication RootCA3,O="SECOM Trust Systems CO.,LTD.",C=JP

# Serial Number:00:e1:7c:37:40:fd:1b:fe:67

# Subject: CN=Security Communication RootCA3,O="SECOM Trust Systems CO.,LTD.",C=JP

# Not Valid Before: Thu Jun 16 06:17:16 2016

# Not Valid After : Mon Jan 18 06:17:16 2038

# Fingerprint (SHA-256):

24:A5:5C:2A:B0:51:44:2D:06:17:76:65:41:23:9A:4A:D0:32:D7:C5:51:75:AA:34:FF:DE:2F:BC:4F:5C:52:94

# Fingerprint (SHA1): C3:03:C8:22:74:92:E5:61:A2:9C:5F:79:91:2B:1E:44:13:91:30:3A

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_CERTIFICATE

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "Security Communication RootCA3"

CKA\_CERTIFICATE\_TYPE CK\_CERTIFICATE\_TYPE CKC\_X\_509

CKA\_SUBJECT MULTILINE\_OCTAL

\060\135\061\013\060\011\006\003\125\004\006\023\002\112\120\061  
\045\060\043\006\003\125\004\012\023\034\123\105\103\117\115\040  
\124\162\165\163\164\040\123\171\163\164\145\155\163\040\103\117  
\056\054\114\124\104\056\061\047\060\045\006\003\125\004\003\023  
\036\123\145\143\165\162\151\164\171\040\103\157\155\155\165\156  
\151\143\141\164\151\157\156\040\122\157\157\164\103\101\063

END

CKA\_ID

UTF8 "0"

CKA\_ISSUER MULTILINE\_OCTAL

\060\135\061\013\060\011\006\003\125\004\006\023\002\112\120\061  
\045\060\043\006\003\125\004\012\023\034\123\105\103\117\115\040  
\124\162\165\163\164\040\123\171\163\164\145\155\163\040\103\117  
\056\054\114\124\104\056\061\047\060\045\006\003\125\004\003\023  
\036\123\145\143\165\162\151\164\171\040\103\157\155\155\165\156  
\151\143\141\164\151\157\156\040\122\157\157\164\103\101\063

END

CKA\_SERIAL\_NUMBER MULTILINE\_OCTAL

\002\011\000\341\174\067\100\375\033\376\147

END

CKA\_VALUE MULTILINE\_OCTAL

\060\202\005\177\060\202\003\147\240\003\002\001\002\002\011\000  
\341\174\067\100\375\033\376\147\060\015\006\011\052\206\110\206  
\367\015\001\001\014\005\000\060\135\061\013\060\011\006\003\125  
\004\006\023\002\112\120\061\045\060\043\006\003\125\004\012\023  
\034\123\105\103\117\115\040\124\162\165\163\164\040\123\171\163  
\164\145\155\163\040\103\117\056\054\114\124\104\056\061\047\060  
\045\006\003\125\004\003\023\036\123\145\143\165\162\151\164\171  
\040\103\157\155\155\165\156\151\143\141\164\151\157\156\040\122  
\157\157\164\103\101\063\060\036\027\015\061\066\060\066\061\066  
\060\066\061\067\061\066\132\027\015\063\070\060\061\061\070\060  
\066\061\067\061\066\132\060\135\061\013\060\011\006\003\125\004

\006\023\002\112\120\061\045\060\043\006\003\125\004\012\023\034  
\123\105\103\117\115\040\124\162\165\163\164\040\123\171\163\164  
\145\155\163\040\103\117\056\054\114\124\104\056\061\047\060\045  
\006\003\125\004\003\023\036\123\145\143\165\162\151\164\171\040  
\103\157\155\155\165\156\151\143\141\164\151\157\156\040\122\157  
\157\164\103\101\063\060\202\002\042\060\015\006\011\052\206\110  
\206\367\015\001\001\001\005\000\003\202\002\017\000\060\202\002  
\012\002\202\002\001\000\343\311\162\111\367\060\336\011\174\251  
\100\201\130\323\264\072\335\272\141\017\223\120\156\151\074\065  
\302\356\133\163\220\033\147\114\041\354\137\065\273\071\076\053  
\012\140\357\273\155\053\206\373\161\242\310\254\344\126\224\371  
\311\257\261\162\324\040\254\164\322\270\025\255\121\376\205\164  
\241\271\020\376\005\200\371\122\223\263\100\075\165\020\254\300  
\226\267\247\176\166\274\343\033\122\031\316\021\037\013\004\064  
\365\330\365\151\074\167\363\144\364\015\252\205\336\340\011\120  
\004\027\226\204\267\310\212\274\115\162\374\034\273\317\363\006  
\115\371\237\144\367\176\246\146\206\065\161\310\021\200\114\301  
\161\100\130\036\276\240\163\366\374\076\120\341\340\057\046\075  
\176\134\043\265\171\160\336\372\340\321\245\326\014\101\161\173  
\367\352\214\034\210\307\354\213\365\321\057\125\226\106\174\132  
\073\130\073\373\272\330\055\265\045\332\172\116\317\104\256\041  
\246\236\230\312\040\156\174\273\210\205\133\373\300\020\142\273  
\362\371\047\107\357\321\211\071\103\304\337\336\341\101\277\124  
\163\040\227\055\154\332\363\324\007\243\346\271\330\157\256\374  
\214\031\056\323\147\147\053\225\333\130\134\265\152\002\363\270  
\203\136\264\153\276\101\176\127\011\165\104\120\125\315\132\021  
\141\041\012\141\302\251\210\375\023\274\055\211\057\315\141\340  
\225\276\312\265\173\341\173\064\147\013\037\266\014\307\174\036  
\031\123\312\247\261\112\025\040\126\024\160\075\053\202\054\017  
\235\025\035\107\200\107\377\170\231\016\061\257\157\076\217\355  
\206\151\036\173\030\210\024\262\302\374\202\063\056\234\113\055  
\373\160\073\161\252\053\173\046\047\363\032\302\334\373\027\270  
\241\352\313\240\264\256\323\224\176\172\320\253\303\354\070\055  
\021\056\210\277\324\077\255\022\073\102\254\217\002\156\175\314  
\321\137\141\276\241\274\072\152\110\352\046\125\042\026\135\137  
\015\377\047\063\237\030\003\164\212\133\122\040\107\153\105\115  
\042\167\214\125\047\360\257\036\214\311\203\042\124\267\232\320  
\117\331\316\374\331\056\034\226\050\261\002\323\003\275\045\122  
\034\064\146\117\043\253\364\167\202\226\035\321\127\060\010\021  
\005\375\127\321\331\307\002\003\001\000\001\243\102\060\100\060  
\035\006\003\125\035\016\004\026\004\024\144\024\174\374\130\162  
\026\246\012\051\064\025\157\052\313\274\374\257\250\253\060\016  
\006\003\125\035\017\001\001\377\004\004\003\002\001\006\060\017  
\006\003\125\035\023\001\001\377\004\005\060\003\001\001\377\060  
\015\006\011\052\206\110\206\367\015\001\001\014\005\000\003\202  
\002\001\000\334\002\043\010\342\357\041\072\307\015\267\046\322  
\142\223\247\245\043\162\007\040\202\140\337\030\327\124\255\151  
\045\222\236\331\024\317\231\271\122\201\317\256\154\212\073\132

\071\310\154\001\103\302\042\155\002\360\142\315\116\143\103\300  
\024\332\364\143\360\352\364\161\356\116\207\343\161\251\364\311  
\127\345\056\137\034\171\273\043\252\207\104\127\351\275\065\115  
\101\273\113\050\243\230\262\033\331\013\027\007\345\367\352\235  
\365\166\327\277\304\266\201\130\377\310\377\144\151\142\171\255  
\156\016\037\177\356\035\151\345\267\162\161\263\376\245\001\065  
\224\124\053\300\122\155\217\125\304\311\322\270\313\312\064\010  
\121\205\240\365\274\264\027\130\352\012\134\172\275\143\306\072  
\057\377\226\111\031\204\352\147\330\004\261\141\364\000\133\112  
\267\234\161\067\031\205\171\277\201\260\307\023\016\166\161\076  
\072\200\006\256\006\026\247\215\265\302\304\313\377\100\245\134  
\215\245\311\072\355\162\201\312\134\230\074\322\064\003\167\010  
\375\360\051\131\135\041\010\307\140\277\244\161\173\270\331\036  
\202\276\011\257\145\157\050\253\277\113\265\356\076\010\107\047  
\240\017\157\017\213\077\254\225\030\363\271\016\334\147\125\156  
\142\236\106\016\321\004\170\312\162\256\166\331\245\370\262\337  
\210\011\141\213\357\044\116\321\131\077\132\324\075\311\223\074  
\053\144\365\201\015\026\226\367\222\303\376\061\157\350\052\062  
\164\016\364\114\230\112\030\016\060\124\325\305\353\274\305\025  
\236\350\231\041\353\047\053\011\012\333\361\346\160\030\126\273  
\014\344\276\371\350\020\244\023\222\270\034\340\333\147\035\123  
\003\244\042\247\334\135\222\020\074\352\377\374\033\020\032\303  
\330\320\234\235\145\313\320\053\047\061\003\036\066\341\075\166  
\165\014\377\105\046\271\335\121\274\043\307\137\330\330\207\020  
\100\022\015\075\070\067\347\104\074\030\300\123\011\144\217\377  
\325\232\246\174\160\056\163\125\041\350\337\377\203\271\035\076  
\062\036\326\246\175\054\361\146\351\134\035\247\243\316\136\045  
\062\053\343\225\254\052\007\316\264\050\170\206\074\055\246\235  
\115\322\164\060\335\144\121\025\333\203\203\121\327\257\375\063  
\235\115\146

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "Security Communication RootCA3"

# Issuer: CN=Security Communication RootCA3,O="SECOM Trust Systems CO.,LTD.",C=JP

# Serial Number:00:e1:7c:37:40:fd:1b:fe:67

# Subject: CN=Security Communication RootCA3,O="SECOM Trust Systems CO.,LTD.",C=JP

# Not Valid Before: Thu Jun 16 06:17:16 2016

# Not Valid After : Mon Jan 18 06:17:16 2038

# Fingerprint (SHA-256):

24:A5:5C:2A:B0:51:44:2D:06:17:76:65:41:23:9A:4A:D0:32:D7:C5:51:75:AA:34:FF:DE:2F:BC:4F:5C:52:94

#

Fingerprint (SHA1): C3:03:C8:22:74:92:E5:61:A2:9C:5F:79:91:2B:1E:44:13:91:30:3A

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE



```

CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Security Communication RootCA3"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\303\003\310\042\164\222\345\141\242\234\137\171\221\053\036\104
\023\221\060\072
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\034\232\026\377\236\134\340\115\212\024\001\364\065\135\051\046
END
CKA_ISSUER MULTILINE_OCTAL
\060\135\061\013\060\011\006\003\125\004\006\023\002\112\120\061
\045\060\043\006\003\125\004\012\023\034\123\105\103\117\115\040
\124\162\165\163\164\040\123\171\163\164\145\155\163\040\103\117
\056\054\114\124\104\056\061\047\060\045\006\003\125\004\003\023
\036\123\145\143\165\162\151\164\171\040\103\157\155\155\165\156
\151\143\141\164\151\157\156\040\122\157\157\164\103\101\063
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\011\000\341\174\067\100\375\033\376\147
END
CKA_TRUST_SERVER_AUTH
CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "Security Communication ECC RootCA1"
#
# Issuer: CN=Security Communication ECC RootCA1,O="SECOM Trust Systems CO.,LTD.",C=JP
# Serial Number:00:d6:5d:9b:b3:78:81:2e:eb
# Subject: CN=Security Communication ECC RootCA1,O="SECOM Trust Systems CO.,LTD.",C=JP
# Not Valid Before: Thu Jun 16 05:15:28 2016
# Not Valid After : Mon Jan 18 05:15:28 2038
# Fingerprint (SHA-256):
E7:4F:BD:A5:5B:D5:64:C4:73:A3:6B:44:1A:A7:99:C8:A6:8E:07:74:40:E8:28:8B:9F:A1:E5:0E:4B:BA:CA:11
# Fingerprint (SHA1): B8:0E:26:A9:BF:D2:B2:3B:C0:EF:46:C9:BA:C7:BB:F6:1D:0D:41:41
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Security Communication ECC RootCA1"
CKA_CERTIFICATE_TYPE
CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\141\061\013\060\011\006\003\125\004\006\023\002\112\120\061
\045\060\043\006\003\125\004\012\023\034\123\105\103\117\115\040

```

\124\162\165\163\164\040\123\171\163\164\145\155\163\040\103\117  
\056\054\114\124\104\056\061\053\060\051\006\003\125\004\003\023  
\042\123\145\143\165\162\151\164\171\040\103\157\155\155\165\156  
\151\143\141\164\151\157\156\040\105\103\103\040\122\157\157\164  
\103\101\061

END

CKA\_ID UTF8 "0"

CKA\_ISSUER MULTILINE\_OCTAL

\060\141\061\013\060\011\006\003\125\004\006\023\002\112\120\061  
\045\060\043\006\003\125\004\012\023\034\123\105\103\117\115\040  
\124\162\165\163\164\040\123\171\163\164\145\155\163\040\103\117  
\056\054\114\124\104\056\061\053\060\051\006\003\125\004\003\023  
\042\123\145\143\165\162\151\164\171\040\103\157\155\155\165\156  
\151\143\141\164\151\157\156\040\105\103\103\040\122\157\157\164  
\103\101\061

END

CKA\_SERIAL\_NUMBER MULTILINE\_OCTAL

\002\011\000\326\135\233\263\170\201\056\353

END

CKA\_VALUE

MULTILINE\_OCTAL

\060\202\002\070\060\202\001\276\240\003\002\001\002\002\011\000  
\326\135\233\263\170\201\056\353\060\012\006\010\052\206\110\316  
\075\004\003\003\060\141\061\013\060\011\006\003\125\004\006\023  
\002\112\120\061\045\060\043\006\003\125\004\012\023\034\123\105  
\103\117\115\040\124\162\165\163\164\040\123\171\163\164\145\155  
\163\040\103\117\056\054\114\124\104\056\061\053\060\051\006\003  
\125\004\003\023\042\123\145\143\165\162\151\164\171\040\103\157  
\155\155\165\156\151\143\141\164\151\157\156\040\105\103\103\040  
\122\157\157\164\103\101\061\060\036\027\015\061\066\060\066\061  
\066\060\065\061\065\062\070\132\027\015\063\070\060\061\061\070  
\060\065\061\065\062\070\132\060\141\061\013\060\011\006\003\125  
\004\006\023\002\112\120\061\045\060\043\006\003\125\004\012\023  
\034\123\105\103\117\115\040\124\162\165\163\164\040\123\171\163  
\164\145\155\163\040\103\117\056\054\114\124\104\056\061\053\060  
\051\006\003\125\004\003\023\042\123\145\143\165\162\151\164\171  
\040\103\157\155\155\165\156\151\143\141\164\151\157\156\040\105  
\103\103\040\122\157\157\164\103\101\061\060\166\060\020\006\007  
\052\206\110\316\075\002\001\006\005\053\201\004\000\042\003\142  
\000\004\244\245\157\140\003\003\303\275\061\364\323\027\234\053  
\204\165\254\345\375\075\127\156\327\143\277\346\004\211\222\216  
\201\234\343\351\107\156\312\220\022\310\023\340\247\235\367\145  
\164\037\154\020\262\350\344\351\357\155\205\062\231\104\261\136  
\375\314\166\020\330\133\275\242\306\371\326\102\344\127\166\334  
\220\302\065\251\113\210\074\022\107\155\134\377\111\117\032\112  
\120\261\243\102\060\100\060\035\006\003\125\035\016\004\026\004  
\024\206\034\347\376\055\245\112\213\010\376\050\021\372\276\243  
\146\370\140\131\057\060\016\006\003\125\035\017\001\001\377\004

```
\004\003\002\001\006\060\017\006\003\125\035\023\001\001\377\004
\005\060\003\001\001\377\060\012\006\010\052\206\110\316\075\004
\003\003\003\150\000\060\145\002\060\025\135\102\075\374\266\356
\367\073\261\066\350\236\366\304\106\050\111\063\320\130\103\052
\143\051\314\115\261\264\172\242\271\015\070\245\135\110\052\375
\313\262\163\135\243\210\010\307\014\002\061\000\300\253\055\016
\155\355\030\242\333\123\351\045\333\125\010\340\120\314\337\104
\141\026\202\253\111\260\262\201\354\163\207\170\264\114\262\142
\033\022\372\026\115\045\113\143\275\036\067\331
```

END

CKA\_NSS\_Mozilla\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "Security Communication ECC RootCA1"

# Issuer: CN=Security Communication ECC RootCA1,O="SECOM Trust Systems CO.,LTD.",C=JP

# Serial Number:00:d6:5d:9b:b3:78:81:2e:eb

# Subject: CN=Security Communication ECC RootCA1,O="SECOM Trust Systems CO.,LTD.",C=JP

# Not Valid Before: Thu Jun 16 05:15:28 2016

# Not Valid After : Mon Jan 18 05:15:28 2038

# Fingerprint (SHA-256):

E7:4F:BD:A5:5B:D5:64:C4:73:A3:6B:44:1A:A7:99:C8:A6:8E:07:74:40:E8:28:8B:9F:A1:E5:0E:4B:BA:CA:11

# Fingerprint (SHA1):

B8:0E:26:A9:BF:D2:B2:3B:C0:EF:46:C9:BA:C7:BB:F6:1D:0D:41:41

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "Security Communication ECC RootCA1"

CKA\_CERT\_SHA1\_HASH MULTILINE\_OCTAL

```
\270\016\046\251\277\322\262\073\300\357\106\311\272\307\273\366
\035\015\101\101
```

END

CKA\_CERT\_MD5\_HASH MULTILINE\_OCTAL

```
\176\103\260\222\150\354\005\103\114\230\253\135\065\056\176\206
```

END

CKA\_ISSUER MULTILINE\_OCTAL

```
\060\141\061\013\060\011\006\003\125\004\006\023\002\112\120\061
\045\060\043\006\003\125\004\012\023\034\123\105\103\117\115\040
\124\162\165\163\164\040\123\171\163\164\145\155\163\040\103\117
\056\054\114\124\104\056\061\053\060\051\006\003\125\004\003\023
\042\123\145\143\165\162\151\164\171\040\103\157\155\155\165\156
\151\143\141\164\151\157\156\040\105\103\103\040\122\157\157\164
\103\101\061
```

END

CKA\_SERIAL\_NUMBER MULTILINE\_OCTAL

```
\002\011\000\326\135\233\263\170\201\056\353
```

```

END
CKA_TRUST_SERVER_AUTH
CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "BJCA Global Root CA1"
#
# Issuer: CN=BJCA Global Root CA1,O=BEIJING CERTIFICATE AUTHORITY,C=CN
# Serial Number:55:6f:65:e3:b4:d9:90:6a:1b:09:d1:6c:3e:c0:6c:20
# Subject: CN=BJCA Global Root CA1,O=BEIJING CERTIFICATE AUTHORITY,C=CN
# Not Valid Before: Thu Dec 19 03:16:17 2019
# Not Valid After : Mon Dec 12 03:16:17 2044
# Fingerprint (SHA-256):
F3:89:6F:88:FE:7C:0A:88:27:66:A7:FA:6A:D2:74:9F:B5:7A:7F:3E:98:FB:76:9C:1F:A7:B0:9C:2C:44:D5:AE
# Fingerprint (SHA1): D5:EC:8D:7B:4C:BA:79:F4:E7:E8:CB:9D:6B:AE:77:83:10:03:21:6A
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "BJCA Global Root CA1"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\124\061\013\060\011\006\003\125\004\006\023\002\103\116\061
\046\060\044\006\003\125\004\012\014\035\102\105\111\112\111\116
\107\040\103\105\122\124\111\106\111\103\101\124\105\040\101\125
\124\110\117\122\111\124\131\061\035\060\033\006\003\125\004\003
\014\024\102\112\103\101\040\107\154\157\142\141\154\040\122\157
\157\164\040\103\101\061
END
CKA_ID
UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\124\061\013\060\011\006\003\125\004\006\023\002\103\116\061
\046\060\044\006\003\125\004\012\014\035\102\105\111\112\111\116
\107\040\103\105\122\124\111\106\111\103\101\124\105\040\101\125
\124\110\117\122\111\124\131\061\035\060\033\006\003\125\004\003
\014\024\102\112\103\101\040\107\154\157\142\141\154\040\122\157
\157\164\040\103\101\061
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\020\125\157\145\343\264\331\220\152\033\011\321\154\076\300
\154\040
END
CKA_VALUE MULTILINE_OCTAL
\060\202\005\164\060\202\003\134\240\003\002\001\002\002\020\125

```

\157\145\343\264\331\220\152\033\011\321\154\076\300\154\040\060  
\015\006\011\052\206\110\206\367\015\001\001\013\005\000\060\124  
\061\013\060\011\006\003\125\004\006\023\002\103\116\061\046\060  
\044\006\003\125\004\012\014\035\102\105\111\112\111\116\107\040  
\103\105\122\124\111\106\111\103\101\124\105\040\101\125\124\110  
\117\122\111\124\131\061\035\060\033\006\003\125\004\003\014\024  
\102\112\103\101\040\107\154\157\142\141\154\040\122\157\157\164  
\040\103\101\061\060\036\027\015\061\071\061\062\061\071\060\063  
\061\066\061\067\132\027\015\064\064\061\062\061\062\060\063\061  
\066\061\067\132\060\124\061\013\060\011\006\003\125\004\006\023  
\002\103\116\061\046\060\044\006\003\125\004\012\014\035\102\105  
\111\112\111\116\107\040\103\105\122\124\111\106\111\103\101\124  
\105\040\101\125\124\110\117\122\111\124\131\061\035\060\033\006  
\003\125\004\003\014\024\102\112\103\101\040\107\154\157\142\141  
\154\040\122\157\157\164\040\103\101\061\060\202\002\042\060\015  
\006\011\052\206\110\206\367\015\001\001\001\005\000\003\202\002  
\017\000\060\202\002\012\002\202\002\001\000\361\146\010\275\331  
\305\025\141\313\204\004\101\245\151\067\167\035\301\260\173\372  
\303\167\110\220\023\162\144\321\270\174\220\065\235\030\171\210  
\343\227\001\074\107\201\362\016\242\230\015\236\077\067\340\031  
\262\220\362\106\034\222\261\072\141\316\372\267\106\236\003\206  
\327\063\156\355\367\105\214\166\067\336\156\226\221\367\327\176  
\053\207\027\325\213\065\356\204\221\162\127\334\140\303\303\271  
\347\307\147\044\043\117\143\012\143\366\146\175\113\125\247\077  
\170\144\111\151\022\227\340\114\015\323\011\240\062\060\072\372  
\237\300\362\234\305\022\052\056\034\265\004\063\332\244\070\021  
\152\336\306\030\366\107\072\042\101\207\042\374\304\211\050\124  
\330\214\245\060\012\370\027\026\312\254\067\375\171\247\221\027  
\170\070\231\255\130\355\262\336\314\211\175\003\234\263\211\145  
\347\343\073\261\042\206\217\006\155\170\007\375\221\022\177\260  
\153\034\211\015\371\270\313\164\133\007\302\310\364\065\321\144  
\143\172\351\156\232\050\326\060\275\346\033\335\025\257\204\352  
\234\307\312\365\016\352\362\135\051\207\217\151\163\071\276\056  
\044\157\105\041\254\305\324\151\045\006\203\255\172\110\205\023  
\054\015\006\270\154\171\126\374\243\147\062\201\365\127\245\312  
\127\102\151\351\134\044\141\357\342\060\030\116\104\230\125\157  
\172\302\223\330\031\266\336\174\107\212\021\116\111\107\333\050  
\224\002\013\224\112\054\371\022\320\117\350\061\176\154\172\277  
\246\077\233\071\075\002\026\243\030\263\147\254\133\077\054\203  
\053\147\071\201\134\271\176\224\325\144\335\236\217\156\256\350  
\174\133\264\327\152\107\110\327\176\263\324\055\216\126\166\116  
\317\151\361\156\104\154\324\044\352\215\044\241\030\277\275\127  
\376\251\231\065\265\333\020\167\270\075\110\272\326\301\347\361  
\043\076\327\337\205\235\047\074\324\100\275\012\014\275\365\347  
\215\045\326\201\164\207\106\324\051\165\242\102\154\367\163\211  
\347\175\277\172\112\037\323\042\311\025\125\317\337\157\174\125  
\320\244\213\007\021\067\137\203\246\046\127\246\001\133\176\376  
\130\150\007\251\351\172\331\271\350\377\120\037\253\302\264\300

\316\350\352\375\017\275\215\115\270\274\161\002\003\001\000\001  
\243\102\060\100\060\035\006\003\125\035\016\004\026\004\024\305  
\357\355\314\330\215\041\306\110\344\343\327\024\056\247\026\223  
\345\230\001\060\017\006\003\125\035\023\001\001\377\004\005\060  
\003\001\001\377\060\016\006\003\125\035\017\001\001\377\004\004  
\003\002\001\006\060\015\006\011\052\206\110\206\367\015\001\001  
\013\005\000\003\202\002\001\000\122\202\254\041\064\037\043\362  
\242\330\371\270\257\067\066\040\211\321\067\003\326\151\237\270  
\141\020\272\242\061\230\131\107\350\321\015\045\036\025\101\014  
\340\052\125\325\127\122\313\370\344\307\151\243\035\115\161\002  
\136\137\041\105\140\110\134\011\216\111\020\301\004\334\251\142  
\153\002\360\103\310\116\235\070\111\164\311\062\160\124\155\301  
\107\374\216\264\066\236\324\234\275\335\040\326\123\311\030\251  
\265\126\271\166\213\225\147\146\356\275\230\376\256\357\276\156  
\373\140\366\375\131\306\052\033\077\043\112\224\044\060\047\310  
\211\274\353\104\044\232\313\075\276\117\325\172\316\216\027\313  
\142\301\331\336\036\016\172\377\103\206\064\122\274\141\077\074  
\137\273\331\166\264\123\274\227\263\376\212\114\022\056\053\363  
\327\316\341\242\377\335\173\160\373\073\241\115\244\143\002\375  
\070\227\225\077\005\160\240\153\337\142\201\103\213\264\131\015  
\112\214\124\234\305\273\201\237\315\175\245\357\013\045\036\072  
\040\333\034\374\037\230\147\002\012\324\163\104\023\333\121\204  
\032\125\003\126\340\000\176\164\006\377\070\304\162\035\323\250  
\077\150\061\135\323\011\307\056\214\133\143\340\350\334\036\322  
\354\141\036\362\336\345\357\366\231\166\140\055\036\224\162\161  
\306\013\052\062\307\222\116\325\106\327\035\371\251\031\012\310  
\372\225\316\155\043\230\252\013\070\255\232\126\015\157\215\361  
\061\000\210\301\027\234\315\031\066\065\376\125\123\240\340\074  
\063\137\226\136\342\062\351\337\063\273\006\112\251\330\204\163  
\316\167\322\306\254\161\341\134\243\035\014\273\012\337\137\342  
\243\161\330\332\067\132\240\170\053\364\324\175\353\166\355\362  
\141\160\245\145\232\323\211\064\030\253\373\162\076\327\264\075  
\171\134\330\037\241\063\173\331\202\120\014\223\027\252\154\334  
\302\202\273\002\127\066\257\230\047\052\071\120\341\260\211\365  
\045\227\176\107\150\020\264\354\163\312\263\227\321\044\334\366  
\142\240\050\323\265\243\270\144\267\210\142\102\317\235\123\315  
\231\276\144\150\217\117\036\022\110\367\322\051\303\230\050\312  
\362\062\013\223\214\051\117\074\140\062\315\005\226\141\354\362  
\257\376\263\160\054\056\246\362

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "BJCA Global Root CA1"

# Issuer: CN=BJCA Global Root CA1,O=BEIJING CERTIFICATE AUTHORITY,C=CN

# Serial Number:55:6f:65:e3:b4:d9:90:6a:1b:09:d1:6c:3e:c0:6c:20

```
# Subject: CN=BJCA Global Root CA1,O=BEIJING CERTIFICATE AUTHORITY,C=CN
# Not Valid Before: Thu Dec 19 03:16:17
2019
# Not Valid After : Mon Dec 12 03:16:17 2044
# Fingerprint (SHA-256):
F3:89:6F:88:FE:7C:0A:88:27:66:A7:FA:6A:D2:74:9F:B5:7A:7F:3E:98:FB:76:9C:1F:A7:B0:9C:2C:44:D5:AE
# Fingerprint (SHA1): D5:EC:8D:7B:4C:BA:79:F4:E7:E8:CB:9D:6B:AE:77:83:10:03:21:6A
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "BJCA Global Root CA1"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\325\354\215\173\114\272\171\364\347\350\313\235\153\256\167\203
\020\003\041\152
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\102\062\231\166\103\063\066\044\065\007\202\233\050\371\320\220
END
CKA_ISSUER MULTILINE_OCTAL
\060\124\061\013\060\011\006\003\125\004\006\023\002\103\116\061
\046\060\044\006\003\125\004\012\014\035\102\105\111\112\111\116
\107\040\103\105\122\124\111\106\111\103\101\124\105\040\101\125
\124\110\117\122\111\124\131\061\035\060\033\006\003\125\004\003
\014\024\102\112\103\101\040\107\154\157\142\141\154\040\122\157
\157\164\040\103\101\061
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\020\125\157\145\343\264\331\220\152\033\011\321\154\076\300
\154\040
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "BJCA Global Root CA2"
#
# Issuer: CN=BJCA Global Root CA2,O=BEIJING CERTIFICATE AUTHORITY,C=CN
# Serial Number:2c:17:08:7d:64:2a:c0:fe:85:18:59:06:cf:b4:4a:eb
# Subject: CN=BJCA Global Root CA2,O=BEIJING CERTIFICATE AUTHORITY,C=CN
# Not Valid Before: Thu Dec 19 03:18:21 2019
# Not Valid After : Mon Dec 12 03:18:21 2044
# Fingerprint (SHA-256):
57:4D:F6:93:1E:27:80:39:66:7B:72:0A:FD:C1:60:0F:C2:7E:B6:6D:D3:09:29:79:FB:73:85:64:87:21:28:82
# Fingerprint (SHA1): F4:27:86:EB:6E:B8:6D:88:31:67:02:FB:BA:66:A4:53:00:AA:7A:A6
```

```
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE
CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "BJCA Global Root CA2"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\124\061\013\060\011\006\003\125\004\006\023\002\103\116\061
\046\060\044\006\003\125\004\012\014\035\102\105\111\112\111\116
\107\040\103\105\122\124\111\106\111\103\101\124\105\040\101\125
\124\110\117\122\111\124\131\061\035\060\033\006\003\125\004\003
\014\024\102\112\103\101\040\107\154\157\142\141\154\040\122\157
\157\164\040\103\101\062
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\124\061\013\060\011\006\003\125\004\006\023\002\103\116\061
\046\060\044\006\003\125\004\012\014\035\102\105\111\112\111\116
\107\040\103\105\122\124\111\106\111\103\101\124\105\040\101\125
\124\110\117\122\111\124\131\061\035\060\033\006\003\125\004\003
\014\024\102\112\103\101\040\107\154\157\142\141\154\040\122\157
\157\164\040\103\101\062
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\020\054\027\010\175\144\052\300\376\205\030\131\006\317\264
\112\353
END
CKA_VALUE
MULTILINE_OCTAL
\060\202\002\045\060\202\001\253\240\003\002\001\002\002\020\054
\027\010\175\144\052\300\376\205\030\131\006\317\264\112\353\060
\012\006\010\052\206\110\316\075\004\003\003\060\124\061\013\060
\011\006\003\125\004\006\023\002\103\116\061\046\060\044\006\003
\125\004\012\014\035\102\105\111\112\111\116\107\040\103\105\122
\124\111\106\111\103\101\124\105\040\101\125\124\110\117\122\111
\124\131\061\035\060\033\006\003\125\004\003\014\024\102\112\103
\101\040\107\154\157\142\141\154\040\122\157\157\164\040\103\101
\062\060\036\027\015\061\071\061\062\061\071\060\063\061\070\062
\061\132\027\015\064\064\061\062\061\062\060\063\061\070\062\061
\132\060\124\061\013\060\011\006\003\125\004\006\023\002\103\116
\061\046\060\044\006\003\125\004\012\014\035\102\105\111\112\111
\116\107\040\103\105\122\124\111\106\111\103\101\124\105\040\101
\125\124\110\117\122\111\124\131\061\035\060\033\006\003\125\004
\003\014\024\102\112\103\101\040\107\154\157\142\141\154\040\122
\157\157\164\040\103\101\062\060\166\060\020\006\007\052\206\110
\316\075\002\001\006\005\053\201\004\000\042\003\142\000\004\235
\313\200\221\215\123\147\265\271\120\261\003\370\345\111\037\101
```



```
\042\011\260\121\122\130\326\053\064\217\305\022\106\024\305\213
\057\054\204\377\054\156\250\325\361\011\343\003\041\024\304\103
\075\174\301\054\304\113\152\112\315\351\207\340\175\366\042\276
\372\112\121\270\060\212\375\341\336\030\022\012\366\107\267\347
\027\277\047\212\324\101\114\226\074\140\226\301\375\025\034\243
\102\060\100\060\035\006\003\125\035\016\004\026\004\024\322\112
\261\121\177\006\360\321\202\037\116\156\137\253\203\374\110\324
\260\221\060\017\006\003\125\035\023\001\001\377\004\005\060\003
\001\001\377\060\016\006\003\125\035\017\001\001\377\004\004\003
\002\001\006\060\012\006\010\052\206\110\316\075\004\003\003\003
\150\000\060\145\002\060\032\274\133\327\376\251\322\124\016\112
\135\322\155\261\100\334\364\103\325\322\112\231\031\022\126\200
\367\203\064\341\065\116\110\155\004\017\127\061\060\060\055\261
\252\235\003\070\333\006\002\061\000\313\314\207\123\313\172\337
\040\121\163\220\300\250\133\141\320\305\120\071\375\205\376\301
\343\170\370\246\326\113\275\233\207\217\017\345\326\123\226\253
\074\310\100\332\141\367\123\243\367
```

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "BJCA Global Root CA2"

# Issuer: CN=BJCA Global Root CA2,O=BEIJING CERTIFICATE AUTHORITY,C=CN

# Serial Number:2c:17:08:7d:64:2a:c0:fe:85:18:59:06:cf:b4:4a:eb

# Subject: CN=BJCA Global Root CA2,O=BEIJING CERTIFICATE AUTHORITY,C=CN

# Not Valid Before: Thu Dec 19 03:18:21 2019

# Not Valid After : Mon Dec 12 03:18:21 2044

# Fingerprint (SHA-256):

57:4D:F6:93:1E:27:80:39:66:7B:72:0A:FD:C1:60:0F:C2:7E:B6:6D:D3:09:29:79:FB:73:85:64:87:21:28:82

# Fingerprint (SHA1): F4:27:86:EB:6E:B8:6D:88:31:67:02:FB:BA:66:A4:53:00:AA:7A:A6

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN

CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "BJCA Global Root CA2"

CKA\_CERT\_SHA1\_HASH MULTILINE\_OCTAL

```
\364\047\206\353\156\270\155\210\061\147\002\373\272\146\244\123
\000\252\172\246
```

END

CKA\_CERT\_MD5\_HASH MULTILINE\_OCTAL

```
\136\012\366\107\137\246\024\350\021\001\225\077\115\001\353\074
```

END

CKA\_ISSUER MULTILINE\_OCTAL

```
\060\124\061\013\060\011\006\003\125\004\006\023\002\103\116\061
\046\060\044\006\003\125\004\012\014\035\102\105\111\112\111\116
```

```
\107\040\103\105\122\124\111\106\111\103\101\124\105\040\101\125
\124\110\117\122\111\124\131\061\035\060\033\006\003\125\004\003
\014\024\102\112\103\101\040\107\154\157\142\141\154\040\122\157
\157\164\040\103\101\062
```

END

CKA\_SERIAL\_NUMBER MULTILINE\_OCTAL

```
\002\020\054\027\010\175\144\052\300\376\205\030\131\006\317\264
\112\353
```

END

CKA\_TRUST\_SERVER\_AUTH CK\_TRUST CKT\_NSS\_TRUSTED\_DELEGATOR

CKA\_TRUST\_EMAIL\_PROTECTION CK\_TRUST CKT\_NSS\_TRUSTED\_DELEGATOR

CKA\_TRUST\_CODE\_SIGNING CK\_TRUST

CKT\_NSS\_MUST\_VERIFY\_TRUST

CKA\_TRUST\_STEP\_UP\_APPROVED CK\_BBOOL CK\_FALSE

Found in path(s):

```
* /opt/cola/permits/1919538345_1710807720.5754924/0/ca-certificates-20230506-tar-bz2/ca-certificates-
20230506/certdata.txt
```

No license file was found, but licenses were detected in source scan.

```
#!/usr/bin/env perl
```

```
# *****
```

```
# *
```

```
# * Project      _ _ | | | _ \ |
```

```
# *             / _ | | | | ) |
```

```
# *             | ( _ | | | _ < | _ _
```

```
# *             \ _ | \ _ / | | \ \ _ _ |
```

```
# *
```

```
# * Copyright (C) 1998 - 2020, Daniel Stenberg, <daniel@haxx.se>, et al.
```

```
# *
```

```
# * This software is licensed as described in the file COPYING, which
```

```
# * you should have received as part of this distribution. The terms
```

```
# * are also available at https://curl.haxx.se/docs/copyright.html.
```

```
# *
```

```
# * You may opt to use, copy, modify, merge, publish, distribute and/or sell
```

```
# * copies of the Software, and permit persons to whom the Software is
```

```
# * furnished to do so, under the terms of the COPYING file.
```

```
# *
```

```
# * This software is distributed on an "AS IS" basis, WITHOUT
```

```
WARRANTY OF ANY
```

```
# * KIND, either express or implied.
```

```
# *
```

```
# *****
```

```
# This Perl script creates a fresh ca-bundle.crt file for use with libcurl.
```

```
# It downloads certdata.txt from Mozilla's source tree (see URL below),
```

```
# then parses certdata.txt and extracts CA Root Certificates into PEM format.
```

```
# These are then processed with the OpenSSL commandline tool to produce the
```

```
# final ca-bundle.crt file.
```

```

# The script is based on the parse-certs script written by Roland Krikava.
# This Perl script works on almost any platform since its only external
# dependency is the OpenSSL commandline tool for optional text listing.
# Hacked by Guenter Knauf.
#
use Encode;
use Getopt::Std;
use MIME::Base64;
use strict;
use warnings;
use vars qw($opt_b $opt_d $opt_f $opt_h $opt_i $opt_k $opt_l $opt_m $opt_n $opt_p $opt_q $opt_s $opt_t $opt_u
$opt_v $opt_w);
use List::Util;
use Text::Wrap;
use Time::Local;
my $MOD_SHA = "Digest::SHA";
eval "require
$MOD_SHA";
if ($@) {
$MOD_SHA = "Digest::SHA::PurePerl";
eval "require $MOD_SHA";
}
eval "require LWP::UserAgent";

my %urls = (
'nss' =>
'https://hg.mozilla.org/projects/nss/raw-file/default/lib/ckfw/builtins/certdata.txt',
'central' =>
'https://hg.mozilla.org/mozilla-central/raw-file/default/security/nss/lib/ckfw/builtins/certdata.txt',
'beta' =>
'https://hg.mozilla.org/releases/mozilla-beta/raw-file/default/security/nss/lib/ckfw/builtins/certdata.txt',
'release' =>
'https://hg.mozilla.org/releases/mozilla-release/raw-file/default/security/nss/lib/ckfw/builtins/certdata.txt',
);

$opt_d = 'release';

# If the OpenSSL commandline is not in search path you can configure it here!
my $openssl = 'openssl';

my $version = '1.27';

$opt_w = 76; # default base64 encoded lines length

# default cert types to include in the output (default is to include CAs which may issue SSL server certs)
my $default_mozilla_trust_purposes = "SERVER_AUTH";
my $default_mozilla_trust_levels

```

```

= "TRUSTED_DELEGATOR";
$opt_p = $default_mozilla_trust_purposes . ":" . $default_mozilla_trust_levels;

my @valid_mozilla_trust_purposes = (
    "DIGITAL_SIGNATURE",
    "NON_REPUDIATION",
    "KEY_ENCIPHERMENT",
    "DATA_ENCIPHERMENT",
    "KEY_AGREEMENT",
    "KEY_CERT_SIGN",
    "CRL_SIGN",
    "SERVER_AUTH",
    "CLIENT_AUTH",
    "CODE_SIGNING",
    "EMAIL_PROTECTION",
    "IPSEC_END_SYSTEM",
    "IPSEC_TUNNEL",
    "IPSEC_USER",
    "TIME_STAMPING",
    "STEP_UP_APPROVED"
);

my @valid_mozilla_trust_levels = (
    "TRUSTED_DELEGATOR", # CAs
    "NOT_TRUSTED",      # Don't trust these certs.
    "MUST_VERIFY_TRUST", # This explicitly tells us that it ISN'T a CA but is otherwise ok. In other words, this
                        # should tell the app to ignore any other sources that claim this is a CA.
    "TRUSTED"          # This cert is trusted, but only for itself and not for delegates (i.e. it is not a CA).
);

my $default_signature_algorithms = $opt_s = "MD5";

my @valid_signature_algorithms = (
    "MD5",
    "SHA1",
    "SHA256",
    "SHA384",
    "SHA512"
);

$0 =~ s@.*(\/\\)@@;
$Getopt::Std::STANDARD_HELP_VERSION = 1;
getopts('bd:fhiklmnp:qs:tuvw:');

if(!defined($opt_d)) {
    # to make plain "-d" use not cause warnings, and actually still work
    $opt_d = 'release';
}

```

```

# Use predefined URL or else custom URL specified on command line.
my $url;
if(defined($urls{$opt_d})) {
    $url = $urls{$opt_d};
    if(!$opt_k && $url !~ /^https:\//i) {
        die "The URL for '$opt_d' is not HTTPS. Use -k to override (insecure).\n";
    }
}
else {
    $url = $opt_d;
}

my $curl = `curl -V`;

if ($opt_i) {
    print ("=" x 78 . "\n");
    print "Script Version      : $version\n";
    print "Perl Version           : $]\n";
    print "Operating System Name    : $^O\n";
    print "Getopt::Std.pm Version    : ${Getopt::Std::VERSION}\n";
    print "Encode::Encoding.pm Version : ${Encode::Encoding::VERSION}\n";
    print "MIME::Base64.pm Version   : ${MIME::Base64::VERSION}\n";
    print "LWP::UserAgent.pm
Version      : ${LWP::UserAgent::VERSION}\n" if($LWP::UserAgent::VERSION);
    print "LWP.pm Version      : ${LWP::VERSION}\n" if($LWP::VERSION);
    print "Digest::SHA.pm Version      : ${Digest::SHA::VERSION}\n" if ($Digest::SHA::VERSION);
    print "Digest::SHA::PurePerl.pm Version : ${Digest::SHA::PurePerl::VERSION}\n" if
($Digest::SHA::PurePerl::VERSION);
    print ("=" x 78 . "\n");
}

sub warning_message() {
    if ( $opt_d =~ m/^risk$/i ) { # Long Form Warning and Exit
        print "Warning: Use of this script may pose some risk:\n";
        print "\n";
        print " 1) If you use HTTP URLs they are subject to a man in the middle attack\n";
        print " 2) Default to 'release', but more recent updates may be found in other trees\n";
        print " 3) certdata.txt file format may change, lag time to update this script\n";
        print " 4) Generally unwise to blindly trust CAs without manual review & verification\n";
        print " 5) Mozilla apps use additional security
checks aren't represented in certdata\n";
        print " 6) Use of this script will make a security engineer grind his teeth and\n";
        print "    swear at you. :)\n";
        exit;
    } else { # Short Form Warning
        print "Warning: Use of this script may pose some risk, -d risk for more details.\n";
    }
}

```

```

}

sub HELP_MESSAGE() {
    print "Usage:\t${0} [-b] [-d<certdata>] [-f] [-i] [-k] [-l] [-n] [-p<purposes:levels>] [-q] [-s<algorithms>] [-t] [-u] [-v] [-w<l>] [<outputfile>]\n";
    print "\t-b\tbackup an existing version of ca-bundle.crt\n";
    print "\t-d\tspecify Mozilla tree to pull certdata.txt or custom URL\n";
    print "\t\t Valid names are:\n";
    print "\t\t ", join( ", ", map { ( $_ =~ m/$opt_d/ ) ? "$_ (default)" : "$_" } sort keys %urls ), "\n";
    print "\t-f\tforce rebuild even if certdata.txt is current\n";
    print "\t-i\tprint version info about used modules\n";
    print "\t-k\tallow URLs other than HTTPS, enable HTTP fallback (insecure)\n";
    print "\t-l\tprint license info about certdata.txt\n";
    print "\t-m\tinclude meta data in output\n";
    print "\t-n\tno download of certdata.txt (to use existing)\n";
    print wrap("\t\t", "\t\t", "-p\tlist of Mozilla trust purposes and levels for certificates to include in output. Takes the form of a comma separated list of purposes, a colon, and a comma separated list of levels. (default: $default_mozilla_trust_purposes:$default_mozilla_trust_levels)", "\n");
    print "\t\t Valid purposes are:\n";
    print wrap("\t\t ", "\t\t ", join( ", ", "ALL", @valid_mozilla_trust_purposes ), "\n");
    print "\t\t Valid levels are:\n";
    print wrap("\t\t ", "\t\t ", join( ", ", "ALL", @valid_mozilla_trust_levels ), "\n");
    print "\t-q\tbe really quiet (no progress output at all)\n";
    print wrap("\t\t", "\t\t", "-s\tcomma separated list of certificate signatures/hashes to output in plain text mode. (default: $default_signature_algorithms)\n");
    print "\t\t Valid signature algorithms are:\n";
    print wrap("\t\t ", "\t\t ", join( ", ", "ALL", @valid_signature_algorithms ), "\n");
    print "\t-t\tinclude plain text listing of certificates\n";
    print "\t-u\tunlink (remove) certdata.txt after processing\n";
    print "\t-v\tbe verbose and print out processed CAs\n";
    print "\t-w <l>\twrap base64 output lines after <l> chars (default: ${opt_w})\n";
    exit;
}

sub VERSION_MESSAGE() {
    print "${0} version ${version} running Perl ${[]} on ${^O}\n";
}

warning_message() unless ($opt_q || $url =~ m/^(ht|f)tps:/i );
HELP_MESSAGE() if ($opt_h);

sub report($@) {
    my $output = shift;

    print STDERR $output . "\n" unless $opt_q;
}

```

```

sub is_in_list($@) {
    my $target = shift;

    return defined(List::Util::first { $target eq $_ } @_);
}

# Parses $param_string as a case insensitive comma separated list with optional whitespace
# validates that only allowed parameters are supplied
sub parse_csv_param($$@) {
    my $description = shift;
    my $param_string = shift;
    my @valid_values = @_;

    my @values = map {
        s/^\s+//; # strip leading spaces
        s/\s+$//; # strip trailing spaces
        uc $_     # return the modified string as upper case
    } split( ',', $param_string );

    # Find all values which are not in the list of valid values or "ALL"
    my @invalid = grep { !is_in_list($_,"ALL",@valid_values) } @values;

    if ( scalar(@invalid) > 0 ) {
        # Tell the user which parameters were invalid and print the standard help message which will exit
        print "Error: Invalid ", $description, scalar(@invalid) == 1 ? " ? " : "s: ", join( ", ", map { "\"$_\""} @invalid ),
        "\n";
        HELP_MESSAGE();
    }

    @values = @valid_values if ( is_in_list("ALL",@values) );

    return @values;
}

sub sha256 {
    my $result;
    if ($Digest::SHA::VERSION || $Digest::SHA::PurePerl::VERSION) {
        open(FILE, $_[0]) or die "Can't open '$_[0]': $!";
        binmode(FILE);
        $result = $MOD_SHA->new(256)->addfile(*FILE)->hexdigest;
        close(FILE);
    } else {
        # Use OpenSSL command if Perl Digest::SHA modules not available
        $result = `"$openssl" dgst -r -sha256 "$_[0]"`;
        $result =~ s/^\([0-9a-f]{64}\) .+/$1/is;
    }
    return $result;
}

```

```

}

sub oldhash {
my $hash = "";
open(C, "<$_[0]>" || return 0;
while(<C>) {
    chomp;
    if($_ =~ /^#\# SHA256: (.*)/) {
        $hash = $1;
        last;
    }
}
close(C);
return $hash;
}

if ( $opt_p !~ m:/ ) {
    print "Error: Mozilla trust identifier list must include both purposes and levels\n";
    HELP_MESSAGE();
}

(my $included_mozilla_trust_purposes_string, my $included_mozilla_trust_levels_string) = split( ':', $opt_p );
my @included_mozilla_trust_purposes = parse_csv_param( "trust purpose",
$included_mozilla_trust_purposes_string, @valid_mozilla_trust_purposes );
my @included_mozilla_trust_levels = parse_csv_param( "trust level", $included_mozilla_trust_levels_string,
@valid_mozilla_trust_levels );

my @included_signature_algorithms = parse_csv_param( "signature algorithm", $opt_s,
@valid_signature_algorithms );

sub should_output_cert(%) {
    my
    %trust_purposes_by_level = @_;

    foreach my $level (@included_mozilla_trust_levels) {
        # for each level we want to output, see if any of our desired purposes are included
        return 1 if ( defined( List::Util::first { is_in_list( $_, @included_mozilla_trust_purposes ) }
@{$trust_purposes_by_level{$level}} ) );
    }

    return 0;
}

my $crt = $ARGV[0] || 'ca-bundle.crt';
(my $txt = $url) =~ s@(.*/\|?.*)@@g;

my $stdout = $crt eq '-';

```



```

my $resp;
my $fetched;

my $oldhash = oldhash($srt);

report "SHA256 of old file: $oldhash";

if(!$opt_n) {
report "Downloading $txt ...";

# If we have an HTTPS URL then use curl
if($url =~ /^https:\//i) {
if($curl) {
if($curl =~ /^Protocols:.* https(|$)/m) {
report "Get certdata with curl!";
my $proto = !$opt_k ? "--proto =https" : "";
my $quiet = $opt_q ? "-s" : "";
my @out = `curl -w % {response_code} $proto $quiet -o "$txt" "$url"`;
if(! $? && @out && $out[0] == 200) {
$fetched = 1;
report "Downloaded $txt";
}
else {
report "Failed downloading via HTTPS with curl!";
if(-e $txt && !unlink($txt)) {
report "Failed to remove '$txt': $!";
}
}
}
else {
report "curl lacks https support";
}
}
else {
report "curl not found";
}
}

# If nothing was fetched then use LWP
if(!$fetched) {
if($url =~ /^https:\//i) {
report "Falling back to HTTP";
$url =~ s/^https:\//http:\//i;
}
if(!$opt_k) {
report "URLs other than HTTPS are disabled by default, to enable use -k";
exit 1;
}
}

```

```

report "Get certdata with LWP!";
if(!defined(${LWP::UserAgent::VERSION})) {
    report "LWP is not available (LWP::UserAgent not found)";
    exit 1;
}
my $ua = new LWP::UserAgent(agent => "$0/$version");
$ua->env_proxy();
$response = $ua->mirror($url, $txt);
if($response && $response->code eq '304') {
    report "Not modified";
    exit 0 if -e $crt && !$opt_f;
}
else {
    $fetched = 1;
    report "Downloaded $txt";
}
if(!$response || $response->code !~ /^(?:200|304)$/) {
    report "Unable to download latest data: "
        . ($response? $response->code . ' - ' . $response->message : "LWP failed");
    exit 1 if -e $crt || !-r $txt;
}
}
}

my $filedate = $response ? $response->last_modified : (stat($txt))[9];
my $datesrc = "as of";
if(!$filedate) {
    # mxr.mozilla.org gave us a time, hg.mozilla.org does not!
    $filedate = time();
    $datesrc="downloaded on";
}

# get the hash from the download file
my $newhash= sha256($txt);

if(!$opt_f && $oldhash eq $newhash) {
    report "Downloaded file identical to previous run's source file. Exiting";
    if($opt_u && -e $txt && !unlink($txt)) {
        report "Failed to remove $txt: $!\n";
    }
    exit;
}

report "SHA256 of new file: $newhash";

my $currentdate = scalar gmtime($filedate);

my $format = $opt_t ? "plain text and " : "";

```

```

if( $stdout
) {
    open(CRT, '> -') or die "Couldn't open STDOUT: $!\n";
} else {
    open(CRT, ">$crt.~") or die "Couldn't open $crt.~: $!\n";
}
print CRT <<EOT;
##
## Bundle of CA Root Certificates
##
## Certificate data from Mozilla ${datesrc}: ${currentdate} GMT
##
## This is a bundle of X.509 certificates of public Certificate Authorities
## (CA). These were automatically extracted from Mozilla's root certificates
## file (certdata.txt). This file can be found in the mozilla source tree:
## ${url}
##
## It contains the certificates in ${format}PEM format and therefore
## can be directly used with curl / libcurl / php_curl, or with
## an Apache+mod_ssl webserver for SSL client authentication.
## Just configure this file as the SSLCACertificateFile.
##
## Conversion done with mk-ca-bundle.pl version $version.
## SHA256: $newhash
##

EOT

report "Processing '$txt' ...";
my $aname;
my $certnum = 0;
my $skipnum = 0;
my $start_of_cert = 0;
my @precert;
my $cka_value;
my $valid = 1;

open(TXT, "$txt")
or die "Couldn't open $txt: $!\n";
while (<TXT>) {
    if (/^\*\*\*\* BEGIN LICENSE BLOCK \*\*\*\*\*/) {
        print CRT;
        print if ($opt_l);
        while (<TXT>) {
            print CRT;
            print if ($opt_l);
            last if (/^\*\*\*\* END LICENSE BLOCK \*\*\*\*\*);
        }
    }
}

```

```

}
elseif(/^# (Issuer|Serial Number|Subject|Not Valid Before|Not Valid After |Fingerprint \((MD5\)|Fingerprint
\((SHA1\)):\)/) {
    push @precert, $_;
    $valid = 1;
    next;
}
}
elseif(/^#\^s*$/) {
    undef @precert;
    next;
}
}
chomp;

```

# Example:

```

# CKA_NSS_SERVER_DISTRUST_AFTER MULTILINE_OCTAL
# \062\060\060\066\061\067\060\060\060\060\060\132
# END

```

```

if (/^CKA_NSS_SERVER_DISTRUST_AFTER (CK_BBOOL CK_FALSE|MULTILINE_OCTAL)/) {
    if ($1 eq "MULTILINE_OCTAL") {
        my @timestamp;
        while (<TXT>) {
            last if (/^END/);
            chomp;
            my @octets = split(/\//);
            shift @octets;
            for (@octets) {
                push
@timestamp, chr(oct);
            }
        }
        # A trailing Z in the timestamp signifies UTC
        if ($timestamp[12] ne "Z") {
            report "distrust date stamp is not using UTC";
        }
        # Example date: 200617000000Z
        # Means 2020-06-17 00:00:00 UTC
        my $distrustat =
            timegm($timestamp[10] . $timestamp[11], # second
                $timestamp[8] . $timestamp[9], # minute
                $timestamp[6] . $timestamp[7], # hour
                $timestamp[4] . $timestamp[5], # day
                ($timestamp[2] . $timestamp[3]) - 1, # month
                "20" . $timestamp[0] . $timestamp[1]); # year
        if (time >= $distrustat) {
            # not trusted anymore
            $skipnum++;
            report "Skipping: $scaname is not trusted anymore" if ($opt_v);
        }
    }
}

```

```

        $valid = 0;
    }
    else {
        # still trusted
    }
}
next;
}

# this
is a match for the start of a certificate
if (/^CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE/) {
    $start_of_cert = 1
}
if ($start_of_cert && /^CKA_LABEL UTF8 \"(.*)\"/) {
    $scaname = $1;
}
my %trust_purposes_by_level;
if ($start_of_cert && /^CKA_VALUE MULTILINE_OCTAL/) {
    $ska_value="";
    while (<TXT>) {
        last if (/^END/);
        chomp;
        my @octets = split(/\//);
        shift @octets;
        for (@octets) {
            $ska_value .= chr(oct);
        }
    }
}
if(/^CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST/ && $valid) {
    # now scan the trust part to determine how we should trust this cert
    while (<TXT>) {
        last if (/^#/);
        if (/^CKA_TRUST_([A-Z_]+)\s+CK_TRUST\s+CKT_NSS_([A-Z_]+)\s*$/) {
            if ( !is_in_list($1,@valid_mozilla_trust_purposes) ) {
                report "Warning: Unrecognized trust purpose for cert: $scaname. Trust purpose: $1. Trust Level: $2";
            } elseif ( !is_in_list($2,@valid_mozilla_trust_levels) ) {
                report "Warning:
Unrecognized trust level for cert: $scaname. Trust purpose: $1. Trust Level: $2";
            } else {
                push @{$trust_purposes_by_level{$2}}, $1;
            }
        }
    }
}

if ( !should_output_cert(%trust_purposes_by_level) ) {
    $skipnum ++;
}

```

```

report "Skipping: $scaname" if ($opt_v);
} else {
my $data = $scka_value;
$scka_value = "";
my $encoded = MIME::Base64::encode_base64($data, "");
$encoded =~ s/(\.|\{1,$opt_w})/$1\n/g;
my $pem = "-----BEGIN CERTIFICATE-----\n"
    . $encoded
    . "-----END CERTIFICATE-----\n";
print CRT "\n$scaname\n";
print CRT @precert if($opt_m);
my $maxLength = length(decode('UTF-8', $scaname, Encode::FB_CROAK | Encode::LEAVE_SRC));
if ($opt_t) {
    foreach my $key (keys %trust_purposes_by_level) {
        my $string = $key . ": " . join(" ", @{$trust_purposes_by_level{$key}});
        $maxLength = List::Util::max( length($string), $maxLength
);
        print CRT $string . "\n";
    }
}
print CRT ("=" x $maxLength . "\n");
if (!$opt_t) {
    print CRT $pem;
} else {
my $pipe = "";
foreach my $hash (@included_signature_algorithms) {
    $pipe = "|$openssl x509 -" . $hash . " -fingerprint -noout -inform PEM";
    if (!$stdout) {
        $pipe .= " >> $crt.~";
        close(CRT) or die "Couldn't close $crt.~: $!";
    }
    open(TMP, $pipe) or die "Couldn't open openssl pipe: $!";
    print TMP $pem;
    close(TMP) or die "Couldn't close openssl pipe: $!";
    if (!$stdout) {
        open(CRT, ">>$crt.~") or die "Couldn't open $crt.~: $!";
    }
}
$pipe = "|$openssl x509 -text -inform PEM";
if (!$stdout) {
    $pipe .= " >> $crt.~";
    close(CRT) or die "Couldn't close $crt.~: $!";
}
open(TMP, $pipe) or die "Couldn't open openssl pipe: $!";
print TMP
$pem;
close(TMP) or die "Couldn't close openssl pipe: $!";
if (!$stdout) {

```

```

        open(CRT, ">>${cert}~") or die "Couldn't open ${cert}~: $!";
    }
}
report "Parsing: $aname" if ($opt_v);
$certnum ++;
$start_of_cert = 0;
}
undef @precert;
}

}
close(TXT) or die "Couldn't close $txt: $!\n";
close(CRT) or die "Couldn't close ${cert}~: $!\n";
unless( $stdout ) {
    if ($opt_b && -e $cert) {
        my $bk = 1;
        while (-e "${cert}~${bk}~") {
            $bk++;
        }
        rename $cert, "${cert}~${bk}~" or die "Failed to create backup ${cert}~${bk}~: $!\n";
    } elsif( -e $cert ) {
        unlink( $cert ) or die "Failed to remove $cert: $!\n";
    }
    rename "${cert}~", $cert or die "Failed to rename ${cert}~ to $cert: $!\n";
}
if($opt_u && -e $txt && !unlink($txt)) {
    report "Failed to remove $txt: $!\n";
}
report "Done ($certnum CA certs processed, $skipnum skipped).";

```

Found in path(s):

```
* /opt/cola/permits/1919538345_1710807720.5754924/0/ca-certificates-20230506-tar-bz2/ca-certificates-20230506/mk-ca-bundle.pl
```

# 1.186 gopkg-in-go-playground-validator-v8

## 8.18.2

### 1.186.1 Available under license :

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## 1.187 openssl 3.1.4-r6

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```

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# 1.193 ca-certificates-bundle 20240226-r0

## 1.193.1 Available under license :

No license file was found, but licenses were detected in source scan.

```
#!/usr/bin/env perl
# *****
# *
# * Project      _ _ _ _ _
# *             _||| _\||
# *             / _||| \||
# *             |(_||| _<|_
# *             \_|||/||\|_
# *
# * Copyright (C) 1998 - 2020, Daniel Stenberg, <daniel@haxx.se>, et al.
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# *
# *****
# This Perl script creates a fresh ca-bundle.crt file for use with libcurl.
# It downloads certdata.txt from Mozilla's source tree (see URL below),
# then parses certdata.txt and extracts CA Root Certificates into PEM format.
# These are then processed with the OpenSSL commandline tool to produce the
# final ca-bundle.crt file.
# The script is based on the parse-certs script written by Roland Krikava.
# This Perl script works on almost any platform since its only external
# dependency is the OpenSSL commandline tool for optional text listing.
# Hacked by Guenter Knauf.
#
```

```

use Encode;
use Getopt::Std;
use MIME::Base64;
use strict;
use warnings;
use vars qw($opt_b $opt_d $opt_f $opt_h $opt_i $opt_k $opt_l $opt_m $opt_n $opt_p $opt_q $opt_s $opt_t $opt_u
$opt_v $opt_w);
use List::Util;
use Text::Wrap;
use Time::Local;
my $MOD_SHA = "Digest::SHA";
eval "require
$MOD_SHA";
if ($@) {
$MOD_SHA = "Digest::SHA::PurePerl";
eval "require $MOD_SHA";
}
eval "require LWP::UserAgent";

my %urls = (
'nss' =>
'https://hg.mozilla.org/projects/nss/raw-file/default/lib/ckfw/builtins/certdata.txt',
'central' =>
'https://hg.mozilla.org/mozilla-central/raw-file/default/security/nss/lib/ckfw/builtins/certdata.txt',
'beta' =>
'https://hg.mozilla.org/releases/mozilla-beta/raw-file/default/security/nss/lib/ckfw/builtins/certdata.txt',
'release' =>
'https://hg.mozilla.org/releases/mozilla-release/raw-file/default/security/nss/lib/ckfw/builtins/certdata.txt',
);

$opt_d = 'release';

# If the OpenSSL commandline is not in search path you can configure it here!
my $openssl = 'openssl';

my $version = '1.27';

$opt_w = 76; # default base64 encoded lines length

# default cert types to include in the output (default is to include CAs which may issue SSL server certs)
my $default_mozilla_trust_purposes = "SERVER_AUTH";
my $default_mozilla_trust_levels
= "TRUSTED_DELEGATOR";
$opt_p = $default_mozilla_trust_purposes . ":" . $default_mozilla_trust_levels;

my @valid_mozilla_trust_purposes = (
"DIGITAL_SIGNATURE",
"NON_REPUDIATION",

```

```

"KEY_ENCIPHERMENT",
"DATA_ENCIPHERMENT",
"KEY_AGREEMENT",
"KEY_CERT_SIGN",
"CRL_SIGN",
"SERVER_AUTH",
"CLIENT_AUTH",
"CODE_SIGNING",
"EMAIL_PROTECTION",
"IPSEC_END_SYSTEM",
"IPSEC_TUNNEL",
"IPSEC_USER",
"TIME_STAMPING",
"STEP_UP_APPROVED"
);

my @valid_mozilla_trust_levels = (
"TRUSTED_DELEGATOR", # CAs
"NOT_TRUSTED",      # Don't trust these certs.
"MUST_VERIFY_TRUST", # This explicitly tells us that it ISN'T a CA but is otherwise ok. In other words, this
                    # should tell the app to ignore any other sources that claim this is a CA.
"TRUSTED"           # This cert is trusted, but only for itself and not for delegates (i.e. it is not a CA).
);

my $default_signature_algorithms = $opt_s = "MD5";

my @valid_signature_algorithms = (
"MD5",
"SHA1",
"SHA256",
"SHA384",
"SHA512"
);

$0 =~ s@.*(//\.)@@;
$Getopt::Std::STANDARD_HELP_VERSION = 1;
getopts('bd:fhiklmnp:qs:tuvw:');

if(!defined($opt_d)) {
    # to make plain "-d" use not cause warnings, and actually still work
    $opt_d = 'release';
}

# Use predefined URL or else custom URL specified on command line.
my $url;
if(defined($urls{$opt_d})) {
    $url = $urls{$opt_d};
    if(!$opt_k && $url !~ /^https:\/\/i/) {

```

```

    die "The URL for '$opt_d' is not HTTPS. Use -k to override (insecure).\n";
}
}
else {
    $url = $opt_d;
}

my $curl = `curl -V`;

if ($opt_i) {
    print ("=" x 78 . "\n");
    print "Script Version      : $version\n";
    print "Perl Version          : $]\n";
    print "Operating System Name    : $^O\n";
    print "Getopt::Std.pm Version    : ${Getopt::Std::VERSION}\n";
    print "Encode::Encoding.pm Version : ${Encode::Encoding::VERSION}\n";
    print "MIME::Base64.pm Version   : ${MIME::Base64::VERSION}\n";
    print "LWP::UserAgent.pm
Version      : ${LWP::UserAgent::VERSION}\n" if($LWP::UserAgent::VERSION);
    print "LWP.pm Version      : ${LWP::VERSION}\n" if($LWP::VERSION);
    print "Digest::SHA.pm Version      : ${Digest::SHA::VERSION}\n" if ($Digest::SHA::VERSION);
    print "Digest::SHA::PurePerl.pm Version : ${Digest::SHA::PurePerl::VERSION}\n" if
($Digest::SHA::PurePerl::VERSION);
    print ("=" x 78 . "\n");
}

sub warning_message() {
    if ( $opt_d =~ m/^risk$/i ) { # Long Form Warning and Exit
        print "Warning: Use of this script may pose some risk:\n";
        print "\n";
        print " 1) If you use HTTP URLs they are subject to a man in the middle attack\n";
        print " 2) Default to 'release', but more recent updates may be found in other trees\n";
        print " 3) certdata.txt file format may change, lag time to update this script\n";
        print " 4) Generally unwise to blindly trust CAs without manual review & verification\n";
        print " 5) Mozilla apps use additional security
checks aren't represented in certdata\n";
        print " 6) Use of this script will make a security engineer grind his teeth and\n";
        print "    swear at you. :)\n";
        exit;
    } else { # Short Form Warning
        print "Warning: Use of this script may pose some risk, -d risk for more details.\n";
    }
}

sub HELP_MESSAGE() {
    print "Usage: t${0} [-b] [-d<certdata>] [-f] [-i] [-k] [-l] [-n] [-p<purposes:levels>] [-q] [-s<algorithms>] [-t] [-u] [-
v] [-w<l>] [<outputfile>]\n";
    print "\t-b\tbackup an existing version of ca-bundle.crt\n";
}

```



```

print "\t-d\t specify Mozilla tree to pull certdata.txt or custom URL\n";
print "\t\t Valid names are:\n";
print "\t\t ", join( " ", map { ( $_ =~ m/$opt_d/ ) ? "$_ (default)" : "$_" } sort keys %urls ), "\n";
print "\t-f\t force rebuild even if certdata.txt is current\n";
print "\t-i\t print version info about used modules\n";
print "\t-k\t allow URLs other than HTTPS, enable HTTP fallback (insecure)\n";
print "\t-l\t print license info
about certdata.txt\n";
print "\t-m\t include meta data in output\n";
print "\t-n\t no download of certdata.txt (to use existing)\n";
print wrap("\t\t", "\t\t", "-p\t list of Mozilla trust purposes and levels for certificates to include in output. Takes the
form of a comma separated list of purposes, a colon, and a comma separated list of levels. (default:
$default_mozilla_trust_purposes:$default_mozilla_trust_levels)", "\n");
print "\t\t Valid purposes are:\n";
print wrap("\t\t ", "\t\t ", join( " ", "ALL", @valid_mozilla_trust_purposes ) ), "\n";
print "\t\t Valid levels are:\n";
print wrap("\t\t ", "\t\t ", join( " ", "ALL", @valid_mozilla_trust_levels ) ), "\n";
print "\t-q\t be really quiet (no progress output at all)\n";
print wrap("\t\t", "\t\t", "-s\t comma separated list of certificate signatures/ hashes to output in plain text mode. (default:
$default_signature_algorithms)\n");
print "\t\t Valid signature algorithms are:\n";
print wrap("\t\t ", "\t\t
", join( " ", "ALL", @valid_signature_algorithms ) ), "\n";
print "\t-t\t include plain text listing of certificates\n";
print "\t-u\t unlink (remove) certdata.txt after processing\n";
print "\t-v\t be verbose and print out processed CAs\n";
print "\t-w <l>\t wrap base64 output lines after <l> chars (default: ${opt_w})\n";
exit;
}

sub VERSION_MESSAGE() {
print "${0} version ${version} running Perl ${} on ${^O}\n";
}

warning_message() unless ($opt_q || $url =~ m/^(ht|f)tps/i );
HELP_MESSAGE() if ($opt_h);

sub report($@) {
my $output = shift;

print STDERR $output . "\n" unless $opt_q;
}

sub is_in_list($@) {
my $target = shift;

return defined(List::Util::first { $target eq $_ } @_);
}

```

```

# Parses $param_string as a case insensitive comma separated list with optional whitespace
# validates that only allowed parameters are supplied
sub parse_csv_param($$@) {
    my $description = shift;
    my $param_string = shift;
    my @valid_values = @_;

    my @values = map {
        s/^\s+//; # strip leading spaces
        s/\s+$//; # strip trailing spaces
        uc $_ # return the modified string as upper case
    } split( ',', $param_string );

    # Find all values which are not in the list of valid values or "ALL"
    my @invalid = grep { !is_in_list($_,"ALL",@valid_values) } @values;

    if ( scalar(@invalid) > 0 ) {
        # Tell the user which parameters were invalid and print the standard help message which will exit
        print "Error: Invalid ", $description, scalar(@invalid) == 1 ? " : " : "s: ", join( ", ", map { "\"$_\""} @invalid ),
        "\n";
        HELP_MESSAGE();
    }

    @values = @valid_values if ( is_in_list("ALL",@values) );

    return @values;
}

sub sha256 {
    my $result;
    if ($Digest::SHA::VERSION || $Digest::SHA::PurePerl::VERSION) {
        open(FILE, $_[0]) or die "Can't open '$_[0]': $!";
        binmode(FILE);
        $result = $MOD_SHA->new(256)->addfile(*FILE)->hexdigest;
        close(FILE);
    } else {
        # Use OpenSSL command if Perl Digest::SHA modules not available
        $result = `"$openssl" dgst -r -sha256 "$_[0]"`;
        $result =~ s/^\{[0-9a-f]{64}\} .+/$1/is;
    }
    return $result;
}

sub oldhash {
    my $hash = "";
    open(C, "<$_[0]") || return 0;

```

```

while(<C> ) {
  chomp;
  if($_ =~ /\#\# SHA256: (.*)/) {
    $hash = $1;
    last;
  }
}
close(C);
return $hash;
}

if ( $opt_p !~ m:/ ) {
  print "Error: Mozilla trust identifier list must include both purposes and levels\n";
  HELP_MESSAGE();
}

(my $included_mozilla_trust_purposes_string, my $included_mozilla_trust_levels_string) = split( ':', $opt_p );
my @included_mozilla_trust_purposes = parse_csv_param( "trust purpose",
$included_mozilla_trust_purposes_string, @valid_mozilla_trust_purposes );
my @included_mozilla_trust_levels = parse_csv_param( "trust level", $included_mozilla_trust_levels_string,
@valid_mozilla_trust_levels );

my @included_signature_algorithms = parse_csv_param( "signature algorithm", $opt_s,
@valid_signature_algorithms );

sub should_output_cert(%) {
  my
  %trust_purposes_by_level = @_;

  foreach my $level (@included_mozilla_trust_levels) {
    # for each level we want to output, see if any of our desired purposes are included
    return 1 if ( defined( List::Util::first { is_in_list( $_, @included_mozilla_trust_purposes ) }
@{ $trust_purposes_by_level{ $level } } ) );
  }

  return 0;
}

my $crt = $ARGV[0] || 'ca-bundle.crt';
(my $txt = $url) =~ s@(.*/\?.*)@@g;

my $stdout = $crt eq '-';
my $resp;
my $fetched;

my $oldhash = oldhash($crt);

report "SHA256 of old file: $oldhash";

```

```

if(!$opt_n) {
    report "Downloading $txt ...";

# If we have an HTTPS URL then use curl
if($url =~ /^https:\//i) {
    if($curl) {
        if($curl =~ /^Protocols:.* https(|$)/m) {
            report "Get certdata with curl!";
            my $proto = !$opt_k ? "--proto =https" : "";
            my $quiet = $opt_q ? "-s" : "";
            my @out = `curl -w %{response_code} $proto $quiet -o "$txt" "$url"`;
            if(!$_ && @out && $out[0] == 200) {
                $fetched = 1;
                report "Downloaded $txt";
            }
            else {
                report "Failed downloading via HTTPS with curl!";
                if(-e $txt && !unlink($txt)) {
                    report "Failed to remove '$txt': $!";
                }
            }
        }
        else {
            report "curl lacks https support";
        }
    }
    else {
        report "curl not found";
    }
}

# If nothing was fetched then use LWP
if(!$fetched) {
    if($url =~ /^https:\//i) {
        report "Falling back to HTTP";
        $url =~ s/^https:\//http:\//i;
    }
    if(!$opt_k) {
        report "URLs other than HTTPS are disabled by default, to enable use -k";
        exit 1;
    }
    report "Get certdata with LWP!";
    if(!defined($LWP::UserAgent::VERSION)) {
        report "LWP is not available (LWP::UserAgent not found)";
        exit 1;
    }
    my $ua = new LWP::UserAgent(agent => "$0/$version");

```

```

$ua->env_proxy();
$resp = $ua->mirror($url, $txt);
if($resp && $resp->code eq '304') {
    report "Not modified";
    exit 0 if -e $crt && !$opt_f;
}
else {
    $fetched = 1;
    report "Downloaded $txt";
}
if(!$resp || $resp->code !~ /^(?:200|304)$/) {
    report "Unable to download latest data: "
        . ($resp? $resp->code . ' - ' . $resp->message : "LWP failed");
    exit 1 if -e $crt || !-r $txt;
}
}
}

my $filedate = $resp ? $resp->last_modified : (stat($txt))[9];
my $datesrc = "as of";
if(!$filedate) {
    # mxr.mozilla.org gave us a time, hg.mozilla.org does not!
    $filedate = time();
    $datesrc="downloaded on";
}

# get the hash from the download file
my $newhash= sha256($txt);

if(!$opt_f && $oldhash eq $newhash) {
    report "Downloaded file identical to previous run's source file. Exiting";
    if($opt_u && -e $txt && !unlink($txt)) {
        report "Failed to remove $txt: $!\n";
    }
    exit;
}

report "SHA256 of new file: $newhash";

my $currentdate = scalar gmtime($filedate);

my $format = $opt_t ? "plain text and " : "";
if( $stdout
) {
    open(CRT, '> -') or die "Couldn't open STDOUT: $!\n";
} else {
    open(CRT, ">$crt.~") or die "Couldn't open $crt.~: $!\n";
}

```

```

print CRT <<EOT;
##
## Bundle of CA Root Certificates
##
## Certificate data from Mozilla ${datesrc}: ${currentdate} GMT
##
## This is a bundle of X.509 certificates of public Certificate Authorities
## (CA). These were automatically extracted from Mozilla's root certificates
## file (certdata.txt). This file can be found in the mozilla source tree:
## ${url}
##
## It contains the certificates in ${format}PEM format and therefore
## can be directly used with curl / libcurl / php_curl, or with
## an Apache+mod_ssl webserver for SSL client authentication.
## Just configure this file as the SSLCACertificateFile.
##
## Conversion done with mk-ca-bundle.pl version $version.
## SHA256: $newhash
##

EOT

report "Processing '$txt' ...";
my $scaname;
my $certnum = 0;
my $skipnum = 0;
my $start_of_cert = 0;
my @precert;
my $sca_value;
my $valid = 1;

open(TXT,"$txt")
or die "Couldn't open $txt: $!\n";
while (<TXT>) {
if (/^\*\*\*\* BEGIN LICENSE BLOCK \*\*\*\*$/) {
print CRT;
print if ($opt_l);
while (<TXT>) {
print CRT;
print if ($opt_l);
last if (/^\*\*\*\* END LICENSE BLOCK \*\*\*\*$/);
}
}
}
elsif(/^# (Issuer|Serial Number|Subject|Not Valid Before|Not Valid After |Fingerprint \|(MD5)|Fingerprint
\|(SHA1)):/) {
push @precert, $_;
$valid = 1;
next;
}

```

```

}
elseif(/^#\s*$/) {
    undef @precert;
    next;
}
chomp;

# Example:
# CKA_NSS_SERVER_DISTRICT_AFTER MULTILINE_OCTAL
# \062\060\060\066\061\067\060\060\060\060\060\060\132
# END

if (/^CKA_NSS_SERVER_DISTRICT_AFTER (CK_BBOOL CK_FALSE|MULTILINE_OCTAL)/) {
    if($1 eq "MULTILINE_OCTAL") {
        my @timestamp;
        while (<TXT>) {
            last if (/^END/);
            chomp;
            my @octets = split(/\|/);
            shift @octets;
            for (@octets) {
                push
@timestamp, chr(oct);
            }
        }
        # A trailing Z in the timestamp signifies UTC
        if($timestamp[12] ne "Z") {
            report "distrust date stamp is not using UTC";
        }
        # Example date: 200617000000Z
        # Means 2020-06-17 00:00:00 UTC
        my $distrustat =
            timegm($timestamp[10] . $timestamp[11], # second
                $timestamp[8] . $timestamp[9], # minute
                $timestamp[6] . $timestamp[7], # hour
                $timestamp[4] . $timestamp[5], # day
                ($timestamp[2] . $timestamp[3]) - 1, # month
                "20" . $timestamp[0] . $timestamp[1]); # year
        if(time >= $distrustat) {
            # not trusted anymore
            $skipnum++;
            report "Skipping: $scaname is not trusted anymore" if ($opt_v);
            $valid = 0;
        }
        else {
            # still trusted
        }
    }
}

```

```

    next;
}

# this
is a match for the start of a certificate
if (/^CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE/) {
    $start_of_cert = 1
}
if ($start_of_cert && /^CKA_LABEL UTF8 \"(.*)\"/) {
    $scaname = $1;
}
my %trust_purposes_by_level;
if ($start_of_cert && /^CKA_VALUE MULTILINE_OCTAL/) {
    $sca_value="";
    while (<TXT>) {
        last if (/^END/);
        chomp;
        my @octets = split(/\//);
        shift @octets;
        for (@octets) {
            $sca_value .= chr(oct);
        }
    }
}
if(/^CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST/ && $valid) {
    # now scan the trust part to determine how we should trust this cert
    while (<TXT>) {
        last if (/^#/);
        if (/^CKA_TRUST_([A-Z_]+)\s+CK_TRUST\s+CKT_NSS_([A-Z_]+)\s*$/) {
            if ( !is_in_list($1,@valid_mozilla_trust_purposes) ) {
                report "Warning: Unrecognized trust purpose for cert: $scaname. Trust purpose: $1. Trust Level: $2";
            } elsif ( !is_in_list($2,@valid_mozilla_trust_levels) ) {
                report "Warning:
Unrecognized trust level for cert: $scaname. Trust purpose: $1. Trust Level: $2";
            } else {
                push @{$trust_purposes_by_level{$2}}, $1;
            }
        }
    }
}

if ( !should_output_cert(%trust_purposes_by_level) ) {
    $skipnum ++;
    report "Skipping: $scaname" if ($opt_v);
} else {
    my $data = $sca_value;
    $sca_value = "";
    my $encoded = MIME::Base64::encode_base64($data, "");
    $encoded =~ s/(.{1,$opt_w})/$1\n/g;
}

```



```

my $pem = "-----BEGIN CERTIFICATE-----\n"
    . $encoded
    . "-----END CERTIFICATE-----\n";
print CRT "\n$aname\n";
print CRT @precert if($opt_m);
my $maxLength = length(decode('UTF-8', $aname, Encode::FB_CROAK | Encode::LEAVE_SRC));
if ($opt_t) {
    foreach my $key (keys %trust_purposes_by_level) {
        my $string = $key . ": " . join(" ", @{$trust_purposes_by_level{$key}});
        $maxLength = List::Util::max( length($string), $maxLength );
    };
    print CRT $string . "\n";
}
print CRT ("=" x $maxLength . "\n");
if (!$opt_t) {
    print CRT $pem;
} else {
    my $pipe = "";
    foreach my $hash (@included_signature_algorithms) {
        $pipe = "|$openssl x509 -" . $hash . " -fingerprint -noout -inform PEM";
        if (!$stdout) {
            $pipe .= " >> $crt.~";
            close(CRT) or die "Couldn't close $crt.~: $!";
        }
        open(TMP, $pipe) or die "Couldn't open openssl pipe: $!";
        print TMP $pem;
        close(TMP) or die "Couldn't close openssl pipe: $!";
        if (!$stdout) {
            open(CRT, ">>$crt.~") or die "Couldn't open $crt.~: $!";
        }
    }
    $pipe = "|$openssl x509 -text -inform PEM";
    if (!$stdout) {
        $pipe .= " >> $crt.~";
        close(CRT) or die "Couldn't close $crt.~: $!";
    }
    open(TMP, $pipe) or die "Couldn't open openssl pipe: $!";
    print TMP
    $pem;
    close(TMP) or die "Couldn't close openssl pipe: $!";
    if (!$stdout) {
        open(CRT, ">>$crt.~") or die "Couldn't open $crt.~: $!";
    }
}
report "Parsing: $aname" if ($opt_v);
$certnum++;
$start_of_cert = 0;

```

```

}
undef @precert;
}

}
close(TXT) or die "Couldn't close $txt: $!\n";
close(CRT) or die "Couldn't close $crt: $!\n";
unless( $stdout ) {
    if ($opt_b && -e $crt) {
        my $bk = 1;
        while (-e "$crt.~${bk}~") {
            $bk++;
        }
        rename $crt, "$crt.~${bk}~" or die "Failed to create backup $crt.~$bk}~: $!\n";
    } elsif( -e $crt ) {
        unlink( $crt ) or die "Failed to remove $crt: $!\n";
    }
    rename "$crt.~", $crt or die "Failed to rename $crt.~ to $crt: $!\n";
}
if($opt_u && -e $txt && !unlink($txt)) {
    report "Failed to remove $txt: $!\n";
}
}
report "Done ($certnum CA certs processed, $skipnum skipped).";

```

Found in path(s):

```
* /opt/cola/permits/1978342439_1713364772.434879/0/ca-certificates-bundle-20230506-r0-os-alpine-3-18-0-tar-
xz/ca-certificates-20230506-tar-bz2/ca-certificates-20230506/mk-ca-bundle.pl
```

No license file was found, but licenses were detected in source scan.

```
/* c_rehash.c - Create hash symlinks for certificates
```

```
* C implementation based on the original Perl and shell versions
```

```
*
```

```
* Copyright (c) 2013-2014 Timo Teräs <timo.teras@iki.fi>
```

```
* All rights reserved.
```

```
*
```

```
* This software is licensed under the MIT License.
```

```
* Full license available at: http://opensource.org/licenses/MIT
```

```
*/
```

Found in path(s):

```
* /opt/cola/permits/1978342439_1713364772.434879/0/ca-certificates-bundle-20230506-r0-os-alpine-3-18-0-tar-
xz/ca-certificates-20230506-tar-bz2/ca-certificates-20230506/c_rehash.c
```

No license file was found, but licenses were detected in source scan.

```
#
```

```
# This Source Code Form is subject to the terms of the Mozilla Public
```

```
# License, v. 2.0. If a copy of the MPL was not distributed with this
```

```
# file, You can obtain one at http://mozilla.org/MPL/2.0/.
```

```

#
# certdata.txt
#
# This file contains the object definitions for the certs and other
# information "built into" NSS.
#
# Object definitions:
#
# Certificates
#
# -- Attribute --      -- type --      -- value --
# CKA_CLASS            CK_OBJECT_CLASS  CKO_CERTIFICATE
# CKA_TOKEN            CK_BBOOL        CK_TRUE
# CKA_PRIVATE          CK_BBOOL        CK_FALSE
# CKA_MODIFIABLE       CK_BBOOL        CK_FALSE
# CKA_LABEL            UTF8            (varies)
# CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
# CKA_SUBJECT          DER+base64      (varies)
# CKA_ID               byte array      (varies)
#
# CKA_ISSUER           DER+base64      (varies)
# CKA_SERIAL_NUMBER   DER+base64      (varies)
# CKA_VALUE            DER+base64      (varies)
# CKA_NSS_EMAIL        ASCII7        (unused here)
# CKA_NSS_SERVER_DISTRUST_AFTER DER+base64      (varies)
# CKA_NSS_EMAIL_DISTRUST_AFTER DER+base64      (varies)
#
# Trust
#
# -- Attribute --      -- type --      -- value --
# CKA_CLASS            CK_OBJECT_CLASS  CKO_TRUST
# CKA_TOKEN            CK_BBOOL        CK_TRUE
# CKA_PRIVATE          CK_BBOOL        CK_FALSE
# CKA_MODIFIABLE       CK_BBOOL        CK_FALSE
# CKA_LABEL            UTF8            (varies)
# CKA_ISSUER           DER+base64      (varies)
# CKA_SERIAL_NUMBER   DER+base64      (varies)
# CKA_CERT_HASH        binary+base64    (varies)
# CKA_EXPIRES          CK_DATE
#
# (not used here)
# CKA_TRUST_DIGITAL_SIGNATURE CK_TRUST      (varies)
# CKA_TRUST_NON_REPUDIATION  CK_TRUST      (varies)
# CKA_TRUST_KEY_ENCIPHERMENT CK_TRUST      (varies)
# CKA_TRUST_DATA_ENCIPHERMENT CK_TRUST      (varies)
# CKA_TRUST_KEY_AGREEMENT    CK_TRUST      (varies)
# CKA_TRUST_KEY_CERT_SIGN    CK_TRUST      (varies)
# CKA_TRUST_CRL_SIGN         CK_TRUST      (varies)

```

```

# CKA_TRUST_SERVER_AUTH    CK_TRUST    (varies)
# CKA_TRUST_CLIENT_AUTH    CK_TRUST    (varies)
# CKA_TRUST_CODE_SIGNING   CK_TRUST    (varies)
# CKA_TRUST_EMAIL_PROTECTION CK_TRUST    (varies)
# CKA_TRUST_IPSEC_END_SYSTEM CK_TRUST    (varies)
# CKA_TRUST_IPSEC_TUNNEL   CK_TRUST    (varies)
# CKA_TRUST_IPSEC_USER     CK_TRUST    (varies)
# CKA_TRUST_TIME_STAMPING   CK_TRUST    (varies)
# CKA_TRUST_STEP_UP_APPROVED CK_BBOOL    (varies)
# (other
  trust attributes can be defined)
#

#
# The object to tell NSS that this is a root list and we don't
# have to go looking for others.
#
BEGINDATA
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_BUILTIN_ROOT_LIST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Mozilla Builtin Roots"

#
# Certificate "GlobalSign Root CA"
#
# Issuer: CN=GlobalSign Root CA,OU=Root CA,O=GlobalSign nv-sa,C=BE
# Serial Number:04:00:00:00:01:15:4b:5a:c3:94
# Subject: CN=GlobalSign Root CA,OU=Root CA,O=GlobalSign nv-sa,C=BE
# Not Valid Before: Tue Sep 01 12:00:00 1998
# Not Valid After : Fri Jan 28 12:00:00 2028
# Fingerprint (SHA-256):
EB:D4:10:40:E4:BB:3E:C7:42:C9:E3:81:D3:1E:F2:A4:1A:48:B6:68:5C:96:E7:CE:F3:C1:DF:6C:D4:33:1C:99
# Fingerprint (SHA1): B1:BC:96:8B:D4:F4:9D:62:2A:A8:9A:81:F2:15:01:52:A4:1D:82:9C
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "GlobalSign
  Root CA"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\127\061\013\060\011\006\003\125\004\006\023\002\102\105\061
\031\060\027\006\003\125\004\012\023\020\107\154\157\142\141\154
\123\151\147\156\040\156\166\055\163\141\061\020\060\016\006\003
\125\004\013\023\007\122\157\157\164\040\103\101\061\033\060\031
\006\003\125\004\003\023\022\107\154\157\142\141\154\123\151\147

```

\156\040\122\157\157\164\040\103\101  
END  
CKA\_ID UTF8 "0"  
CKA\_ISSUER MULTILINE\_OCTAL  
\060\127\061\013\060\011\006\003\125\004\006\023\002\102\105\061  
\031\060\027\006\003\125\004\012\023\020\107\154\157\142\141\154  
\123\151\147\156\040\156\166\055\163\141\061\020\060\016\006\003  
\125\004\013\023\007\122\157\157\164\040\103\101\061\033\060\031  
\006\003\125\004\003\023\022\107\154\157\142\141\154\123\151\147  
\156\040\122\157\157\164\040\103\101  
END  
CKA\_SERIAL\_NUMBER MULTILINE\_OCTAL  
\002\013\004\000\000\000\000\001\025\113\132\303\224  
END  
CKA\_VALUE MULTILINE\_OCTAL  
\060\202\003\165\060\202\002\135\240\003\002\001\002\002\013\004  
\000\000\000\000\001\025\113\132\303\224\060\015\006\011\052\206  
\110\206\367\015\001\001\005\005\000\060\127\061\013\060\011\006  
\003\125\004\006\023\002\102\105\061\031\060\027\006\003\125\004  
\012\023\020\107\154\157\142\141\154\123\151\147\156\040\156\166  
\055\163\141\061\020\060\016\006\003\125\004\013\023\007\122\157  
\157\164\040\103\101\061\033\060\031\006\003\125\004\003\023\022  
\107\154\157\142\141\154\123\151\147\156\040\122\157\157\164\040  
\103\101\060\036\027\015\071\070\060\071\060\061\061\062\060\060  
\060\060\132\027\015\062\070\060\061\062\070\061\062\060\060\060  
\060\132\060\127\061\013\060\011\006\003\125\004\006\023\002\102  
\105\061\031\060\027\006\003\125\004\012\023\020\107\154\157\142  
\141\154\123\151\147\156\040\156\166\055\163\141\061\020\060\016  
\006\003\125\004\013\023\007\122\157\157\164\040\103\101\061\033  
\060\031\006\003\125\004\003\023\022\107\154\157\142\141\154\123  
\151\147\156\040\122\157\157\164\040\103\101\060\202\001\042\060  
\015\006\011\052\206\110\206\367\015\001\001\001\005\000\003\202  
\001\017\000\060\202\001\012\002\202\001\001\000\332\016\346\231  
\215\316\243\343\117\212\176\373\361\213\203\045\153\352\110\037  
\361\052\260\271\225\021\004\275\360\143\321\342\147\146\317\034  
\335\317\033\110\053\356\215\211\216\232\257\051\200\145\253\351  
\307\055\022\313\253\034\114\160\007\241\075\012\060\315\025\215  
\117\370\335\324\214\120\025\034\357\120\356\304\056\367\374\351  
\122\362\221\175\340\155\325\065\060\216\136\103\163\362\101\351  
\325\152\343\262\211\072\126\071\070\157\006\074\210\151\133\052  
\115\305\247\124\270\154\211\314\233\371\074\312\345\375\211\365  
\022\074\222\170\226\326\334\164\156\223\104\141\321\215\307\106  
\262\165\016\206\350\031\212\325\155\154\325\170\026\225\242\351  
\310\012\070\353\362\044\023\117\163\124\223\023\205\072\033\274  
\036\064\265\213\005\214\271\167\213\261\333\037\040\221\253\011  
\123\156\220\316\173\067\164\271\160\107\221\042\121\143\026\171  
\256\261\256\101\046\010\310\031\053\321\106\252\110\326\144\052  
\327\203\064\377\054\052\301\154\031\103\112\007\205\347\323\174

```
\366\041\150\357\352\362\122\237\177\223\220\317\002\003\001\000
\001\243\102\060\100\060\016\006\003\125\035\017\001\001\377\004
\004\003\002\001\006\060\017\006\003\125\035\023\001\001\377\004
\005\060\003\001\001\377\060\035\006\003\125\035\016\004\026\004
\024\140\173\146\032\105\015\227\312\211\120\057\175\004\315\064
\250\377\374\375\113\060\015\006\011\052\206\110\206\367\015\001
\001\005\005\000\003\202\001\001\000\326\163\347\174\117\166\320
\215\277\354\272\242\276\064\305\050\062\265\174\374\154\234\054
\053\275\011\236\123\277\153\136\252\021\110\266\345\010\243\263
\312\075\141\115\323\106\011\263\076\303\240\343\143\125\033\362
\272\357\255\071\341\103\271\070\243\346\057\212\046\073\357\240
\120\126\371\306\012\375\070\315\304\013\160\121\224\227\230\004
\337\303\137\224\325\025\311\024\101\234\304\135\165\144\025\015
\377\125\060\354\206\217\377\015\357\054\271\143\106\366\252\374
\337\274\151\375\056\022\110\144\232\340\225\360\246\357\051\217
\001\261\025\265\014\035\245\376\151\054\151\044\170\036\263\247
\034\161\142\356\312\310\227\254\027\135\212\302\370\107\206\156
\052\304\126\061\225\320\147\211\205\053\371\154\246\135\106\235
\014\252\202\344\231\121\335\160\267\333\126\075\141\344\152\341
\134\326\366\376\075\336\101\314\007\256\143\122\277\123\123\364
\053\351\307\375\266\367\202\137\205\322\101\030\333\201\263\004
\034\305\037\244\200\157\025\040\311\336\014\210\012\035\326\146
\125\342\374\110\311\051\046\151\340
```

END

CKA\_NSS\_Mozilla\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "GlobalSign Root CA"

# Issuer: CN=GlobalSign Root CA,OU=Root CA,O=GlobalSign nv-sa,C=BE

# Serial Number:04:00:00:00:01:15:4b:5a:c3:94

# Subject: CN=GlobalSign Root CA,OU=Root CA,O=GlobalSign nv-sa,C=BE

# Not Valid Before: Tue Sep 01 12:00:00 1998

#

Not Valid After : Fri Jan 28 12:00:00 2028

# Fingerprint (SHA-256):

EB:D4:10:40:E4:BB:3E:C7:42:C9:E3:81:D3:1E:F2:A4:1A:48:B6:68:5C:96:E7:CE:F3:C1:DF:6C:D4:33:1C:99

# Fingerprint (SHA1): B1:BC:96:8B:D4:F4:9D:62:2A:A8:9A:81:F2:15:01:52:A4:1D:82:9C

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "GlobalSign Root CA"

CKA\_CERT\_SHA1\_HASH MULTILINE\_OCTAL

```
\261\274\226\213\324\364\235\142\052\250\232\201\362\025\001\122
```

```
\244\035\202\234
```

END

```
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\076\105\122\025\011\121\222\341\267\135\067\237\261\207\051\212
END
CKA_ISSUER MULTILINE_OCTAL
\060\127\061\013\060\011\006\003\125\004\006\023\002\102\105\061
\031\060\027\006\003\125\004\012\023\020\107\154\157\142\141\154
\123\151\147\156\040\156\166\055\163\141\061\020\060\016\006\003
\125\004\013\023\007\122\157\157\164\040\103\101\061\033\060\031
\006\003\125\004\003\023\022\107\154\157\142\141\154\123\151\147
\156\040\122\157\157\164\040\103\101
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\013\004\000\000\000\000\001\025\113\132\303\224
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "Verisign Class 1 Public Primary Certification Authority - G3"
#
# Issuer: CN=VeriSign Class 1 Public Primary Certification Authority - G3,OU="(c) 1999 VeriSign, Inc. - For
authorized use only",OU=VeriSign Trust Network,O="VeriSign, Inc.",C=US
# Serial Number:00:8b:5b:75:56:84:54:85:0b:00:cf:af:38:48:ce:b1:a4
# Subject: CN=VeriSign Class 1 Public Primary Certification Authority - G3,OU="(c) 1999 VeriSign, Inc. - For
authorized use only",OU=VeriSign Trust Network,O="VeriSign, Inc.",C=US
# Not Valid Before: Fri Oct 01 00:00:00 1999
# Not Valid After : Wed Jul 16 23:59:59 2036
# Fingerprint (SHA-256):
CB:B5:AF:18:5E:94:2A:24:02:F9:EA:CB:C0:ED:5B:B8:76:EE:A3:C1:22:36:23:D0:04:47:E4:F3:BA:55:4B:65
#
Fingerprint (SHA1): 20:42:85:DC:F7:EB:76:41:95:57:8E:13:6B:D4:B7:D1:E9:8E:46:A5
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Verisign Class 1 Public Primary Certification Authority - G3"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\201\312\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\027\060\025\006\003\125\004\012\023\016\126\145\162\151\123
\151\147\156\054\040\111\156\143\056\061\037\060\035\006\003\125
\004\013\023\026\126\145\162\151\123\151\147\156\040\124\162\165
\163\164\040\116\145\164\167\157\162\153\061\072\060\070\006\003
\125\004\013\023\061\050\143\051\040\061\071\071\071\040\126\145
\162\151\123\151\147\156\054\040\111\156\143\056\040\055\040\106
```

\157\162\040\141\165\164\150\157\162\151\172\145\144\040\165\163  
\145\040\157\156\154\171\061\105\060\103\006\003\125\004\003\023  
\074\126\145\162\151\123\151\147\156\040\103\154\141\163\163\040  
\061\040\120\165\142\154\151\143\040\120\162\151\155\141\162\171  
\040\103\145\162\164\151\146\151\143\141\164\151\157\156\040\101  
\165\164\150\157\162\151\164\171\040\055\040\107\063

END

CKA\_ID

UTF8 "0"

CKA\_ISSUER MULTILINE\_OCTAL

\060\201\312\061\013\060\011\006\003\125\004\006\023\002\125\123  
\061\027\060\025\006\003\125\004\012\023\016\126\145\162\151\123  
\151\147\156\054\040\111\156\143\056\061\037\060\035\006\003\125  
\004\013\023\026\126\145\162\151\123\151\147\156\040\124\162\165  
\163\164\040\116\145\164\167\157\162\153\061\072\060\070\006\003  
\125\004\013\023\061\050\143\051\040\061\071\071\071\040\126\145  
\162\151\123\151\147\156\054\040\111\156\143\056\040\055\040\106  
\157\162\040\141\165\164\150\157\162\151\172\145\144\040\165\163  
\145\040\157\156\154\171\061\105\060\103\006\003\125\004\003\023  
\074\126\145\162\151\123\151\147\156\040\103\154\141\163\163\040  
\061\040\120\165\142\154\151\143\040\120\162\151\155\141\162\171  
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CKA\_SERIAL\_NUMBER

MULTILINE\_OCTAL

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\316\261\244

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CKA\_VALUE MULTILINE\_OCTAL

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\125\004\006\023\002\125\123\061\027\060\025\006\003\125\004\012  
\023\016\126\145\162\151\123\151\147\156\054\040\111\156\143\056  
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\120\162\151\155\141\162\171\040\103\145\162\164\151\146\151\143  
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\314\332\376\207\231\041\352\272\376\076\124\327\322\131\170\333  
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\327\017\126\107\201\025\004\112\257\203\047\321\305\130\210\301  
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\237\226\166\321\075\002\003\001\000\001\060\015\006\011\052\206  
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\252\331\252\106\046\017\161\355\245\255\123\126\142\001\107\052  
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\266\322\210\134\263\237\315\313\324\247\331\140\225\204\072\370  
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\171\112\031\017\262\034\076\040\164\331\152\303\276\362\050\170  
\023\126\171\117\155\120\352\033\260\265\127\261\067\146\130\043  
\363\334\017\337\012\207\304\357\206\005\325\070\024\140\231\243  
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END
CKA_NSS_MOZILLA_CA_POLICY
CK_BBOOL CK_TRUE
CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE
# For Email Distrust After: Wed Aug 31 00:00:00 2022
CKA_NSS_EMAIL_DISTRICT_AFTER MULTILINE_OCTAL
\062\062\060\070\063\061\060\060\060\060\060\060\132
END

# Trust for "Verisign Class 1 Public Primary Certification Authority - G3"
# Issuer: CN=VeriSign Class 1 Public Primary Certification Authority - G3,OU="(c) 1999 VeriSign,
Inc. - For authorized use only",OU=VeriSign Trust Network,O="VeriSign, Inc.",C=US
# Serial Number:00:8b:5b:75:56:84:54:85:0b:00:cf:af:38:48:ce:b1:a4
# Subject: CN=VeriSign Class 1 Public Primary Certification Authority - G3,OU="(c) 1999 VeriSign, Inc. - For
authorized use only",OU=VeriSign Trust Network,O="VeriSign, Inc.",C=US
# Not Valid Before: Fri Oct 01 00:00:00 1999
# Not Valid After : Wed Jul 16 23:59:59 2036
# Fingerprint (SHA-256):
CB:B5:AF:18:5E:94:2A:24:02:F9:EA:CB:C0:ED:5B:B8:76:EE:A3:C1:22:36:23:D0:04:47:E4:F3:BA:55:4B:65
# Fingerprint (SHA1): 20:42:85:DC:F7:EB:76:41:95:57:8E:13:6B:D4:B7:D1:E9:8E:46:A5
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Verisign Class 1 Public Primary Certification Authority - G3"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\040\102\205\334\367\353\166\101\225\127\216\023\153\324\267\321
\351\216\106\245
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\261\107\274\030\127\321\030\240\170\055\354\161\350\052\225\163
END
CKA_ISSUER
MULTILINE_OCTAL
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\061\027\060\025\006\003\125\004\012\023\016\126\145\162\151\123
\151\147\156\054\040\111\156\143\056\061\037\060\035\006\003\125
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\163\164\040\116\145\164\167\157\162\153\061\072\060\070\006\003
\125\004\013\023\061\050\143\051\040\061\071\071\071\040\126\145
\162\151\123\151\147\156\054\040\111\156\143\056\040\055\040\106
\157\162\040\141\165\164\150\157\162\151\172\145\144\040\165\163
\145\040\157\156\154\171\061\105\060\103\006\003\125\004\003\023
\074\126\145\162\151\123\151\147\156\040\103\154\141\163\163\040
\061\040\120\165\142\154\151\143\040\120\162\151\155\141\162\171
\040\103\145\162\164\151\146\151\143\141\164\151\157\156\040\101
\165\164\150\157\162\151\164\171\040\055\040\107\063
END
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CKA_SERIAL_NUMBER MULTILINE_OCTAL
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\316\261\244
END
CKA_TRUST_SERVER_AUTH
CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "Verisign Class 2 Public Primary Certification Authority - G3"
#
# Issuer: CN=VeriSign Class 2 Public Primary Certification Authority - G3,OU="(c) 1999 VeriSign, Inc. - For
authorized use only",OU=VeriSign Trust Network,O="VeriSign, Inc.",C=US
# Serial Number:61:70:cb:49:8c:5f:98:45:29:e7:b0:a6:d9:50:5b:7a
# Subject: CN=VeriSign Class 2 Public Primary Certification Authority - G3,OU="(c) 1999 VeriSign, Inc. - For
authorized use only",OU=VeriSign Trust Network,O="VeriSign, Inc.",C=US
# Not Valid Before: Fri Oct 01 00:00:00 1999
# Not Valid After : Wed Jul 16 23:59:59 2036
# Fingerprint (SHA-256):
92:A9:D9:83:3F:E1:94:4D:B3:66:E8:BF:AE:7A:95:B6:48:0C:2D:6C:6C:2A:1B:E6:5D:42:36:B6:08:FC:A1:BB
# Fingerprint (SHA1): 61:EF:43:D7:7F:CA:D4:61:51:BC:98:E0:C3:59:12:AF:9F:EB:63:11
CKA_CLASS
CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Verisign Class 2 Public Primary Certification Authority - G3"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\201\312\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\027\060\025\006\003\125\004\012\023\016\126\145\162\151\123
\151\147\156\054\040\111\156\143\056\061\037\060\035\006\003\125
\004\013\023\026\126\145\162\151\123\151\147\156\040\124\162\165
\163\164\040\116\145\164\167\157\162\153\061\072\060\070\006\003
\125\004\013\023\061\050\143\051\040\061\071\071\071\040\126\145
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\157\162\040\141\165\164\150\157\162\151\172\145\144\040\165\163
\145\040\157\156\154\171\061\105\060\103\006\003\125\004\003\023
\074\126\145\162\151\123\151\147\156\040\103\154\141\163\163\040
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UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
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\074\126\145\162\151\123\151\147\156\040\103\154\141\163\163\040  
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CKA\_SERIAL\_NUMBER

MULTILINE\_OCTAL

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CKA\_VALUE MULTILINE\_OCTAL

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\151\123\151\147\156\040\124\162\165\163\164\040\116\145\164\167  
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END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# For Email Distrust After: Wed Aug 31 00:00:00 2022

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER MULTILINE\_OCTAL

\062\062\060\070\063\061\060\060\060\060\060\060\132

END

# Trust for "Verisign Class 2 Public Primary Certification Authority - G3"

```
# Issuer: CN=VeriSign Class 2 Public Primary Certification Authority - G3,OU="(c) 1999 VeriSign, Inc. - For
authorized use only",OU=VeriSign Trust Network,O="VeriSign, Inc.",C=US
# Serial Number:61:70:cb:49:8c:5f:98:45:29:e7:b0:a6:d9:50:5b:7a
#
Subject: CN=VeriSign Class 2 Public Primary Certification Authority - G3,OU="(c) 1999 VeriSign, Inc. - For
authorized use only",OU=VeriSign Trust Network,O="VeriSign, Inc.",C=US
# Not Valid Before: Fri Oct 01 00:00:00 1999
# Not Valid After : Wed Jul 16 23:59:59 2036
# Fingerprint (SHA-256):
92:A9:D9:83:3F:E1:94:4D:B3:66:E8:BF:AE:7A:95:B6:48:0C:2D:6C:6C:2A:1B:E6:5D:42:36:B6:08:FC:A1:BB
# Fingerprint (SHA1): 61:EF:43:D7:7F:CA:D4:61:51:BC:98:E0:C3:59:12:AF:9F:EB:63:11
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Verisign Class 2 Public Primary Certification Authority - G3"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\141\357\103\327\177\312\324\141\121\274\230\340\303\131\022\257
\237\353\143\021
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\370\276\304\143\042\311\250\106\164\213\270\035\036\112\053\366
END
CKA_ISSUER MULTILINE_OCTAL
\060\201\312\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\027\060\025\006\003\125\004\012\023\016\126\145\162\151\123
\151\147\156\054\040\111\156\143\056\061\037\060\035\006\003\125
\004\013\023\026\126\145\162\151\123\151\147\156\040\124\162\165
\163\164\040\116\145\164\167\157\162\153\061\072\060\070\006\003
\125\004\013\023\061\050\143\051\040\061\071\071\071\040\126\145
\162\151\123\151\147\156\054\040\111\156\143\056\040\055\040\106
\157\162\040\141\165\164\150\157\162\151\172\145\144\040\165\163
\145\040\157\156\154\171\061\105\060\103\006\003\125\004\003\023
\074\126\145\162\151\123\151\147\156\040\103\154\141\163\163\040
\062\040\120\165\142\154\151\143\040\120\162\151\155\141\162\171
\040\103\145\162\164\151\146\151\143\141\164\151\157\156\040\101
\165\164\150\157\162\151\164\171\040\055\040\107\063
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\020\141\160\313\111\214\137\230\105\051\347\260\246\331\120
\133\172
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_EMAIL_PROTECTION
CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE
```

```
#
# Certificate "Entrust.net Premium 2048 Secure Server CA"
#
# Issuer: CN=Entrust.net Certification Authority (2048),OU=(c) 1999 Entrust.net
Limited,OU=www.entrust.net/CPS_2048 incorp. by ref. (limits liab.),O=Entrust.net
# Serial Number: 946069240 (0x3863def8)
# Subject: CN=Entrust.net Certification Authority (2048),OU=(c) 1999 Entrust.net
Limited,OU=www.entrust.net/CPS_2048 incorp. by ref. (limits liab.),O=Entrust.net
# Not Valid Before: Fri Dec 24 17:50:51 1999
# Not Valid After : Tue Jul 24 14:15:12 2029
# Fingerprint (SHA-256):
6D:C4:71:72:E0:1C:BC:B0:BF:62:58:0D:89:5F:E2:B8:AC:9A:D4:F8:73:80:1E:0C:10:B9:C8:37:D2:1E:B1:77
# Fingerprint (SHA1): 50:30:06:09:1D:97:D4:F5:AE:39:F7:CB:E7:92:7D:7D:65:2D:34:31
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL
UTF8 "Entrust.net Premium 2048 Secure Server CA"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\201\264\061\024\060\022\006\003\125\004\012\023\013\105\156
\164\162\165\163\164\056\156\145\164\061\100\060\076\006\003\125
\004\013\024\067\167\167\167\056\145\156\164\162\165\163\164\056
\156\145\164\057\103\120\123\137\062\060\064\070\040\151\156\143
\157\162\160\056\040\142\171\040\162\145\146\056\040\050\154\151
\155\151\164\163\040\154\151\141\142\056\051\061\045\060\043\006
\003\125\004\013\023\034\050\143\051\040\061\071\071\071\040\105
\156\164\162\165\163\164\056\156\145\164\040\114\151\155\151\164
\145\144\061\063\060\061\006\003\125\004\003\023\052\105\156\164
\162\165\163\164\056\156\145\164\040\103\145\162\164\151\146\151
\143\141\164\151\157\156\040\101\165\164\150\157\162\151\164\171
\040\050\062\060\064\070\051
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\201\264\061\024\060\022\006\003\125\004\012\023\013\105\156
\164\162\165\163\164\056\156\145\164\061\100\060\076\006\003\125
\004\013\024\067\167\167\167\056\145\156\164\162\165\163\164\056
\156\145\164\057\103\120\123\137\062\060\064\070\040\151\156\143
\157\162\160\056\040\142\171\040\162\145\146\056\040\050\154\151
\155\151\164\163\040\154\151\141\142\056\051\061\045\060\043\006
\003\125\004\013\023\034\050\143\051\040\061\071\071\071\040\105
\156\164\162\165\163\164\056\156\145\164\040\114\151\155\151\164
\145\144\061\063\060\061\006\003\125\004\003\023\052\105\156\164
\162\165\163\164\056\156\145\164\040\103\145\162\164\151\146\151
\143\141\164\151\157\156\040\101\165\164\150\157\162\151\164\171
```

\040\050\062\060\064\070\051

END

CKA\_SERIAL\_NUMBER

MULTILINE\_OCTAL

\002\004\070\143\336\370

END

CKA\_VALUE MULTILINE\_OCTAL

\060\202\004\052\060\202\003\022\240\003\002\001\002\002\004\070  
\143\336\370\060\015\006\011\052\206\110\206\367\015\001\001\005  
\005\000\060\201\264\061\024\060\022\006\003\125\004\012\023\013  
\105\156\164\162\165\163\164\056\156\145\164\061\100\060\076\006  
\003\125\004\013\024\067\167\167\167\056\145\156\164\162\165\163  
\164\056\156\145\164\057\103\120\123\137\062\060\064\070\040\151  
\156\143\157\162\160\056\040\142\171\040\162\145\146\056\040\050  
\154\151\155\151\164\163\040\154\151\141\142\056\051\061\045\060  
\043\006\003\125\004\013\023\034\050\143\051\040\061\071\071\071  
\040\105\156\164\162\165\163\164\056\156\145\164\040\114\151\155  
\151\164\145\144\061\063\060\061\006\003\125\004\003\023\052\105  
\156\164\162\165\163\164\056\156\145\164\040\103\145\162\164\151  
\146\151\143\141\164\151\157\156\040\101\165\164\150\157\162\151  
\164\171\040\050\062\060\064\070\051\060\036\027\015\071\071\061  
\062\062\064\061\067\065\060\065\061\132\027\015\062\071\060\067  
\062\064\061\064\061\065\061\062\132\060\201\264\061\024\060\022  
\006\003\125\004\012\023\013\105\156\164\162\165\163\164\056\156  
\145\164\061\100\060\076\006\003\125\004\013\024\067\167\167\167  
\056\145\156\164\162\165\163\164\056\156\145\164\057\103\120\123  
\137\062\060\064\070\040\151\156\143\157\162\160\056\040\142\171  
\040\162\145\146\056\040\050\154\151\155\151\164\163\040\154\151  
\141\142\056\051\061\045\060\043\006\003\125\004\013\023\034\050  
\143\051\040\061\071\071\071\040\105\156\164\162\165\163\164\056  
\156\145\164\040\114\151\155\151\164\145\144\061\063\060\061\006  
\003\125\004\003\023\052\105\156\164\162\165\163\164\056\156\145  
\164\040\103\145\162\164\151\146\151\143\141\164\151\157\156\040  
\101\165\164\150\157\162\151\164\171\040\050\062\060\064\070\051  
\060\202\001\042\060\015\006\011\052\206\110\206\367\015\001\001  
\001\005\000\003\202\001\017\000\060\202\001\012\002\202\001\001  
\000\255\115\113\251\022\206\262\352\243\040\007\025\026\144\052  
\053\113\321\277\013\112\115\216\355\200\166\245\147\267\170\100  
\300\163\102\310\150\300\333\123\053\335\136\270\166\230\065\223  
\213\032\235\174\023\072\016\037\133\267\036\317\345\044\024\036  
\261\201\251\215\175\270\314\153\113\003\361\002\014\334\253\245  
\100\044\000\177\164\224\241\235\010\051\263\210\013\365\207\167  
\235\125\315\344\303\176\327\152\144\253\205\024\206\225\133\227  
\062\120\157\075\310\272\146\014\343\374\275\270\111\301\166\211  
\111\031\375\300\250\275\211\243\147\057\306\237\274\161\031\140  
\270\055\351\054\311\220\166\146\173\224\342\257\170\326\145\123  
\135\074\326\234\262\317\051\003\371\057\244\120\262\324\110\316  
\005\062\125\212\375\262\144\114\016\344\230\007\165\333\177\337



\271\010\125\140\205\060\051\371\173\110\244\151\206\343\065\077  
\036\206\135\172\172\025\275\357\000\216\025\042\124\027\000\220  
\046\223\274\016\111\150\221\277\370\107\323\235\225\102\301\016  
\115\337\157\046\317\303\030\041\142\146\103\160\326\325\300\007  
\341\002\003\001\000\001\243\102\060\100\060\016\006\003\125\035  
\017\001\001\377\004\004\003\002\001\006\060\017\006\003\125\035  
\023\001\001\377\004\005\060\003\001\001\377\060\035\006\003\125  
\035\016\004\026\004\024\125\344\201\321\021\200\276\330\211\271  
\010\243\061\371\241\044\011\026\271\160\060\015\006\011\052\206  
\110\206\367\015\001\001\005\005\000\003\202\001\001\000\073\233  
\217\126\233\060\347\123\231\174\172\171\247\115\227\327\031\225  
\220\373\006\037\312\063\174\106\143\217\226\146\044\372\100\033  
\041\047\312\346\162\163\362\117\376\061\231\375\310\014\114\150  
\123\306\200\202\023\230\372\266\255\332\135\075\361\316\156\366  
\025\021\224\202\014\356\077\225\257\021\253\017\327\057\336\037  
\003\217\127\054\036\311\273\232\032\104\225\353\030\117\246\037  
\315\175\127\020\057\233\004\011\132\204\265\156\330\035\072\341  
\326\236\321\154\171\136\171\034\024\305\343\320\114\223\073\145  
\074\355\337\075\276\246\345\225\032\303\265\031\303\275\136\133  
\273\377\043\357\150\031\313\022\223\047\134\003\055\157\060\320  
\036\266\032\254\336\132\367\321\252\250\047\246\376\171\201\304  
\171\231\063\127\272\022\260\251\340\102\154\223\312\126\336\376  
\155\204\013\010\213\176\215\352\327\230\041\306\363\347\074\171  
\057\136\234\321\114\025\215\341\354\042\067\314\232\103\013\227  
\334\200\220\215\263\147\233\157\110\010\025\126\317\277\361\053  
\174\136\232\166\351\131\220\305\174\203\065\021\145\121

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "Entrust.net Premium 2048 Secure Server CA"

# Issuer: CN=Entrust.net Certification Authority (2048),OU=(c) 1999 Entrust.net  
Limited,OU=www.entrust.net/CPS\_2048 incorp. by ref. (limits liab.),O=Entrust.net

# Serial Number: 946069240 (0x3863def8)

# Subject: CN=Entrust.net Certification Authority (2048),OU=(c) 1999 Entrust.net  
Limited,OU=www.entrust.net/CPS\_2048 incorp. by ref. (limits liab.),O=Entrust.net

# Not Valid Before: Fri Dec 24 17:50:51 1999

# Not Valid After : Tue Jul 24 14:15:12 2029

# Fingerprint (SHA-256):

6D:C4:71:72:E0:1C:BC:B0:BF:62:58:0D:89:5F:E2:B8:AC:9A:D4:F8:73:80:1E:0C:10:B9:C8:37:D2:1E:B1:77

# Fingerprint (SHA1): 50:30:06:09:1D:97:D4:F5:AE:39:F7:CB:E7:92:7D:7D:65:2D:34:31

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN

CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

```

CKA_LABEL UTF8 "Entrust.net Premium 2048 Secure Server CA"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\120\060\006\011\035\227\324\365\256\071\367\313\347\222\175\175
\145\055\064\061
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\356\051\061\274\062\176\232\346\350\265\367\121\264\064\161\220
END
CKA_ISSUER MULTILINE_OCTAL
\060\201\264\061\024\060\022\006\003\125\004\012\023\013\105\156
\164\162\165\163\164\056\156\145\164\061\100\060\076\006\003\125
\004\013\024\067\167\167\167\056\145\156\164\162\165\163\164\056
\156\145\164\057\103\120\123\137\062\060\064\070\040\151\156\143
\157\162\160\056\040\142\171\040\162\145\146\056\040\050\154\151
\155\151\164\163\040\154\151\141\142\056\051\061\045\060\043\006
\003\125\004\013\023\034\050\143\051\040\061\071\071\071\040\105
\156\164\162\165\163\164\056\156\145\164\040\114\151\155\151\164
\145\144\061\063\060\061\006\003\125\004\003\023\052\105\156\164
\162\165\163\164\056\156\145\164\040\103\145\162\164\151\146\151
\143\141\164\151\157\156\040\101\165\164\150\157\162\151\164\171
\040\050\062\060\064\070\051
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\004\070\143\336\370
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "Baltimore CyberTrust Root"
#
# Issuer: CN=Baltimore CyberTrust Root,OU=CyberTrust,O=Baltimore,C=IE
# Serial Number: 33554617 (0x20000b9)
# Subject: CN=Baltimore CyberTrust Root,OU=CyberTrust,O=Baltimore,C=IE
# Not Valid Before: Fri May 12 18:46:00 2000
# Not Valid After : Mon May 12 23:59:00 2025
# Fingerprint (SHA-256):
16:AF:57:A9:F6:76:B0:AB:12:60:95:AA:5E:BA:DE:F2:2A:B3:11:19:D6:44:AC:95:CD:4B:93:DB:F3:F2:6A:EB
# Fingerprint (SHA1): D4:DE:20:D0:5E:66:FC:53:FE:1A:50:88:2C:78:DB:28:52:CA:E4:74
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN
CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Baltimore CyberTrust Root"

```

CKA\_CERTIFICATE\_TYPE CK\_CERTIFICATE\_TYPE CKC\_X\_509

CKA\_SUBJECT MULTILINE\_OCTAL

\060\132\061\013\060\011\006\003\125\004\006\023\002\111\105\061  
\022\060\020\006\003\125\004\012\023\011\102\141\154\164\151\155  
\157\162\145\061\023\060\021\006\003\125\004\013\023\012\103\171  
\142\145\162\124\162\165\163\164\061\042\060\040\006\003\125\004  
\003\023\031\102\141\154\164\151\155\157\162\145\040\103\171\142  
\145\162\124\162\165\163\164\040\122\157\157\164

END

CKA\_ID UTF8 "0"

CKA\_ISSUER MULTILINE\_OCTAL

\060\132\061\013\060\011\006\003\125\004\006\023\002\111\105\061  
\022\060\020\006\003\125\004\012\023\011\102\141\154\164\151\155  
\157\162\145\061\023\060\021\006\003\125\004\013\023\012\103\171  
\142\145\162\124\162\165\163\164\061\042\060\040\006\003\125\004  
\003\023\031\102\141\154\164\151\155\157\162\145\040\103\171\142  
\145\162\124\162\165\163\164\040\122\157\157\164

END

CKA\_SERIAL\_NUMBER

MULTILINE\_OCTAL

\002\004\002\000\000\271

END

CKA\_VALUE MULTILINE\_OCTAL

\060\202\003\167\060\202\002\137\240\003\002\001\002\002\004\002  
\000\000\271\060\015\006\011\052\206\110\206\367\015\001\001\005  
\005\000\060\132\061\013\060\011\006\003\125\004\006\023\002\111  
\105\061\022\060\020\006\003\125\004\012\023\011\102\141\154\164  
\151\155\157\162\145\061\023\060\021\006\003\125\004\013\023\012  
\103\171\142\145\162\124\162\165\163\164\061\042\060\040\006\003  
\125\004\003\023\031\102\141\154\164\151\155\157\162\145\040\103  
\171\142\145\162\124\162\165\163\164\040\122\157\157\164\060\036  
\027\015\060\060\060\065\061\062\061\070\064\066\060\060\132\027  
\015\062\065\060\065\061\062\062\063\065\071\060\060\132\060\132  
\061\013\060\011\006\003\125\004\006\023\002\111\105\061\022\060  
\020\006\003\125\004\012\023\011\102\141\154\164\151\155\157\162  
\145\061\023\060\021\006\003\125\004\013\023\012\103\171\142\145  
\162\124\162\165\163\164\061\042\060\040\006\003\125\004\003\023  
\031\102\141\154\164\151\155\157\162\145\040\103\171\142\145\162  
\124\162\165\163\164\040\122\157\157\164\060\202\001\042\060\015  
\006\011\052\206\110\206\367\015\001\001\001\005\000\003\202\001  
\017\000\060\202\001\012\002\202\001\001\000\243\004\273\042\253  
\230\075\127\350\046\162\232\265\171\324\051\342\341\350\225\200  
\261\260\343\133\216\053\051\232\144\337\241\135\355\260\011\005  
\155\333\050\056\316\142\242\142\376\264\210\332\022\353\070\353  
\041\235\300\101\053\001\122\173\210\167\323\034\217\307\272\271  
\210\265\152\011\347\163\350\021\100\247\321\314\312\142\215\055  
\345\217\013\246\120\322\250\120\303\050\352\365\253\045\207\212  
\232\226\034\251\147\270\077\014\325\367\371\122\023\057\302\033

\325\160\160\360\217\300\022\312\006\313\232\341\331\312\063\172  
\167\326\370\354\271\361\150\104\102\110\023\322\300\302\244\256  
\136\140\376\266\246\005\374\264\335\007\131\002\324\131\030\230  
\143\365\245\143\340\220\014\175\135\262\006\172\363\205\352\353  
\324\003\256\136\204\076\137\377\025\355\151\274\371\071\066\162  
\165\317\167\122\115\363\311\220\054\271\075\345\311\043\123\077  
\037\044\230\041\134\007\231\051\275\306\072\354\347\156\206\072  
\153\227\164\143\063\275\150\030\061\360\170\215\166\277\374\236  
\216\135\052\206\247\115\220\334\047\032\071\002\003\001\000\001  
\243\105\060\103\060\035\006\003\125\035\016\004\026\004\024\345  
\235\131\060\202\107\130\314\254\372\010\124\066\206\173\072\265  
\004\115\360\060\022\006\003\125\035\023\001\001\377\004\010\060  
\006\001\001\377\002\001\003\060\016\006\003\125\035\017\001\001  
\377\004\004\003\002\001\006\060\015\006\011\052\206\110\206\367  
\015\001\001\005\005\000\003\202\001\001\000\205\014\135\216\344  
\157\121\150\102\005\240\335\273\117\047\045\204\003\275\367\144  
\375\055\327\060\343\244\020\027\353\332\051\051\266\171\077\166  
\366\031\023\043\270\020\012\371\130\244\324\141\160\275\004\141  
\152\022\212\027\325\012\275\305\274\060\174\326\351\014\045\215  
\206\100\117\354\314\243\176\070\306\067\021\117\355\335\150\061  
\216\114\322\263\001\164\356\276\165\136\007\110\032\177\160\377  
\026\134\204\300\171\205\270\005\375\177\276\145\021\243\017\300  
\002\264\370\122\067\071\004\325\251\061\172\030\277\240\052\364  
\022\231\367\243\105\202\343\074\136\365\235\236\265\310\236\174  
\056\310\244\236\116\010\024\113\155\375\160\155\153\032\143\275  
\144\346\037\267\316\360\362\237\056\273\033\267\362\120\210\163  
\222\302\342\343\026\215\232\062\002\253\216\030\335\351\020\021  
\356\176\065\253\220\257\076\060\224\172\320\063\075\247\145\017  
\365\374\216\236\142\317\107\104\054\001\135\273\035\265\062\322  
\107\322\070\056\320\376\201\334\062\152\036\265\356\074\325\374  
\347\201\035\031\303\044\102\352\143\071\251

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "Baltimore CyberTrust Root"

# Issuer: CN=Baltimore CyberTrust Root,OU=CyberTrust,O=Baltimore,C=IE

# Serial Number: 33554617

(0x20000b9)

# Subject: CN=Baltimore CyberTrust Root,OU=CyberTrust,O=Baltimore,C=IE

# Not Valid Before: Fri May 12 18:46:00 2000

# Not Valid After : Mon May 12 23:59:00 2025

# Fingerprint (SHA-256):

16:AF:57:A9:F6:76:B0:AB:12:60:95:AA:5E:BA:DE:F2:2A:B3:11:19:D6:44:AC:95:CD:4B:93:DB:F3:F2:6A:EB

# Fingerprint (SHA1): D4:DE:20:D0:5E:66:FC:53:FE:1A:50:88:2C:78:DB:28:52:CA:E4:74

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

```

CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Baltimore CyberTrust Root"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\324\336\040\320\136\146\374\123\376\032\120\210\054\170\333\050
\122\312\344\164
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\254\266\224\245\234\027\340\327\221\122\233\261\227\006\246\344
END
CKA_ISSUER MULTILINE_OCTAL
\060\132\061\013\060\011\006\003\125\004\006\023\002\111\105\061
\022\060\020\006\003\125\004\012\023\011\102\141\154\164\151\155
\157\162\145\061\023\060\021\006\003\125\004\013\023\012\103\171
\142\145\162\124\162\165\163\164\061\042\060\040\006\003\125\004
\003\023\031\102\141\154\164\151\155\157\162\145\040\103\171\142
\145\162\124\162\165\163\164\040\122\157\157\164
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\004\002\000\000\271
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "Entrust Root Certification Authority"
#
# Issuer: CN=Entrust Root Certification Authority,OU="(c) 2006 Entrust, Inc.",OU=www.entrust.net/CPS is
incorporated by reference,O="Entrust, Inc.",C=US
# Serial Number: 1164660820 (0x456b5054)
# Subject: CN=Entrust Root Certification Authority,OU="(c) 2006 Entrust, Inc.",OU=www.entrust.net/CPS is
incorporated by reference,O="Entrust, Inc.",C=US
# Not Valid Before: Mon Nov 27 20:23:42 2006
# Not Valid After : Fri Nov 27 20:53:42 2026
# Fingerprint (SHA-256):
73:C1:76:43:4F:1B:C6:D5:AD:F4:5B:0E:76:E7:27:28:7C:8D:E5:76:16:C1:E6:E6:14:1A:2B:2C:BC:7D:8E:4C
#
Fingerprint (SHA1): B3:1E:B1:B7:40:E3:6C:84:02:DA:DC:37:D4:4D:F5:D4:67:49:52:F9
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Entrust Root Certification Authority"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509

```

CKA\_SUBJECT MULTILINE\_OCTAL

\060\201\260\061\013\060\011\006\003\125\004\006\023\002\125\123  
\061\026\060\024\006\003\125\004\012\023\015\105\156\164\162\165  
\163\164\054\040\111\156\143\056\061\071\060\067\006\003\125\004  
\013\023\060\167\167\167\056\145\156\164\162\165\163\164\056\156  
\145\164\057\103\120\123\040\151\163\040\151\156\143\157\162\160  
\157\162\141\164\145\144\040\142\171\040\162\145\146\145\162\145  
\156\143\145\061\037\060\035\006\003\125\004\013\023\026\050\143  
\051\040\062\060\060\066\040\105\156\164\162\165\163\164\054\040  
\111\156\143\056\061\055\060\053\006\003\125\004\003\023\044\105  
\156\164\162\165\163\164\040\122\157\157\164\040\103\145\162\164  
\151\146\151\143\141\164\151\157\156\040\101\165\164\150\157\162  
\151\164\171

END

CKA\_ID

UTF8 "0"

CKA\_ISSUER MULTILINE\_OCTAL

\060\201\260\061\013\060\011\006\003\125\004\006\023\002\125\123  
\061\026\060\024\006\003\125\004\012\023\015\105\156\164\162\165  
\163\164\054\040\111\156\143\056\061\071\060\067\006\003\125\004  
\013\023\060\167\167\167\056\145\156\164\162\165\163\164\056\156  
\145\164\057\103\120\123\040\151\163\040\151\156\143\157\162\160  
\157\162\141\164\145\144\040\142\171\040\162\145\146\145\162\145  
\156\143\145\061\037\060\035\006\003\125\004\013\023\026\050\143  
\051\040\062\060\060\066\040\105\156\164\162\165\163\164\054\040  
\111\156\143\056\061\055\060\053\006\003\125\004\003\023\044\105  
\156\164\162\165\163\164\040\122\157\157\164\040\103\145\162\164  
\151\146\151\143\141\164\151\157\156\040\101\165\164\150\157\162  
\151\164\171

END

CKA\_SERIAL\_NUMBER MULTILINE\_OCTAL

\002\004\105\153\120\124

END

CKA\_VALUE

MULTILINE\_OCTAL

\060\202\004\221\060\202\003\171\240\003\002\001\002\002\004\105  
\153\120\124\060\015\006\011\052\206\110\206\367\015\001\001\005  
\005\000\060\201\260\061\013\060\011\006\003\125\004\006\023\002  
\125\123\061\026\060\024\006\003\125\004\012\023\015\105\156\164  
\162\165\163\164\054\040\111\156\143\056\061\071\060\067\006\003  
\125\004\013\023\060\167\167\167\056\145\156\164\162\165\163\164  
\056\156\145\164\057\103\120\123\040\151\163\040\151\156\143\157  
\162\160\157\162\141\164\145\144\040\142\171\040\162\145\146\145  
\162\145\156\143\145\061\037\060\035\006\003\125\004\013\023\026  
\050\143\051\040\062\060\060\066\040\105\156\164\162\165\163\164  
\054\040\111\156\143\056\061\055\060\053\006\003\125\004\003\023  
\044\105\156\164\162\165\163\164\040\122\157\157\164\040\103\145  
\162\164\151\146\151\143\141\164\151\157\156\040\101\165\164\150

\157\162\151\164\171\060\036\027\015\060\066\061\061\062\067\062  
\060\062\063\064\062\132\027\015\062\066\061\061\062\067\062\060  
\065\063\064\062\132\060\201\260\061\013\060\011\006\003\125\004  
\006\023\002\125\123\061\026\060\024\006\003\125\004\012\023\015  
\105\156\164\162\165\163\164\054\040\111\156\143\056\061\071\060  
\067\006\003\125\004\013\023\060\167\167\167\056\145\156\164\162  
\165\163\164\056\156\145\164\057\103\120\123\040\151\163\040\151  
\156\143\157\162\160\157\162\141\164\145\144\040\142\171\040\162  
\145\146\145\162\145\156\143\145\061\037\060\035\006\003\125\004  
\013\023\026\050\143\051\040\062\060\060\066\040\105\156\164\162  
\165\163\164\054\040\111\156\143\056\061\055\060\053\006\003\125  
\004\003\023\044\105\156\164\162\165\163\164\040\122\157\157\164  
\040\103\145\162\164\151\146\151\143\141\164\151\157\156\040\101  
\165\164\150\157\162\151\164\171\060\202\001\042\060\015\006\011  
\052\206\110\206\367\015\001\001\001\005\000\003\202\001\017\000  
\060\202\001\012\002\202\001\001\000\266\225\266\103\102\372\306  
\155\052\157\110\337\224\114\071\127\005\356\303\171\021\101\150  
\066\355\354\376\232\001\217\241\070\050\374\367\020\106\146\056  
\115\036\032\261\032\116\306\321\300\225\210\260\311\377\061\213  
\063\003\333\267\203\173\076\040\204\136\355\262\126\050\247\370  
\340\271\100\161\067\305\313\107\016\227\052\150\300\042\225\142  
\025\333\107\331\365\320\053\377\202\113\311\255\076\336\114\333  
\220\200\120\077\011\212\204\000\354\060\012\075\030\315\373\375  
\052\131\232\043\225\027\054\105\236\037\156\103\171\155\014\134  
\230\376\110\247\305\043\107\134\136\375\156\347\036\264\366\150  
\105\321\206\203\133\242\212\215\261\343\051\200\376\045\161\210  
\255\276\274\217\254\122\226\113\252\121\215\344\023\061\031\350  
\116\115\237\333\254\263\152\325\274\071\124\161\312\172\172\177  
\220\335\175\035\200\331\201\273\131\046\302\021\376\346\223\342  
\367\200\344\145\373\064\067\016\051\200\160\115\257\070\206\056  
\236\177\127\257\236\027\256\353\034\313\050\041\137\266\034\330  
\347\242\004\042\371\323\332\330\313\002\003\001\000\001\243\201  
\260\060\201\255\060\016\006\003\125\035\017\001\001\377\004\004  
\003\002\001\006\060\017\006\003\125\035\023\001\001\377\004\005  
\060\003\001\001\377\060\053\006\003\125\035\020\004\044\060\042  
\200\017\062\060\060\066\061\061\062\067\062\060\062\063\064\062  
\132\201\017\062\060\062\066\061\061\062\067\062\060\065\063\064  
\062\132\060\037\006\003\125\035\043\004\030\060\026\200\024\150  
\220\344\147\244\246\123\200\307\206\146\244\361\367\113\103\373  
\204\275\155\060\035\006\003\125\035\016\004\026\004\024\150\220  
\344\147\244\246\123\200\307\206\146\244\361\367\113\103\373\204  
\275\155\060\035\006\011\052\206\110\206\366\175\007\101\000\004  
\020\060\016\033\010\126\067\056\061\072\064\056\060\003\002\004  
\220\060\015\006\011\052\206\110\206\367\015\001\001\005\005\000  
\003\202\001\001\000\223\324\060\260\327\003\040\052\320\371\143  
\350\221\014\005\040\251\137\031\312\173\162\116\324\261\333\320  
\226\373\124\132\031\054\014\010\367\262\274\205\250\235\177\155  
\073\122\263\052\333\347\324\204\214\143\366\017\313\046\001\221

```
\120\154\364\137\024\342\223\164\300\023\236\060\072\120\343\264
\140\305\034\360\042\104\215\161\107\254\310\032\311\351\233\232
\000\140\023\377\160\176\137\021\115\111\033\263\025\122\173\311
\124\332\277\235\225\257\153\232\330\236\351\361\344\103\215\342
\021\104\072\277\257\275\203\102\163\122\213\252\273\247\051\317
\365\144\034\012\115\321\274\252\254\237\052\320\377\177\177\332
\175\352\261\355\060\045\301\204\332\064\322\133\170\203\126\354
\234\066\303\046\342\021\366\147\111\035\222\253\214\373\353\377
\172\356\205\112\247\120\200\360\247\134\112\224\056\137\005\231
\074\122\101\340\315\264\143\317\001\103\272\234\203\334\217\140
\073\363\132\264\264\173\256\332\013\220\070\165\357\201\035\146
\322\367\127\160\066\263\277\374\050\257\161\045\205\133\023\376
\036\177\132\264\074
```

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "Entrust Root Certification Authority"

# Issuer: CN=Entrust

Root Certification Authority,OU="(c) 2006 Entrust, Inc.",OU=www.entrust.net/CPS is incorporated by reference,O="Entrust, Inc.",C=US

# Serial Number: 1164660820 (0x456b5054)

# Subject: CN=Entrust Root Certification Authority,OU="(c) 2006 Entrust, Inc.",OU=www.entrust.net/CPS is incorporated by reference,O="Entrust, Inc.",C=US

# Not Valid Before: Mon Nov 27 20:23:42 2006

# Not Valid After : Fri Nov 27 20:53:42 2026

# Fingerprint (SHA-256):

73:C1:76:43:4F:1B:C6:D5:AD:F4:5B:0E:76:E7:27:28:7C:8D:E5:76:16:C1:E6:E6:14:1A:2B:2C:BC:7D:8E:4C

# Fingerprint (SHA1): B3:1E:B1:B7:40:E3:6C:84:02:DA:DC:37:D4:4D:F5:D4:67:49:52:F9

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "Entrust Root Certification Authority"

CKA\_CERT\_SHA1\_HASH MULTILINE\_OCTAL

```
\263\036\261\267\100\343\154\204\002\332\334\067\324\115\365\324
\147\111\122\371
```

END

CKA\_CERT\_MD5\_HASH MULTILINE\_OCTAL

```
\326\245\303\355\135\335\076\000\301\075\207\222\037\035\077\344
```

END

CKA\_ISSUER

MULTILINE\_OCTAL

```
\060\201\260\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\026\060\024\006\003\125\004\012\023\015\105\156\164\162\165
\163\164\054\040\111\156\143\056\061\071\060\067\006\003\125\004
```



```
\013\023\060\167\167\167\056\145\156\164\162\165\163\164\056\156
\145\164\057\103\120\123\040\151\163\040\151\156\143\157\162\160
\157\162\141\164\145\144\040\142\171\040\162\145\146\145\162\145
\156\143\145\061\037\060\035\006\003\125\004\013\023\026\050\143
\051\040\062\060\060\066\040\105\156\164\162\165\163\164\054\040
\111\156\143\056\061\055\060\053\006\003\125\004\003\023\044\105
\156\164\162\165\163\164\040\122\157\157\164\040\103\145\162\164
\151\146\151\143\141\164\151\157\156\040\101\165\164\150\157\162
\151\164\171
```

END

CKA\_SERIAL\_NUMBER MULTILINE\_OCTAL

```
\002\004\105\153\120\124
```

END

CKA\_TRUST\_SERVER\_AUTH CK\_TRUST CKT\_NSS\_TRUSTED\_DELEGATOR

CKA\_TRUST\_EMAIL\_PROTECTION CK\_TRUST CKT\_NSS\_MUST\_VERIFY\_TRUST

CKA\_TRUST\_CODE\_SIGNING CK\_TRUST

CKT\_NSS\_MUST\_VERIFY\_TRUST

CKA\_TRUST\_STEP\_UP\_APPROVED CK\_BBOOL CK\_FALSE

#

# Certificate "Certum Root CA"

#

# Issuer: CN=Certum CA,O=Unizeto Sp. z o.o.,C=PL

# Serial Number: 65568 (0x10020)

# Subject: CN=Certum CA,O=Unizeto Sp. z o.o.,C=PL

# Not Valid Before: Tue Jun 11 10:46:39 2002

# Not Valid After : Fri Jun 11 10:46:39 2027

# Fingerprint (SHA-256):

D8:E0:FE:BC:1D:B2:E3:8D:00:94:0F:37:D2:7D:41:34:4D:99:3E:73:4B:99:D5:65:6D:97:78:D4:D8:14:36:24

# Fingerprint (SHA1): 62:52:DC:40:F7:11:43:A2:2F:DE:9E:F7:34:8E:06:42:51:B1:81:18

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_CERTIFICATE

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "Certum Root CA"

CKA\_CERTIFICATE\_TYPE CK\_CERTIFICATE\_TYPE CKC\_X\_509

CKA\_SUBJECT MULTILINE\_OCTAL

```
\060\076\061\013\060\011\006\003\125\004\006\023\002\120\114\061
\033\060\031\006\003\125\004\012\023\022\125\156\151\172\145\164
\157\040\123\160\056\040\172\040\157\056\157\056\061\022\060\020
\006\003\125\004\003\023\011\103\145\162\164\165\155\040\103\101
```

END

CKA\_ID

UTF8 "0"

CKA\_ISSUER MULTILINE\_OCTAL

```
\060\076\061\013\060\011\006\003\125\004\006\023\002\120\114\061
\033\060\031\006\003\125\004\012\023\022\125\156\151\172\145\164
\157\040\123\160\056\040\172\040\157\056\157\056\061\022\060\020
```

\006\003\125\004\003\023\011\103\145\162\164\165\155\040\103\101  
END  
CKA\_SERIAL\_NUMBER MULTILINE\_OCTAL  
\002\003\001\000\040  
END  
CKA\_VALUE MULTILINE\_OCTAL  
\060\202\003\014\060\202\001\364\240\003\002\001\002\002\003\001  
\000\040\060\015\006\011\052\206\110\206\367\015\001\001\005\005  
\000\060\076\061\013\060\011\006\003\125\004\006\023\002\120\114  
\061\033\060\031\006\003\125\004\012\023\022\125\156\151\172\145  
\164\157\040\123\160\056\040\172\040\157\056\157\056\061\022\060  
\020\006\003\125\004\003\023\011\103\145\162\164\165\155\040\103  
\101\060\036\027\015\060\062\060\066\061\061\061\060\064\066\063  
\071\132\027\015\062\067\060\066\061\061\061\060\064\066\063\071  
\132\060\076\061\013\060\011\006\003\125\004\006\023\002\120\114  
\061\033\060\031\006\003\125\004\012\023\022\125\156\151\172\145  
\164\157\040\123\160\056\040\172\040\157\056\157\056\061\022\060  
\020\006\003\125\004\003\023\011\103\145\162\164\165\155\040\103  
\101\060\202\001\042\060\015\006\011\052\206\110\206\367\015\001  
\001\001\005\000\003\202\001\017\000\060\202\001\012\002\202\001  
\001\000\316\261\301\056\323\117\174\315\045\316\030\076\117\304  
\214\157\200\152\163\310\133\121\370\233\322\334\273\000\134\261  
\240\374\165\003\356\201\360\210\356\043\122\351\346\025\063\215  
\254\055\011\305\166\371\053\071\200\211\344\227\113\220\245\250  
\170\370\163\103\173\244\141\260\330\130\314\341\154\146\176\234  
\363\011\136\125\143\204\325\250\357\363\261\056\060\150\263\304  
\074\330\254\156\215\231\132\220\116\064\334\066\232\217\201\210  
\120\267\155\226\102\011\363\327\225\203\015\101\113\260\152\153  
\370\374\017\176\142\237\147\304\355\046\137\020\046\017\010\117  
\360\244\127\050\316\217\270\355\105\366\156\356\045\135\252\156  
\071\276\344\223\057\331\107\240\162\353\372\246\133\257\312\123  
\077\342\016\306\226\126\021\156\367\351\146\251\046\330\177\225  
\123\355\012\205\210\272\117\051\245\102\214\136\266\374\205\040  
\000\252\150\013\241\032\205\001\234\304\106\143\202\210\266\042  
\261\356\376\252\106\131\176\317\065\054\325\266\332\135\367\110  
\063\024\124\266\353\331\157\316\315\210\326\253\033\332\226\073  
\035\131\002\003\001\000\001\243\023\060\021\060\017\006\003\125  
\035\023\001\001\377\004\005\060\003\001\001\377\060\015\006\011  
\052\206\110\206\367\015\001\001\005\005\000\003\202\001\001\000  
\270\215\316\357\347\024\272\317\356\260\104\222\154\264\071\076  
\242\204\156\255\270\041\167\322\324\167\202\207\346\040\101\201  
\356\342\370\021\267\143\321\027\067\276\031\166\044\034\004\032  
\114\353\075\252\147\157\055\324\315\376\145\061\160\305\033\246  
\002\012\272\140\173\155\130\302\232\111\376\143\062\013\153\343  
\072\300\254\253\073\260\350\323\011\121\214\020\203\306\064\340  
\305\053\340\032\266\140\024\047\154\062\167\214\274\262\162\230  
\317\315\314\077\271\310\044\102\024\326\127\374\346\046\103\251  
\035\345\200\220\316\003\124\050\076\367\077\323\370\115\355\152

```
\012\072\223\023\233\073\024\043\023\143\234\077\321\207\047\171
\345\114\121\343\001\255\205\135\032\073\261\325\163\020\244\323
\362\274\156\144\365\132\126\220\250\307\016\114\164\017\056\161
\073\367\310\107\364\151\157\025\362\021\136\203\036\234\174\122
\256\375\002\332\022\250\131\147\030\333\274\160\335\233\261\151
\355\200\316\211\100\110\152\016\065\312\051\146\025\041\224\054
\350\140\052\233\205\112\100\363\153\212\044\354\006\026\054\163
END
```

```
CKA_NSS_MOZILLA_CA_POLICY
CK_BBOOL CK_TRUE
CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE
CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE
```

```
# Trust for "Certum Root CA"
```

```
# Issuer: CN=Certum CA,O=Unizeto Sp. z o.o.,C=PL
```

```
# Serial Number: 65568 (0x10020)
```

```
# Subject: CN=Certum CA,O=Unizeto Sp. z o.o.,C=PL
```

```
# Not Valid Before: Tue Jun 11 10:46:39 2002
```

```
# Not Valid After : Fri Jun 11
```

```
10:46:39 2027
```

```
# Fingerprint (SHA-256):
```

```
D8:E0:FE:BC:1D:B2:E3:8D:00:94:0F:37:D2:7D:41:34:4D:99:3E:73:4B:99:D5:65:6D:97:78:D4:D8:14:36:24
```

```
# Fingerprint (SHA1): 62:52:DC:40:F7:11:43:A2:2F:DE:9E:F7:34:8E:06:42:51:B1:81:18
```

```
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
```

```
CKA_TOKEN CK_BBOOL CK_TRUE
```

```
CKA_PRIVATE CK_BBOOL CK_FALSE
```

```
CKA_MODIFIABLE CK_BBOOL CK_FALSE
```

```
CKA_LABEL UTF8 "Certum Root CA"
```

```
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
```

```
\142\122\334\100\367\021\103\242\057\336\236\367\064\216\006\102
\121\261\201\030
```

```
END
```

```
CKA_CERT_MD5_HASH MULTILINE_OCTAL
```

```
\054\217\237\146\035\030\220\261\107\046\235\216\206\202\214\251
```

```
CKA_ISSUER MULTILINE_OCTAL
```

```
\060\076\061\013\060\011\006\003\125\004\006\023\002\120\114\061
\033\060\031\006\003\125\004\012\023\022\125\156\151\172\145\164
\157\040\123\160\056\040\172\040\157\056\157\056\061\022\060\020
\006\003\125\004\003\023\011\103\145\162\164\165\155\040\103\101
```

```
END
```

```
CKA_SERIAL_NUMBER MULTILINE_OCTAL
```

```
\002\003\001\000\040
```

```
END
```

```
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
```

```
CKA_TRUST_EMAIL_PROTECTION
```

```
CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
```

```
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
```

CKA\_TRUST\_STEP\_UP\_APPROVED CK\_BBOOL CK\_FALSE

#

# Certificate "Comodo AAA Services root"

#

# Issuer: CN=AAA Certificate Services,O=Comodo CA Limited,L=Salford,ST=Greater Manchester,C=GB

# Serial Number: 1 (0x1)

# Subject: CN=AAA Certificate Services,O=Comodo CA Limited,L=Salford,ST=Greater Manchester,C=GB

# Not Valid Before: Thu Jan 01 00:00:00 2004

# Not Valid After : Sun Dec 31 23:59:59 2028

# Fingerprint (SHA-256):

D7:A7:A0:FB:5D:7E:27:31:D7:71:E9:48:4E:BC:DE:F7:1D:5F:0C:3E:0A:29:48:78:2B:C8:3E:E0:EA:69:9E:F4

# Fingerprint (SHA1): D1:EB:23:A4:6D:17:D6:8F:D9:25:64:C2:F1:F1:60:17:64:D8:E3:49

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_CERTIFICATE

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "Comodo AAA Services root"

CKA\_CERTIFICATE\_TYPE CK\_CERTIFICATE\_TYPE CKC\_X\_509

CKA\_SUBJECT MULTILINE\_OCTAL

\060\173\061\013\060\011\006\003\125\004\006\023\002\107\102\061  
\033\060\031\006\003\125\004\010\014\022\107\162\145\141\164\145  
\162\040\115\141\156\143\150\145\163\164\145\162\061\020\060\016  
\006\003\125\004\007\014\007\123\141\154\146\157\162\144\061\032  
\060\030\006\003\125\004\012\014\021\103\157\155\157\144\157\040  
\103\101\040\114\151\155\151\164\145\144\061\041\060\037\006\003  
\125\004\003\014\030\101\101\101\040\103\145\162\164\151\146\151  
\143\141\164\145\040\123\145\162\166\151\143\145\163

END

CKA\_ID

UTF8 "0"

CKA\_ISSUER MULTILINE\_OCTAL

\060\173\061\013\060\011\006\003\125\004\006\023\002\107\102\061  
\033\060\031\006\003\125\004\010\014\022\107\162\145\141\164\145  
\162\040\115\141\156\143\150\145\163\164\145\162\061\020\060\016  
\006\003\125\004\007\014\007\123\141\154\146\157\162\144\061\032  
\060\030\006\003\125\004\012\014\021\103\157\155\157\144\157\040  
\103\101\040\114\151\155\151\164\145\144\061\041\060\037\006\003  
\125\004\003\014\030\101\101\101\040\103\145\162\164\151\146\151  
\143\141\164\145\040\123\145\162\166\151\143\145\163

END

CKA\_SERIAL\_NUMBER

MULTILINE\_OCTAL

\002\001\001

END

CKA\_VALUE MULTILINE\_OCTAL

\060\202\004\062\060\202\003\032\240\003\002\001\002\002\001\001  
\060\015\006\011\052\206\110\206\367\015\001\001\005\005\000\060

\173\061\013\060\011\006\003\125\004\006\023\002\107\102\061\033  
\060\031\006\003\125\004\010\014\022\107\162\145\141\164\145\162  
\040\115\141\156\143\150\145\163\164\145\162\061\020\060\016\006  
\003\125\004\007\014\007\123\141\154\146\157\162\144\061\032\060  
\030\006\003\125\004\012\014\021\103\157\155\157\144\157\040\103  
\101\040\114\151\155\151\164\145\144\061\041\060\037\006\003\125  
\004\003\014\030\101\101\101\040\103\145\162\164\151\146\151\143  
\141\164\145\040\123\145\162\166\151\143\145\163\060\036\027\015  
\060\064\060\061\060\061\060\060\060\060\060\132\027\015\062  
\070\061\062\063\061\062\063\065\071\065\071\132\060\173\061\013  
\060\011\006\003\125\004\006\023\002\107\102\061\033\060\031\006  
\003\125\004\010\014\022\107\162\145\141\164\145\162\040\115\141  
\156\143\150\145\163\164\145\162\061\020\060\016\006\003\125\004  
\007\014\007\123\141\154\146\157\162\144\061\032\060\030\006\003  
\125\004\012\014\021\103\157\155\157\144\157\040\103\101\040\114  
\151\155\151\164\145\144\061\041\060\037\006\003\125\004\003\014  
\030\101\101\101\040\103\145\162\164\151\146\151\143\141\164\145  
\040\123\145\162\166\151\143\145\163\060\202\001\042\060\015\006  
\011\052\206\110\206\367\015\001\001\001\005\000\003\202\001\017  
\000\060\202\001\012\002\202\001\001\000\276\100\235\364\156\341  
\352\166\207\034\115\105\104\216\276\106\310\203\006\235\301\052  
\376\030\037\216\344\002\372\363\253\135\120\212\026\061\013\232  
\006\320\305\160\042\315\111\055\124\143\314\266\156\150\106\013  
\123\352\313\114\044\300\274\162\116\352\361\025\256\364\124\232  
\022\012\303\172\262\063\140\342\332\211\125\363\042\130\363\336  
\334\317\357\203\206\242\214\224\117\237\150\362\230\220\106\204  
\047\307\166\277\343\314\065\054\213\136\007\144\145\202\300\110  
\260\250\221\371\141\237\166\040\120\250\221\307\146\265\353\170  
\142\003\126\360\212\032\023\352\061\243\036\240\231\375\070\366  
\366\047\062\130\157\007\365\153\270\373\024\053\257\267\252\314  
\326\143\137\163\214\332\005\231\250\070\250\313\027\170\066\121  
\254\351\236\364\170\072\215\317\017\331\102\342\230\014\253\057  
\237\016\001\336\357\237\231\111\361\055\337\254\164\115\033\230  
\265\107\305\345\051\321\371\220\030\307\142\234\276\203\307\046  
\173\076\212\045\307\300\335\235\346\065\150\020\040\235\217\330  
\336\322\303\204\234\015\136\350\057\311\002\003\001\000\001\243  
\201\300\060\201\275\060\035\006\003\125\035\016\004\026\004\024  
\240\021\012\043\076\226\361\007\354\342\257\051\357\202\245\177  
\320\060\244\264\060\016\006\003\125\035\017\001\001\377\004\004  
\003\002\001\006\060\017\006\003\125\035\023\001\001\377\004\005  
\060\003\001\001\377\060\173\006\003\125\035\037\004\164\060\162  
\060\070\240\066\240\064\206\062\150\164\164\160\072\057\057\143  
\162\154\056\143\157\155\157\144\157\143\141\056\143\157\155\057  
\101\101\101\103\145\162\164\151\146\151\143\141\164\145\123\145  
\162\166\151\143\145\163\056\143\162\154\060\066\240\064\240\062  
\206\060\150\164\164\160\072\057\057\143\162\154\056\143\157\155  
\157\144\157\056\156\145\164\057\101\101\101\103\145\162\164\151  
\146\151\143\141\164\145\123\145\162\166\151\143\145\163\056\143

```
\162\154\060\015\006\011\052\206\110\206\367\015\001\001\005\005
\000\003\202\001\001\000\010\126\374\002\360\233\350\377\244\372
\326\173\306\104\200\316\117\304\305\366\000\130\314\246\266\274
\024\111\150\004\166\350\346\356\135\354\002\017\140\326\215\120
\030\117\046\116\001\343\346\260\245\356\277\274\164\124\101\277
\375\374\022\270\307\117\132\364\211\140\005\177\140\267\005\112
\363\366\361\302\277\304\271\164\206\266\055\175\153\314\322\363
\106\335\057\306\340\152\303\303\064\003\054\175\226\335\132\302
\016\247\012\231\301\005\213\253\014\057\363\134\072\317\154\067
\125\011\207\336\123\100\154\130\357\374\266\253\145\156\004\366
\033\334\074\340\132\025\306\236\331\361\131\110\060\041\145\003
\154\354\351\041\163\354\233\003\241\340\067\255\240\025\030\217
\372\272\002\316\247\054\251\020\023\054\324\345\010\046\253\042
\227\140\370\220\136\164\324\242\232\123\275\362\251\150\340\242
\156\302\327\154\261\243\017\236\277\353\150\347\126\362\256\362
\343\053\070\072\011\201\265\153\205\327\276\055\355\077\032\267
\262\143\342\365\142\054\202\324\152\000\101\120\361\071\203\237
\225\351\066\226\230\156
```

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "Comodo AAA Services root"

# Issuer: CN=AAA Certificate Services,O=Comodo CA Limited,L=Salford,ST=Greater Manchester,C=GB

# Serial Number: 1 (0x1)

# Subject: CN=AAA Certificate Services,O=Comodo CA Limited,L=Salford,ST=Greater Manchester,C=GB

# Not Valid Before: Thu Jan 01 00:00:00 2004

# Not Valid After : Sun Dec 31 23:59:59 2028

# Fingerprint

(SHA-256):

D7:A7:A0:FB:5D:7E:27:31:D7:71:E9:48:4E:BC:DE:F7:1D:5F:0C:3E:0A:29:48:78:2B:C8:3E:E0:EA:69:9E:F4

# Fingerprint (SHA1): D1:EB:23:A4:6D:17:D6:8F:D9:25:64:C2:F1:F1:60:17:64:D8:E3:49

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "Comodo AAA Services root"

CKA\_CERT\_SHA1\_HASH MULTILINE\_OCTAL

```
\321\353\043\244\155\027\326\217\331\045\144\302\361\361\140\027
\144\330\343\111
```

END

CKA\_CERT\_MD5\_HASH MULTILINE\_OCTAL

```
\111\171\004\260\353\207\031\254\107\260\274\021\121\233\164\320
```

END

CKA\_ISSUER MULTILINE\_OCTAL

```
\060\173\061\013\060\011\006\003\125\004\006\023\002\107\102\061
```

```
\033\060\031\006\003\125\004\010\014\022\107\162\145\141\164\145
\162\040\115\141\156\143\150\145\163\164\145\162\061\020\060\016
\006\003\125\004\007\014\007\123\141\154\146\157\162\144\061\032
\060\030\006\003\125\004\012\014\021\103\157\155\157\144\157\040
\103\101\040\114\151\155\151\164\145\144\061\041\060\037\006\003
\125\004\003\014\030\101\101\101\040\103\145\162\164\151\146\151
\143\141\164\145\040\123\145\162\166\151\143\145\163
```

END

CKA\_SERIAL\_NUMBER

MULTILINE\_OCTAL

```
\002\001\001
```

END

CKA\_TRUST\_SERVER\_AUTH CK\_TRUST CKT\_NSS\_TRUSTED\_DELEGATOR

CKA\_TRUST\_EMAIL\_PROTECTION CK\_TRUST CKT\_NSS\_TRUSTED\_DELEGATOR

CKA\_TRUST\_CODE\_SIGNING CK\_TRUST CKT\_NSS\_MUST\_VERIFY\_TRUST

CKA\_TRUST\_STEP\_UP\_APPROVED CK\_BBOOL CK\_FALSE

#

# Certificate "QuoVadis Root CA 2"

#

# Issuer: CN=QuoVadis Root CA 2,O=QuoVadis Limited,C=BM

# Serial Number: 1289 (0x509)

# Subject: CN=QuoVadis Root CA 2,O=QuoVadis Limited,C=BM

# Not Valid Before: Fri Nov 24 18:27:00 2006

# Not Valid After : Mon Nov 24 18:23:33 2031

# Fingerprint (SHA-256):

85:A0:DD:7D:D7:20:AD:B7:FF:05:F8:3D:54:2B:20:9D:C7:FF:45:28:F7:D6:77:B1:83:89:FE:A5:E5:C4:9E:86

# Fingerprint (SHA1): CA:3A:FB:CF:12:40:36:4B:44:B2:16:20:88:80:48:39:19:93:7C:F7

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_CERTIFICATE

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL

CK\_FALSE

CKA\_LABEL UTF8 "QuoVadis Root CA 2"

CKA\_CERTIFICATE\_TYPE CK\_CERTIFICATE\_TYPE CKC\_X\_509

CKA\_SUBJECT MULTILINE\_OCTAL

```
\060\105\061\013\060\011\006\003\125\004\006\023\002\102\115\061
\031\060\027\006\003\125\004\012\023\020\121\165\157\126\141\144
\151\163\040\114\151\155\151\164\145\144\061\033\060\031\006\003
\125\004\003\023\022\121\165\157\126\141\144\151\163\040\122\157
\157\164\040\103\101\040\062
```

END

CKA\_ID UTF8 "0"

CKA\_ISSUER MULTILINE\_OCTAL

```
\060\105\061\013\060\011\006\003\125\004\006\023\002\102\115\061
\031\060\027\006\003\125\004\012\023\020\121\165\157\126\141\144
\151\163\040\114\151\155\151\164\145\144\061\033\060\031\006\003
\125\004\003\023\022\121\165\157\126\141\144\151\163\040\122\157
```

\157\164\040\103\101\040\062

END

CKA\_SERIAL\_NUMBER MULTILINE\_OCTAL

\002\002\005\011

END

CKA\_VALUE MULTILINE\_OCTAL

\060\202\005\267\060\202\003\237\240\003\002\001\002\002\002\005  
\011\060\015\006\011\052\206\110\206\367\015\001\001\005\005\000  
\060\105\061\013\060\011\006\003\125\004\006\023\002\102\115\061  
\031\060\027\006\003\125\004\012\023\020\121\165\157\126\141\144  
\151\163\040\114\151\155\151\164\145\144\061\033\060\031\006\003  
\125\004\003\023\022\121\165\157\126\141\144\151\163\040\122\157  
\157\164\040\103\101\040\062\060\036\027\015\060\066\061\061\062  
\064\061\070\062\067\060\060\132\027\015\063\061\061\061\062\064  
\061\070\062\063\063\063\132\060\105\061\013\060\011\006\003\125  
\004\006\023\002\102\115\061\031\060\027\006\003\125\004\012\023  
\020\121\165\157\126\141\144\151\163\040\114\151\155\151\164\145  
\144\061\033\060\031\006\003\125\004\003\023\022\121\165\157\126  
\141\144\151\163\040\122\157\157\164\040\103\101\040\062\060\202  
\002\042\060\015\006\011\052\206\110\206\367\015\001\001\001\005  
\000\003\202\002\017\000\060\202\002\012\002\202\002\001\000\232  
\030\312\113\224\015\000\055\257\003\051\212\360\017\201\310\256  
\114\031\205\035\010\237\253\051\104\205\363\057\201\255\062\036  
\220\106\277\243\206\046\032\036\376\176\034\030\072\134\234\140  
\027\052\072\164\203\063\060\175\141\124\021\313\355\253\340\346  
\322\242\176\365\153\157\030\267\012\013\055\375\351\076\357\012  
\306\263\020\351\334\302\106\027\370\135\375\244\332\377\236\111  
\132\234\346\063\346\044\226\367\077\272\133\053\034\172\065\302  
\326\147\376\253\146\120\213\155\050\140\053\357\327\140\303\307  
\223\274\215\066\221\363\177\370\333\021\023\304\234\167\166\301  
\256\267\002\152\201\172\251\105\203\342\005\346\271\126\301\224  
\067\217\110\161\143\042\354\027\145\007\225\212\113\337\217\306  
\132\012\345\260\343\137\136\153\021\253\014\371\205\353\104\351  
\370\004\163\362\351\376\134\230\214\365\163\257\153\264\176\315  
\324\134\002\053\114\071\341\262\225\225\055\102\207\327\325\263  
\220\103\267\154\023\361\336\335\366\304\370\211\077\321\165\365  
\222\303\221\325\212\210\320\220\354\334\155\336\211\302\145\161  
\226\213\015\003\375\234\277\133\026\254\222\333\352\376\171\174  
\255\353\257\367\026\313\333\315\045\053\345\037\373\232\237\342  
\121\314\072\123\014\110\346\016\275\311\264\166\006\122\346\021  
\023\205\162\143\003\004\340\004\066\053\040\031\002\350\164\247  
\037\266\311\126\146\360\165\045\334\147\301\016\141\140\210\263  
\076\321\250\374\243\332\035\260\321\261\043\124\337\104\166\155  
\355\101\330\301\262\042\266\123\034\337\065\035\334\241\167\052  
\061\344\055\365\345\345\333\310\340\377\345\200\327\013\143\240  
\377\063\241\017\272\054\025\025\352\227\263\322\242\265\276\362  
\214\226\036\032\217\035\154\244\141\067\271\206\163\063\327\227  
\226\236\043\175\202\244\114\201\342\241\321\272\147\137\225\007



\243\047\021\356\026\020\173\274\105\112\114\262\004\322\253\357  
\325\375\014\121\316\120\152\010\061\371\221\332\014\217\144\134  
\003\303\072\213\040\077\156\215\147\075\072\326\376\175\133\210  
\311\136\373\314\141\334\213\063\167\323\104\062\065\011\142\004  
\222\026\020\330\236\047\107\373\073\041\343\370\353\035\133\002  
\003\001\000\001\243\201\260\060\201\255\060\017\006\003\125\035  
\023\001\001\377\004\005\060\003\001\001\377\060\013\006\003\125  
\035\017\004\004\003\002\001\006\060\035\006\003\125\035\016\004  
\026\004\024\032\204\142\274\110\114\063\045\004\324\356\320\366  
\003\304\031\106\321\224\153\060\156\006\003\125\035\043\004\147  
\060\145\200\024\032\204\142\274\110\114\063\045\004\324\356\320  
\366\003\304\031\106\321\224\153\241\111\244\107\060\105\061\013  
\060\011\006\003\125\004\006\023\002\102\115\061\031\060\027\006  
\003\125\004\012\023\020\121\165\157\126\141\144\151\163\040\114  
\151\155\151\164\145\144\061\033\060\031\006\003\125\004\003\023  
\022\121\165\157\126\141\144\151\163\040\122\157\157\164\040\103  
\101\040\062\202\002\005\011\060\015\006\011\052\206\110\206\367  
\015\001\001\005\005\000\003\202\002\001\000\076\012\026\115\237  
\006\133\250\256\161\135\057\005\057\147\346\023\105\203\304\066  
\366\363\300\046\014\015\265\107\144\135\370\264\162\311\106\245  
\003\030\047\125\211\170\175\166\352\226\064\200\027\040\334\347  
\203\370\215\374\007\270\332\137\115\056\147\262\204\375\331\104  
\374\167\120\201\346\174\264\311\015\013\162\123\370\166\007\007  
\101\107\226\014\373\340\202\046\223\125\214\376\042\037\140\145  
\174\137\347\046\263\367\062\220\230\120\324\067\161\125\366\222  
\041\170\367\225\171\372\370\055\046\207\146\126\060\167\246\067  
\170\063\122\020\130\256\077\141\216\362\152\261\357\030\176\112  
\131\143\312\215\242\126\325\247\057\274\126\037\317\071\301\342  
\373\012\250\025\054\175\115\172\143\306\154\227\104\074\322\157  
\303\112\027\012\370\220\322\127\242\031\121\245\055\227\101\332  
\007\117\251\120\332\220\215\224\106\341\076\360\224\375\020\000  
\070\365\073\350\100\341\264\156\126\032\040\314\157\130\215\355  
\056\105\217\326\351\223\077\347\261\054\337\072\326\042\214\334  
\204\273\042\157\320\370\344\306\071\351\004\210\074\303\272\353  
\125\172\155\200\231\044\365\154\001\373\370\227\260\224\133\353  
\375\322\157\361\167\150\015\065\144\043\254\270\125\241\003\321  
\115\102\031\334\370\165\131\126\243\371\250\111\171\370\257\016  
\271\021\240\174\267\152\355\064\320\266\046\142\070\032\207\014  
\370\350\375\056\323\220\177\007\221\052\035\326\176\134\205\203  
\231\260\070\010\077\351\136\371\065\007\344\311\142\156\127\177  
\247\120\225\367\272\310\233\346\216\242\001\305\326\146\277\171  
\141\363\074\034\341\271\202\134\135\240\303\351\330\110\275\031  
\242\021\024\031\156\262\206\033\150\076\110\067\032\210\267\135  
\226\136\234\307\357\047\142\010\342\221\031\134\322\361\041\335  
\272\027\102\202\227\161\201\123\061\251\237\366\175\142\277\162  
\341\243\223\035\314\212\046\132\011\070\320\316\327\015\200\026  
\264\170\245\072\207\114\215\212\245\325\106\227\362\054\020\271  
\274\124\042\300\001\120\151\103\236\364\262\357\155\370\354\332

```

\361\343\261\357\337\221\217\124\052\013\045\301\046\031\304\122
\020\005\145\325\202\020\352\302\061\315\056
END
CKA_NSS_MOZILLA_CA_POLICY
CK_BBOOL CK_TRUE
CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE
CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

# Trust for "QuoVadis Root CA 2"
# Issuer: CN=QuoVadis Root
  CA 2,O=QuoVadis Limited,C=BM
# Serial Number: 1289 (0x509)
# Subject: CN=QuoVadis Root CA 2,O=QuoVadis Limited,C=BM
# Not Valid Before: Fri Nov 24 18:27:00 2006
# Not Valid After : Mon Nov 24 18:23:33 2031
# Fingerprint (SHA-256):
85:A0:DD:7D:D7:20:AD:B7:FF:05:F8:3D:54:2B:20:9D:C7:FF:45:28:F7:D6:77:B1:83:89:FE:A5:E5:C4:9E:86
# Fingerprint (SHA1): CA:3A:FB:CF:12:40:36:4B:44:B2:16:20:88:80:48:39:19:93:7C:F7
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "QuoVadis Root CA 2"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\312\072\373\317\022\100\066\113\104\262\026\040\210\200\110\071
\031\223\174\367
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\136\071\173\335\370\272\354\202\351\254\142\272\014\124\000\053
END
CKA_ISSUER MULTILINE_OCTAL
\060\105\061\013\060\011\006\003\125\004\006\023\002\102\115\061
\031\060\027\006\003\125\004\012\023\020\121\165\157\126\141\144
\151\163\040\114\151\155\151\164\145\144\061\033\060\031\006\003
\125\004\003\023\022\121\165\157\126\141\144\151\163\040\122\157
\157\164\040\103\101\040\062
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\002\005\011
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "QuoVadis Root CA 3"

```

```
#
# Issuer: CN=QuoVadis Root CA 3,O=QuoVadis Limited,C=BM
# Serial Number: 1478 (0x5c6)
# Subject: CN=QuoVadis Root CA 3,O=QuoVadis Limited,C=BM
# Not Valid Before: Fri Nov 24 19:11:23 2006
# Not Valid After : Mon Nov 24 19:06:44 2031
# Fingerprint (SHA-256):
18:F1:FC:7F:20:5D:F8:AD:DD:EB:7F:E0:07:DD:57:E3:AF:37:5A:9C:4D:8D:73:54:6B:F4:F1:FE:D1:E1:8D:35
# Fingerprint (SHA1): 1F:49:14:F7:D8:74:95:1D:DD:AE:02:C0:BE:FD:3A:2D:82:75:51:85
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL
UTF8 "QuoVadis Root CA 3"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\105\061\013\060\011\006\003\125\004\006\023\002\102\115\061
\031\060\027\006\003\125\004\012\023\020\121\165\157\126\141\144
\151\163\040\114\151\155\151\164\145\144\061\033\060\031\006\003
\125\004\003\023\022\121\165\157\126\141\144\151\163\040\122\157
\157\164\040\103\101\040\063
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\105\061\013\060\011\006\003\125\004\006\023\002\102\115\061
\031\060\027\006\003\125\004\012\023\020\121\165\157\126\141\144
\151\163\040\114\151\155\151\164\145\144\061\033\060\031\006\003
\125\004\003\023\022\121\165\157\126\141\144\151\163\040\122\157
\157\164\040\103\101\040\063
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\002\005\306
END
CKA_VALUE MULTILINE_OCTAL
\060\202\006\235\060\202\004\205\240\003\002\001\002\002\002\005
\306\060\015\006\011\052\206\110\206\367\015\001\001\005\005\000
\060\105\061\013\060\011\006\003\125\004\006\023\002\102\115\061
\031\060\027\006\003\125\004\012\023\020\121\165\157\126\141\144
\151\163\040\114\151\155\151\164\145\144\061\033\060\031\006\003
\125\004\003\023\022\121\165\157\126\141\144\151\163\040\122\157
\157\164\040\103\101\040\063\060\036\027\015\060\066\061\061\062
\064\061\071\061\061\062\063\132\027\015\063\061\061\061\062\064
\061\071\060\066\064\064\132\060\105\061\013\060\011\006\003\125
\004\006\023\002\102\115\061\031\060\027\006\003\125\004\012\023
\020\121\165\157\126\141\144\151\163\040\114\151\155\151\164\145
\144\061\033\060\031\006\003\125\004\003\023\022\121\165\157\126
\141\144\151\163\040\122\157\157\164\040\103\101\040\063\060\202
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\002\042\060\015\006\011\052\206\110\206\367\015\001\001\001\005  
\000\003\202\002\017\000\060\202\002\012\002\202\002\001\000\314  
\127\102\026\124\234\346\230\323\323\115\356\376\355\307\237\103  
\071\112\145\263\350\026\210\064\333\015\131\221\164\317\222\270  
\004\100\255\002\113\061\253\274\215\221\150\330\040\016\032\001  
\342\032\173\116\027\135\342\212\267\077\231\032\315\353\141\253  
\302\145\246\037\267\267\275\267\217\374\375\160\217\013\240\147  
\276\001\242\131\317\161\346\017\051\166\377\261\126\171\105\053  
\037\236\172\124\350\243\051\065\150\244\001\117\017\244\056\067  
\357\033\277\343\217\020\250\162\253\130\127\347\124\206\310\311  
\363\133\332\054\332\135\216\156\074\243\076\332\373\202\345\335  
\362\134\262\005\063\157\212\066\316\320\023\116\377\277\112\014  
\064\114\246\303\041\275\120\004\125\353\261\273\235\373\105\036  
\144\025\336\125\001\214\002\166\265\313\241\077\102\151\274\057  
\275\150\103\026\126\211\052\067\141\221\375\246\256\116\300\313  
\024\145\224\067\113\222\006\357\004\320\310\234\210\333\013\173  
\201\257\261\075\052\304\145\072\170\266\356\334\200\261\322\323  
\231\234\072\356\153\132\153\263\215\267\325\316\234\302\276\245  
\113\057\026\261\236\150\073\006\157\256\175\237\370\336\354\314  
\051\247\230\243\045\103\057\357\361\137\046\341\210\115\370\136  
\156\327\331\024\156\031\063\151\247\073\204\211\223\304\123\125  
\023\241\121\170\100\370\270\311\242\356\173\272\122\102\203\236  
\024\355\005\122\132\131\126\247\227\374\235\077\012\051\330\334  
\117\221\016\023\274\336\225\244\337\213\231\276\254\233\063\210  
\357\265\201\257\033\306\042\123\310\366\307\356\227\024\260\305  
\174\170\122\310\360\316\156\167\140\204\246\351\052\166\040\355  
\130\001\027\060\223\351\032\213\340\163\143\331\152\222\224\111  
\116\264\255\112\205\304\243\042\060\374\011\355\150\042\163\246  
\210\014\125\041\130\305\341\072\237\052\335\312\341\220\340\331  
\163\253\154\200\270\350\013\144\223\240\234\214\031\377\263\322  
\014\354\221\046\207\212\263\242\341\160\217\054\012\345\315\155  
\150\121\353\332\077\005\177\213\062\346\023\134\153\376\137\100  
\342\042\310\264\264\144\117\326\272\175\110\076\250\151\014\327  
\273\206\161\311\163\270\077\073\235\045\113\332\377\100\353\002  
\003\001\000\001\243\202\001\225\060\202\001\221\060\017\006\003  
\125\035\023\001\001\377\004\005\060\003\001\001\377\060\201\341  
\006\003\125\035\040\004\201\331\060\201\326\060\201\323\006\011  
\053\006\001\004\001\276\130\000\003\060\201\305\060\201\223\006  
\010\053\006\001\005\005\007\002\002\060\201\206\032\201\203\101  
\156\171\040\165\163\145\040\157\146\040\164\150\151\163\040\103  
\145\162\164\151\146\151\143\141\164\145\040\143\157\156\163\164  
\151\164\165\164\145\163\040\141\143\143\145\160\164\141\156\143  
\145\040\157\146\040\164\150\145\040\121\165\157\126\141\144\151  
\163\040\122\157\157\164\040\103\101\040\063\040\103\145\162\164  
\151\146\151\143\141\164\145\040\120\157\154\151\143\171\040\057  
\040\103\145\162\164\151\146\151\143\141\164\151\157\156\040\120  
\162\141\143\164\151\143\145\040\123\164\141\164\145\155\145\156  
\164\056\060\055\006\010\053\006\001\005\005\007\002\001\026\041

\150\164\164\160\072\057\057\167\167\167\056\161\165\157\166\141  
\144\151\163\147\154\157\142\141\154\056\143\157\155\057\143\160  
\163\060\013\006\003\125\035\017\004\004\003\002\001\006\060\035  
\006\003\125\035\016\004\026\004\024\362\300\023\340\202\103\076  
\373\356\057\147\062\226\065\134\333\270\313\002\320\060\156\006  
\003\125\035\043\004\147\060\145\200\024\362\300\023\340\202\103  
\076\373\356\057\147\062\226\065\134\333\270\313\002\320\241\111  
\244\107\060\105\061\013\060\011\006\003\125\004\006\023\002\102  
\115\061\031\060\027\006\003\125\004\012\023\020\121\165\157\126  
\141\144\151\163\040\114\151\155\151\164\145\144\061\033\060\031  
\006\003\125\004\003\023\022\121\165\157\126\141\144\151\163\040  
\122\157\157\164\040\103\101\040\063\202\002\005\306\060\015\006  
\011\052\206\110\206\367\015\001\001\005\005\000\003\202\002\001  
\000\117\255\240\054\114\372\300\362\157\367\146\125\253\043\064  
\356\347\051\332\303\133\266\260\203\331\320\320\342\041\373\363  
\140\247\073\135\140\123\047\242\233\366\010\042\052\347\277\240  
\162\345\234\044\152\061\261\220\172\047\333\204\021\211\047\246  
\167\132\070\327\277\254\206\374\356\135\203\274\006\306\321\167  
\153\017\155\044\057\113\172\154\247\007\226\312\343\204\237\255  
\210\213\035\253\026\215\133\146\027\331\026\364\213\200\322\335  
\370\262\166\303\374\070\023\252\014\336\102\151\053\156\363\074  
\353\200\047\333\365\246\104\015\237\132\125\131\013\325\015\122  
\110\305\256\237\362\057\200\305\352\062\120\065\022\227\056\301  
\341\377\361\043\210\121\070\237\362\146\126\166\347\017\121\227  
\245\122\014\115\111\121\225\066\075\277\242\113\014\020\035\206  
\231\114\252\363\162\021\223\344\352\366\233\332\250\135\247\115  
\267\236\002\256\163\000\310\332\043\003\350\371\352\031\164\142  
\000\224\313\042\040\276\224\247\131\265\202\152\276\231\171\172  
\251\362\112\044\122\367\164\375\272\116\346\250\035\002\156\261  
\015\200\104\301\256\323\043\067\137\273\205\174\053\222\056\350  
\176\245\213\335\231\341\277\047\157\055\135\252\173\207\376\012  
\335\113\374\216\365\046\344\156\160\102\156\063\354\061\236\173  
\223\301\344\311\151\032\075\300\153\116\042\155\356\253\130\115  
\306\320\101\301\053\352\117\022\207\136\353\105\330\154\365\230  
\002\323\240\330\125\212\006\231\031\242\240\167\321\060\236\254  
\314\165\356\203\365\260\142\071\317\154\127\342\114\322\221\013  
\016\165\050\033\232\277\375\032\103\361\312\167\373\073\217\141  
\270\151\050\026\102\004\136\160\052\034\041\330\217\341\275\043  
\133\055\164\100\222\331\143\031\015\163\335\151\274\142\107\274  
\340\164\053\262\353\175\276\101\033\265\300\106\305\241\042\313  
\137\116\301\050\222\336\030\272\325\052\050\273\021\213\027\223  
\230\231\140\224\134\043\317\132\047\227\136\013\005\006\223\067  
\036\073\151\066\353\251\236\141\035\217\062\332\216\014\326\164  
\076\173\011\044\332\001\167\107\304\073\315\064\214\231\365\312  
\341\045\141\063\262\131\033\342\156\327\067\127\266\015\251\022  
\332

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

```

CK_BBOOL CK_TRUE
CKA_NSS_SERVER_DISTRUST_AFTER CK_BBOOL CK_FALSE
CKA_NSS_EMAIL_DISTRUST_AFTER CK_BBOOL CK_FALSE

# Trust for "QuoVadis Root CA 3"
# Issuer: CN=QuoVadis Root CA 3,O=QuoVadis Limited,C=BM
# Serial Number: 1478 (0x5c6)
# Subject:
  CN=QuoVadis Root CA 3,O=QuoVadis Limited,C=BM
# Not Valid Before: Fri Nov 24 19:11:23 2006
# Not Valid After : Mon Nov 24 19:06:44 2031
# Fingerprint (SHA-256):
18:F1:FC:7F:20:5D:F8:AD:DD:EB:7F:E0:07:DD:57:E3:AF:37:5A:9C:4D:8D:73:54:6B:F4:F1:FE:D1:E1:8D:35
# Fingerprint (SHA1): 1F:49:14:F7:D8:74:95:1D:DD:AE:02:C0:BE:FD:3A:2D:82:75:51:85
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "QuoVadis Root CA 3"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\037\111\024\367\330\164\225\035\335\256\002\300\276\375\072\055
\202\165\121\205
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\061\205\074\142\224\227\143\271\252\375\211\116\257\157\340\317
END
CKA_ISSUER MULTILINE_OCTAL
\060\105\061\013\060\011\006\003\125\004\006\023\002\102\115\061
\031\060\027\006\003\125\004\012\023\020\121\165\157\126\141\144
\151\163\040\114\151\155\151\164\145\144\061\033\060\031\006\003
\125\004\003\023\022\121\165\157\126\141\144\151\163\040\122\157
\157\164\040\103\101\040\063
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\002\005\306
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "Security Communication Root CA"
#
# Issuer: OU=Security Communication RootCA1,O=SECOM Trust.net,C=JP
# Serial Number: 0 (0x0)
# Subject: OU=Security Communication RootCA1,O=SECOM Trust.net,C=JP

```

```
# Not Valid Before: Tue Sep 30 04:20:49 2003
# Not Valid After : Sat Sep 30 04:20:49 2023
# Fingerprint (SHA-256):
E7:5E:72:ED:9F:56:0E:EC:6E:B4:80:00:73:A4:3F:C3:AD:19:19:5A:39:22:82:01:78:95:97:4A:99:02:6B:6C
# Fingerprint (SHA1): 36:B1:2B:49:F9:81:9E:D7:4C:9E:BC:38:0F:C6:56:8F:5D:AC:B2:F7
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Security Communication
Root CA"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\120\061\013\060\011\006\003\125\004\006\023\002\112\120\061
\030\060\026\006\003\125\004\012\023\017\123\105\103\117\115\040
\124\162\165\163\164\056\156\145\164\061\047\060\045\006\003\125
\004\013\023\036\123\145\143\165\162\151\164\171\040\103\157\155
\155\165\156\151\143\141\164\151\157\156\040\122\157\157\164\103
\101\061
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\120\061\013\060\011\006\003\125\004\006\023\002\112\120\061
\030\060\026\006\003\125\004\012\023\017\123\105\103\117\115\040
\124\162\165\163\164\056\156\145\164\061\047\060\045\006\003\125
\004\013\023\036\123\145\143\165\162\151\164\171\040\103\157\155
\155\165\156\151\143\141\164\151\157\156\040\122\157\157\164\103
\101\061
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\001\000
END
CKA_VALUE MULTILINE_OCTAL
\060\202\003\132\060\202\002\102\240\003\002\001\002\002\001\000
\060\015\006\011\052\206\110\206\367\015\001\001\005\005\000\060
\120\061\013\060\011\006\003\125\004\006\023\002\112\120\061\030
\060\026\006\003\125\004\012\023\017\123\105\103\117\115\040\124
\162\165\163\164\056\156\145\164\061\047\060\045\006\003\125\004
\013\023\036\123\145\143\165\162\151\164\171\040\103\157\155\155
\165\156\151\143\141\164\151\157\156\040\122\157\157\164\103\101
\061\060\036\027\015\060\063\060\071\063\060\060\064\062\060\064
\071\132\027\015\062\063\060\071\063\060\060\064\062\060\064\071
\132\060\120\061\013\060\011\006\003\125\004\006\023\002\112\120
\061\030\060\026\006\003\125\004\012\023\017\123\105\103\117\115
\040\124\162\165\163\164\056\156\145\164\061\047\060\045\006\003
\125\004\013\023\036\123\145\143\165\162\151\164\171\040\103\157
\155\155\165\156\151\143\141\164\151\157\156\040\122\157\157\164
\103\101\061\060\202\001\042\060\015\006\011\052\206\110\206\367
```

\015\001\001\001\005\000\003\202\001\017\000\060\202\001\012\002  
\202\001\001\000\263\263\376\177\323\155\261\357\026\174\127\245  
\014\155\166\212\057\113\277\144\373\114\356\212\360\363\051\174  
\365\377\356\052\340\351\351\272\133\144\042\232\232\157\054\072  
\046\151\121\005\231\046\334\325\034\152\161\306\232\175\036\235  
\335\174\154\306\214\147\147\112\076\370\161\260\031\047\251\011  
\014\246\225\277\113\214\014\372\125\230\073\330\350\042\241\113  
\161\070\171\254\227\222\151\263\211\176\352\041\150\006\230\024  
\226\207\322\141\066\274\155\047\126\236\127\356\300\300\126\375  
\062\317\244\331\216\302\043\327\215\250\363\330\045\254\227\344  
\160\070\364\266\072\264\235\073\227\046\103\243\241\274\111\131  
\162\114\043\060\207\001\130\366\116\276\034\150\126\146\257\315  
\101\135\310\263\115\052\125\106\253\037\332\036\342\100\075\333  
\315\175\271\222\200\234\067\335\014\226\144\235\334\042\367\144  
\213\337\141\336\025\224\122\025\240\175\122\311\113\250\041\311  
\306\261\355\313\303\225\140\321\017\360\253\160\370\337\313\115  
\176\354\326\372\253\331\275\177\124\362\245\351\171\372\331\326  
\166\044\050\163\002\003\001\000\001\243\077\060\075\060\035\006  
\003\125\035\016\004\026\004\024\240\163\111\231\150\334\205\133  
\145\343\233\050\057\127\237\275\063\274\007\110\060\013\006\003  
\125\035\017\004\004\003\002\001\006\060\017\006\003\125\035\023  
\001\001\377\004\005\060\003\001\001\377\060\015\006\011\052\206  
\110\206\367\015\001\001\005\005\000\003\202\001\001\000\150\100  
\251\250\273\344\117\135\171\263\005\265\027\263\140\023\353\306  
\222\135\340\321\323\152\376\373\276\233\155\277\307\005\155\131  
\040\304\034\360\267\332\204\130\002\143\372\110\026\357\117\245  
\013\367\112\230\362\077\236\033\255\107\153\143\316\010\107\353  
\122\077\170\234\257\115\256\370\325\117\317\232\230\052\020\101  
\071\122\304\335\331\233\016\357\223\001\256\262\056\312\150\102  
\044\102\154\260\263\072\076\315\351\332\110\304\025\313\351\371  
\007\017\222\120\111\212\335\061\227\137\311\351\067\252\073\131  
\145\227\224\062\311\263\237\076\072\142\130\305\111\255\142\016  
\161\245\062\252\057\306\211\166\103\100\023\023\147\075\242\124  
\045\020\313\361\072\362\331\372\333\111\126\273\246\376\247\101  
\065\303\340\210\141\311\210\307\337\066\020\042\230\131\352\260  
\112\373\126\026\163\156\254\115\367\042\241\117\255\035\172\055  
\105\047\345\060\301\136\362\332\023\313\045\102\121\225\107\003  
\214\154\041\314\164\102\355\123\377\063\213\217\017\127\001\026  
\057\317\246\356\311\160\042\024\275\375\276\154\013\003

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "Security Communication Root CA"

# Issuer: OU=Security Communication RootCA1,O=SECOM Trust.net,C=JP

# Serial Number: 0 (0x0)



```
# Subject: OU=Security Communication RootCA1,O=SECOM Trust.net,C=JP
# Not Valid Before: Tue Sep 30 04:20:49 2003
# Not Valid After : Sat Sep 30 04:20:49 2023
# Fingerprint (SHA-256):
E7:5E:72:ED:9F:56:0E:EC:6E:B4:80:00:73:A4:3F:C3:AD:19:19:5A:39:22:82:01:78:95:97:4A:99:02:6B:6C
# Fingerprint (SHA1): 36:B1:2B:49:F9:81:9E:D7:4C:9E:BC:38:0F:C6:56:8F:5D:AC:B2:F7
CKA_CLASS
CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Security Communication Root CA"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\066\261\053\111\371\201\236\327\114\236\274\070\017\306\126\217
\135\254\262\367
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\361\274\143\152\124\340\265\047\365\315\347\032\343\115\156\112
END
CKA_ISSUER MULTILINE_OCTAL
\060\120\061\013\060\011\006\003\125\004\006\023\002\112\120\061
\030\060\026\006\003\125\004\012\023\017\123\105\103\117\115\040
\124\162\165\163\164\056\156\145\164\061\047\060\045\006\003\125
\004\013\023\036\123\145\143\165\162\151\164\171\040\103\157\155
\155\165\156\151\143\141\164\151\157\156\040\122\157\157\164\103
\101\061
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\001\000
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED
CK_BBOOL CK_FALSE

#
# Certificate "Camerfirma Chambers of Commerce Root"
#
# Issuer: CN=Chambers of Commerce Root,OU=http://www.chambersign.org,O=AC Camerfirma SA CIF
A82743287,C=EU
# Serial Number: 0 (0x0)
# Subject: CN=Chambers of Commerce Root,OU=http://www.chambersign.org,O=AC Camerfirma SA CIF
A82743287,C=EU
# Not Valid Before: Tue Sep 30 16:13:43 2003
# Not Valid After : Wed Sep 30 16:13:44 2037
# Fingerprint (SHA-256):
0C:25:8A:12:A5:67:4A:EF:25:F2:8B:A7:DC:FA:EC:EE:A3:48:E5:41:E6:F5:CC:4E:E6:3B:71:B3:61:60:6A:C3
```

# Fingerprint (SHA1): 6E:3A:55:A4:19:0C:19:5C:93:84:3C:C0:DB:72:2E:31:30:61:F0:B1

```
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Camerfirma Chambers of Commerce Root"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\177\061\013\060\011\006\003\125\004\006\023\002\105\125\061
\047\060\045\006\003\125\004\012\023\036\101\103\040\103\141\155
\145\162\146\151\162\155\141\040\123\101\040\103\111\106\040\101
\070\062\067\064\063\062\070\067\061\043\060\041\006\003\125\004
\013\023\032\150\164\164\160\072\057\057\167\167\167\056\143\150
\141\155\142\145\162\163\151\147\156\056\157\162\147\061\042\060
\040\006\003\125\004\003\023\031\103\150\141\155\142\145\162\163
\040\157\146\040\103\157\155\155\145\162\143\145\040\122\157\157
\164
END
CKA_ID
UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\177\061\013\060\011\006\003\125\004\006\023\002\105\125\061
\047\060\045\006\003\125\004\012\023\036\101\103\040\103\141\155
\145\162\146\151\162\155\141\040\123\101\040\103\111\106\040\101
\070\062\067\064\063\062\070\067\061\043\060\041\006\003\125\004
\013\023\032\150\164\164\160\072\057\057\167\167\167\056\143\150
\141\155\142\145\162\163\151\147\156\056\157\162\147\061\042\060
\040\006\003\125\004\003\023\031\103\150\141\155\142\145\162\163
\040\157\146\040\103\157\155\155\145\162\143\145\040\122\157\157
\164
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\001\000
END
CKA_VALUE MULTILINE_OCTAL
\060\202\004\275\060\202\003\245\240\003\002\001\002\002\001\000
\060\015\006\011\052\206\110\206\367\015\001\001\005\005\000\060
\177\061\013\060\011\006\003\125\004\006\023\002\105\125\061\047
\060\045\006\003\125\004\012\023\036\101\103\040\103\141\155\145
\162\146\151\162\155\141\040\123\101\040\103\111\106\040\101\070
\062\067\064\063\062\070\067\061\043\060\041\006\003\125\004\013
\023\032\150\164\164\160\072\057\057\167\167\167\056\143\150\141
\155\142\145\162\163\151\147\156\056\157\162\147\061\042\060\040
\006\003\125\004\003\023\031\103\150\141\155\142\145\162\163\040
\157\146\040\103\157\155\155\145\162\143\145\040\122\157\157\164
\060\036\027\015\060\063\060\071\063\060\061\066\061\063\064\063
\132\027\015\063\067\060\071\063\060\061\066\061\063\064\064\132
```

\060\177\061\013\060\011\006\003\125\004\006\023\002\105\125\061  
\047\060\045\006\003\125\004\012\023\036\101\103\040\103\141\155  
\145\162\146\151\162\155\141\040\123\101\040\103\111\106\040\101  
\070\062\067\064\063\062\070\067\061\043\060\041\006\003\125\004  
\013\023\032\150\164\164\160\072\057\057\167\167\167\056\143\150  
\141\155\142\145\162\163\151\147\156\056\157\162\147\061\042\060  
\040\006\003\125\004\003\023\031\103\150\141\155\142\145\162\163  
\040\157\146\040\103\157\155\155\145\162\143\145\040\122\157\157  
\164\060\202\001\040\060\015\006\011\052\206\110\206\367\015\001  
\001\001\005\000\003\202\001\015\000\060\202\001\010\002\202\001  
\001\000\267\066\125\345\245\135\030\060\340\332\211\124\221\374  
\310\307\122\370\057\120\331\357\261\165\163\145\107\175\033\133  
\272\165\305\374\241\210\044\372\057\355\312\010\112\071\124\304  
\121\172\265\332\140\352\070\074\201\262\313\361\273\331\221\043  
\077\110\001\160\165\251\005\052\255\037\161\363\311\124\075\035  
\006\152\100\076\263\014\205\356\134\033\171\302\142\304\270\066  
\216\065\135\001\014\043\004\107\065\252\233\140\116\240\146\075  
\313\046\012\234\100\241\364\135\230\277\161\253\245\000\150\052  
\355\203\172\017\242\024\265\324\042\263\200\260\074\014\132\121  
\151\055\130\030\217\355\231\236\361\256\342\225\346\366\107\250  
\326\014\017\260\130\130\333\303\146\067\236\233\221\124\063\067  
\322\224\034\152\110\311\311\362\245\332\245\014\043\367\043\016  
\234\062\125\136\161\234\204\005\121\232\055\375\346\116\052\064  
\132\336\312\100\067\147\014\124\041\125\167\332\012\014\314\227  
\256\200\334\224\066\112\364\076\316\066\023\036\123\344\254\116  
\072\005\354\333\256\162\234\070\213\320\071\073\211\012\076\167  
\376\165\002\001\003\243\202\001\104\060\202\001\100\060\022\006  
\003\125\035\023\001\001\377\004\010\060\006\001\001\377\002\001  
\014\060\074\006\003\125\035\037\004\065\060\063\060\061\240\057  
\240\055\206\053\150\164\164\160\072\057\057\143\162\154\056\143  
\150\141\155\142\145\162\163\151\147\156\056\157\162\147\057\143  
\150\141\155\142\145\162\163\162\157\157\164\056\143\162\154\060  
\035\006\003\125\035\016\004\026\004\024\343\224\365\261\115\351  
\333\241\051\133\127\213\115\166\006\166\341\321\242\212\060\016  
\006\003\125\035\017\001\001\377\004\004\003\002\001\006\060\021  
\006\011\140\206\110\001\206\370\102\001\001\004\004\003\002\000  
\007\060\047\006\003\125\035\021\004\040\060\036\201\034\143\150  
\141\155\142\145\162\163\162\157\157\164\100\143\150\141\155\142  
\145\162\163\151\147\156\056\157\162\147\060\047\006\003\125\035  
\022\004\040\060\036\201\034\143\150\141\155\142\145\162\163\162  
\157\157\164\100\143\150\141\155\142\145\162\163\151\147\156\056  
\157\162\147\060\130\006\003\125\035\040\004\121\060\117\060\115  
\006\013\053\006\001\004\001\201\207\056\012\003\001\060\076\060  
\074\006\010\053\006\001\005\005\007\002\001\026\060\150\164\164  
\160\072\057\057\143\160\163\056\143\150\141\155\142\145\162\163  
\151\147\156\056\157\162\147\057\143\160\163\057\143\150\141\155  
\142\145\162\163\162\157\157\164\056\150\164\155\154\060\015\006  
\011\052\206\110\206\367\015\001\001\005\005\000\003\202\001\001

```
\000\014\101\227\302\032\206\300\042\174\237\373\220\363\032\321
\003\261\357\023\371\041\137\004\234\332\311\245\215\047\154\226
\207\221\276\101\220\001\162\223\347\036\175\137\366\211\306\135
\247\100\011\075\254\111\105\105\334\056\215\060\150\262\011\272
\373\303\057\314\272\013\337\077\167\173\106\175\072\022\044\216
\226\217\074\005\012\157\322\224\050\035\155\014\300\056\210\042
\325\330\317\035\023\307\360\110\327\327\005\247\317\307\107\236
\073\074\064\310\200\117\324\024\273\374\015\120\367\372\263\354
\102\137\251\335\155\310\364\165\317\173\301\162\046\261\001\034
\134\054\375\172\116\264\001\305\005\127\271\347\074\252\005\331
\210\351\007\106\101\316\357\101\201\256\130\337\203\242\256\312
\327\167\037\347\000\074\235\157\216\344\062\011\035\115\170\064
\170\064\074\224\233\046\355\117\161\306\031\172\275\040\042\110
\132\376\113\175\003\267\347\130\276\306\062\116\164\036\150\335
\250\150\133\263\076\356\142\175\331\200\350\012\165\172\267\356
\264\145\232\041\220\340\252\320\230\274\070\265\163\074\213\370
\334
```

END

CKA\_NSS\_Mozilla\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# For Email Distrust After: Mon Mar 01 00:00:00 2021

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER MULTILINE\_OCTAL

```
\062\061\060\063\060\061\060\060\060\060\060\060\132
```

END

# Trust for "Camerfirma Chambers of Commerce Root"

# Issuer: CN=Chambers of Commerce Root,OU=http://www.chambersign.org,O=AC Camerfirma SA CIF  
A82743287,C=EU

# Serial Number: 0 (0x0)

# Subject: CN=Chambers of Commerce Root,OU=http://www.chambersign.org,O=AC Camerfirma SA CIF  
A82743287,C=EU

# Not Valid Before: Tue Sep 30 16:13:43 2003

# Not Valid After : Wed Sep 30 16:13:44 2037

# Fingerprint (SHA-256):

0C:25:8A:12:A5:67:4A:EF:25:F2:8B:A7:DC:FA:EC:EE:A3:48:E5:41:E6:F5:CC:4E:E6:3B:71:B3:61:60:6A:C3

# Fingerprint (SHA1): 6E:3A:55:A4:19:0C:19:5C:93:84:3C:C0:DB:72:2E:31:30:61:F0:B1

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL

CK\_FALSE

CKA\_LABEL UTF8 "Camerfirma Chambers of Commerce Root"

CKA\_CERT\_SHA1\_HASH MULTILINE\_OCTAL

```
\156\072\125\244\031\014\031\134\223\204\074\300\333\162\056\061
\060\141\360\261
```

END

CKA\_CERT\_MD5\_HASH MULTILINE\_OCTAL

\260\001\356\024\331\257\051\030\224\166\216\361\151\063\052\204

END

CKA\_ISSUER MULTILINE\_OCTAL

\060\177\061\013\060\011\006\003\125\004\006\023\002\105\125\061  
\047\060\045\006\003\125\004\012\023\036\101\103\040\103\141\155  
\145\162\146\151\162\155\141\040\123\101\040\103\111\106\040\101  
\070\062\067\064\063\062\070\067\061\043\060\041\006\003\125\004  
\013\023\032\150\164\164\160\072\057\057\167\167\167\056\143\150  
\141\155\142\145\162\163\151\147\156\056\157\162\147\061\042\060  
\040\006\003\125\004\003\023\031\103\150\141\155\142\145\162\163  
\040\157\146\040\103\157\155\155\145\162\143\145\040\122\157\157  
\164

END

CKA\_SERIAL\_NUMBER MULTILINE\_OCTAL

\002\001\000

END

CKA\_TRUST\_SERVER\_AUTH CK\_TRUST CKT\_NSS\_MUST\_VERIFY\_TRUST

CKA\_TRUST\_EMAIL\_PROTECTION CK\_TRUST CKT\_NSS\_TRUSTED\_DELEGATOR

CKA\_TRUST\_CODE\_SIGNING

CK\_TRUST CKT\_NSS\_MUST\_VERIFY\_TRUST

CKA\_TRUST\_STEP\_UP\_APPROVED CK\_BBOOL CK\_FALSE

#

# Certificate "XRamp Global CA Root"

#

# Issuer: CN=XRamp Global Certification Authority,O=XRamp Security Services  
Inc,OU=www.xrampsecurity.com,C=US

# Serial Number:50:94:6c:ec:18:ea:d5:9c:4d:d5:97:ef:75:8f:a0:ad

# Subject: CN=XRamp Global Certification Authority,O=XRamp Security Services  
Inc,OU=www.xrampsecurity.com,C=US

# Not Valid Before: Mon Nov 01 17:14:04 2004

# Not Valid After : Mon Jan 01 05:37:19 2035

# Fingerprint (SHA-256):

CE:CD:DC:90:50:99:D8:DA:DF:C5:B1:D2:09:B7:37:CB:E2:C1:8C:FB:2C:10:C0:FF:0B:CF:0D:32:86:FC:1A:A2

# Fingerprint (SHA1): B8:01:86:D1:EB:9C:86:A5:41:04:CF:30:54:F3:4C:52:B7:E5:58:C6

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_CERTIFICATE

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "XRamp Global CA Root"

CKA\_CERTIFICATE\_TYPE CK\_CERTIFICATE\_TYPE CKC\_X\_509

CKA\_SUBJECT MULTILINE\_OCTAL

\060\201\202\061\013\060\011\006\003\125\004\006\023\002\125\123  
\061\036\060\034\006\003\125\004\013\023\025\167\167\167\056\170  
\162\141\155\160\163\145\143\165\162\151\164\171\056\143\157\155  
\061\044\060\042\006\003\125\004\012\023\033\130\122\141\155\160  
\040\123\145\143\165\162\151\164\171\040\123\145\162\166\151\143  
\145\163\040\111\156\143\061\055\060\053\006\003\125\004\003\023

\044\130\122\141\155\160\040\107\154\157\142\141\154\040\103\145  
\162\164\151\146\151\143\141\164\151\157\156\040\101\165\164\150  
\157\162\151\164\171

END

CKA\_ID

UTF8 "0"

CKA\_ISSUER MULTILINE\_OCTAL

\060\201\202\061\013\060\011\006\003\125\004\006\023\002\125\123  
\061\036\060\034\006\003\125\004\013\023\025\167\167\167\056\170  
\162\141\155\160\163\145\143\165\162\151\164\171\056\143\157\155  
\061\044\060\042\006\003\125\004\012\023\033\130\122\141\155\160  
\040\123\145\143\165\162\151\164\171\040\123\145\162\166\151\143  
\145\163\040\111\156\143\061\055\060\053\006\003\125\004\003\023  
\044\130\122\141\155\160\040\107\154\157\142\141\154\040\103\145  
\162\164\151\146\151\143\141\164\151\157\156\040\101\165\164\150  
\157\162\151\164\171

END

CKA\_SERIAL\_NUMBER

MULTILINE\_OCTAL

\002\020\120\224\154\354\030\352\325\234\115\325\227\357\165\217  
\240\255

END

CKA\_VALUE MULTILINE\_OCTAL

\060\202\004\060\060\202\003\030\240\003\002\001\002\002\020\120  
\224\154\354\030\352\325\234\115\325\227\357\165\217\240\255\060  
\015\006\011\052\206\110\206\367\015\001\001\005\005\000\060\201  
\202\061\013\060\011\006\003\125\004\006\023\002\125\123\061\036  
\060\034\006\003\125\004\013\023\025\167\167\167\056\170\162\141  
\155\160\163\145\143\165\162\151\164\171\056\143\157\155\061\044  
\060\042\006\003\125\004\012\023\033\130\122\141\155\160\040\123  
\145\143\165\162\151\164\171\040\123\145\162\166\151\143\145\163  
\040\111\156\143\061\055\060\053\006\003\125\004\003\023\044\130  
\122\141\155\160\040\107\154\157\142\141\154\040\103\145\162\164  
\151\146\151\143\141\164\151\157\156\040\101\165\164\150\157\162  
\151\164\171\060\036\027\015\060\064\061\061\060\061\061\067\061  
\064\060\064\132\027\015\063\065\060\061\060\061\060\065\063\067  
\061\071\132\060\201\202\061\013\060\011\006\003\125\004\006\023  
\002\125\123\061\036\060\034\006\003\125\004\013\023\025\167\167  
\167\056\170\162\141\155\160\163\145\143\165\162\151\164\171\056  
\143\157\155\061\044\060\042\006\003\125\004\012\023\033\130\122  
\141\155\160\040\123\145\143\165\162\151\164\171\040\123\145\162  
\166\151\143\145\163\040\111\156\143\061\055\060\053\006\003\125  
\004\003\023\044\130\122\141\155\160\040\107\154\157\142\141\154  
\040\103\145\162\164\151\146\151\143\141\164\151\157\156\040\101  
\165\164\150\157\162\151\164\171\060\202\001\042\060\015\006\011  
\052\206\110\206\367\015\001\001\001\005\000\003\202\001\017\000  
\060\202\001\012\002\202\001\001\000\230\044\036\275\025\264\272  
\337\307\214\245\047\266\070\013\151\363\266\116\250\054\056\041

\035\134\104\337\041\135\176\043\164\376\136\176\264\112\267\246  
\255\037\256\340\006\026\342\233\133\331\147\164\153\135\200\217  
\051\235\206\033\331\234\015\230\155\166\020\050\130\344\145\260  
\177\112\230\171\237\340\303\061\176\200\053\265\214\300\100\073  
\021\206\320\313\242\206\066\140\244\325\060\202\155\331\156\320  
\017\022\004\063\227\137\117\141\132\360\344\371\221\253\347\035  
\073\274\350\317\364\153\055\064\174\342\110\141\034\216\363\141  
\104\314\157\240\112\251\224\260\115\332\347\251\064\172\162\070  
\250\101\314\074\224\021\175\353\310\246\214\267\206\313\312\063  
\073\331\075\067\213\373\172\076\206\054\347\163\327\012\127\254  
\144\233\031\353\364\017\004\010\212\254\003\027\031\144\364\132  
\045\042\215\064\054\262\366\150\035\022\155\323\212\036\024\332  
\304\217\246\342\043\205\325\172\015\275\152\340\351\354\354\027  
\273\102\033\147\252\045\355\105\203\041\374\301\311\174\325\142  
\076\372\362\305\055\323\375\324\145\002\003\001\000\001\243\201  
\237\060\201\234\060\023\006\011\053\006\001\004\001\202\067\024  
\002\004\006\036\004\000\103\000\101\060\013\006\003\125\035\017  
\004\004\003\002\001\206\060\017\006\003\125\035\023\001\001\377  
\004\005\060\003\001\001\377\060\035\006\003\125\035\016\004\026  
\004\024\306\117\242\075\006\143\204\011\234\316\142\344\004\254  
\215\134\265\351\266\033\060\066\006\003\125\035\037\004\057\060  
\055\060\053\240\051\240\047\206\045\150\164\164\160\072\057\057  
\143\162\154\056\170\162\141\155\160\163\145\143\165\162\151\164  
\171\056\143\157\155\057\130\107\103\101\056\143\162\154\060\020  
\006\011\053\006\001\004\001\202\067\025\001\004\003\002\001\001  
\060\015\006\011\052\206\110\206\367\015\001\001\005\005\000\003  
\202\001\001\000\221\025\071\003\001\033\147\373\112\034\371\012  
\140\133\241\332\115\227\142\371\044\123\047\327\202\144\116\220  
\056\303\111\033\053\232\334\374\250\170\147\065\361\035\360\021  
\275\267\110\343\020\366\015\337\077\322\311\266\252\125\244\110  
\272\002\333\336\131\056\025\133\073\235\026\175\107\327\067\352  
\137\115\166\022\066\273\037\327\241\201\004\106\040\243\054\155  
\251\236\001\176\077\051\316\000\223\337\375\311\222\163\211\211  
\144\236\347\053\344\034\221\054\322\271\316\175\316\157\061\231  
\323\346\276\322\036\220\360\011\024\171\134\043\253\115\322\332  
\041\037\115\231\171\235\341\317\047\237\020\233\034\210\015\260  
\212\144\101\061\270\016\154\220\044\244\233\134\161\217\272\273  
\176\034\033\333\152\200\017\041\274\351\333\246\267\100\364\262  
\213\251\261\344\357\232\032\320\075\151\231\356\250\050\243\341  
\074\263\360\262\021\234\317\174\100\346\335\347\103\175\242\330  
\072\265\251\215\362\064\231\304\324\020\341\006\375\011\204\020  
\073\356\304\114\364\354\047\174\102\302\164\174\202\212\011\311  
\264\003\045\274

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

```

# Trust for "XRamp Global CA Root"
# Issuer: CN=XRamp Global Certification Authority,O=XRamp Security Services
Inc,OU=www.xrampsecurity.com,C=US
# Serial Number:50:94:6c:ec:18:ea:d5:9c:4d:d5:97:ef:75:8f:a0:ad
# Subject: CN=XRamp
Global Certification Authority,O=XRamp Security Services Inc,OU=www.xrampsecurity.com,C=US
# Not Valid Before: Mon Nov 01 17:14:04 2004
# Not Valid After : Mon Jan 01 05:37:19 2035
# Fingerprint (SHA-256):
CE:CD:DC:90:50:99:D8:DA:DF:C5:B1:D2:09:B7:37:CB:E2:C1:8C:FB:2C:10:C0:FF:0B:CF:0D:32:86:FC:1A:A2
# Fingerprint (SHA1): B8:01:86:D1:EB:9C:86:A5:41:04:CF:30:54:F3:4C:52:B7:E5:58:C6
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "XRamp Global CA Root"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\270\001\206\321\353\234\206\245\101\004\317\060\124\363\114\122
\267\345\130\306
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\241\013\104\263\312\020\330\000\156\235\017\330\017\222\012\321
END
CKA_ISSUER MULTILINE_OCTAL
\060\201\202\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\036\060\034\006\003\125\004\013\023\025\167\167\167\056\170
\162\141\155\160\163\145\143\165\162\151\164\171\056\143\157\155
\061\044\060\042\006\003\125\004\012\023\033\130\122\141\155\160
\040\123\145\143\165\162\151\164\171\040\123\145\162\166\151\143
\145\163\040\111\156\143\061\055\060\053\006\003\125\004\003\023
\044\130\122\141\155\160\040\107\154\157\142\141\154\040\103\145
\162\164\151\146\151\143\141\164\151\157\156\040\101\165\164\150
\157\162\151\164\171
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\020\120\224\154\354\030\352\325\234\115\325\227\357\165\217
\240\255
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "Go Daddy Class 2 CA"
#

```



```
# Issuer: OU=Go Daddy Class 2 Certification Authority,O="The Go Daddy Group, Inc.",C=US
# Serial Number: 0 (0x0)
# Subject: OU=Go Daddy Class 2 Certification Authority,O="The Go Daddy Group, Inc.",C=US
# Not Valid Before: Tue Jun 29 17:06:20 2004
# Not Valid After : Thu Jun
29 17:06:20 2034
# Fingerprint (SHA-256):
C3:84:6B:F2:4B:9E:93:CA:64:27:4C:0E:C6:7C:1E:CC:5E:02:4F:FC:AC:D2:D7:40:19:35:0E:81:FE:54:6A:E4
# Fingerprint (SHA1): 27:96:BA:E6:3F:18:01:E2:77:26:1B:A0:D7:77:70:02:8F:20:EE:E4
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Go Daddy Class 2 CA"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\143\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\041\060\037\006\003\125\004\012\023\030\124\150\145\040\107\157
\040\104\141\144\144\171\040\107\162\157\165\160\054\040\111\156
\143\056\061\061\060\057\006\003\125\004\013\023\050\107\157\040
\104\141\144\144\171\040\103\154\141\163\163\040\062\040\103\145
\162\164\151\146\151\143\141\164\151\157\156\040\101\165\164\150
\157\162\151\164\171
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\143\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\041\060\037\006\003\125\004\012\023\030\124\150\145\040\107\157
\040\104\141\144\144\171\040\107\162\157\165\160\054\040\111\156
\143\056\061\061\060\057\006\003\125\004\013\023\050\107\157\040
\104\141\144\144\171\040\103\154\141\163\163\040\062\040\103\145
\162\164\151\146\151\143\141\164\151\157\156\040\101\165\164\150
\157\162\151\164\171
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\001\000
END
CKA_VALUE MULTILINE_OCTAL
\060\202\004\000\060\202\002\350\240\003\002\001\002\002\001\000
\060\015\006\011\052\206\110\206\367\015\001\001\005\005\000\060
\143\061\013\060\011\006\003\125\004\006\023\002\125\123\061\041
\060\037\006\003\125\004\012\023\030\124\150\145\040\107\157\040
\104\141\144\144\171\040\107\162\157\165\160\054\040\111\156\143
\056\061\061\060\057\006\003\125\004\013\023\050\107\157\040\104
\141\144\144\171\040\103\154\141\163\163\040\062\040\103\145\162
\164\151\146\151\143\141\164\151\157\156\040\101\165\164\150\157
\162\151\164\171\060\036\027\015\060\064\060\066\062\071\061\067
```

\060\066\062\060\132\027\015\063\064\060\066\062\071\061\067\060  
\066\062\060\132\060\143\061\013\060\011\006\003\125\004\006\023  
\002\125\123\061\041\060\037\006\003\125\004\012\023\030\124\150  
\145\040\107\157\040\104\141\144\144\171\040\107\162\157\165\160  
\054\040\111\156\143\056\061\061\060\057\006\003\125\004\013\023  
\050\107\157\040\104\141\144\144\171\040\103\154\141\163\163\040  
\062\040\103\145\162\164\151\146\151\143\141\164\151\157\156\040  
\101\165\164\150\157\162\151\164\171\060\202\001\040\060\015\006  
\011\052\206\110\206\367\015\001\001\001\005\000\003\202\001\015  
\000\060\202\001\010\002\202\001\001\000\336\235\327\352\127\030  
\111\241\133\353\327\137\110\206\352\276\335\377\344\357\147\034  
\364\145\150\263\127\161\240\136\167\273\355\233\111\351\160\200  
\075\126\030\143\010\157\332\362\314\320\077\177\002\124\042\124  
\020\330\262\201\324\300\165\075\113\177\307\167\303\076\170\253  
\032\003\265\040\153\057\152\053\261\305\210\176\304\273\036\260  
\301\330\105\047\157\252\067\130\367\207\046\327\330\055\366\251  
\027\267\037\162\066\116\246\027\077\145\230\222\333\052\156\135  
\242\376\210\340\013\336\177\345\215\025\341\353\313\072\325\342  
\022\242\023\055\330\216\257\137\022\075\240\010\005\010\266\134  
\245\145\070\004\105\231\036\243\140\140\164\305\101\245\162\142  
\033\142\305\037\157\137\032\102\276\002\121\145\250\256\043\030  
\152\374\170\003\251\115\177\200\303\372\253\132\374\241\100\244  
\312\031\026\376\262\310\357\136\163\015\356\167\275\232\366\171  
\230\274\261\007\147\242\025\015\335\240\130\306\104\173\012\076  
\142\050\137\272\101\007\123\130\317\021\176\070\164\305\370\377  
\265\151\220\217\204\164\352\227\033\257\002\001\003\243\201\300  
\060\201\275\060\035\006\003\125\035\016\004\026\004\024\322\304  
\260\322\221\324\114\021\161\263\141\313\075\241\376\335\250\152  
\324\343\060\201\215\006\003\125\035\043\004\201\205\060\201\202  
\200\024\322\304\260\322\221\324\114\021\161\263\141\313\075\241  
\376\335\250\152\324\343\241\147\244\145\060\143\061\013\060\011  
\006\003\125\004\006\023\002\125\123\061\041\060\037\006\003\125  
\004\012\023\030\124\150\145\040\107\157\040\104\141\144\144\171  
\040\107\162\157\165\160\054\040\111\156\143\056\061\061\060\057  
\006\003\125\004\013\023\050\107\157\040\104\141\144\144\171\040  
\103\154\141\163\163\040\062\040\103\145\162\164\151\146\151\143  
\141\164\151\157\156\040\101\165\164\150\157\162\151\164\171\202  
\001\000\060\014\006\003\125\035\023\004\005\060\003\001\001\377  
\060\015\006\011\052\206\110\206\367\015\001\001\005\005\000\003  
\202\001\001\000\062\113\363\262\312\076\221\374\022\306\241\007  
\214\216\167\240\063\006\024\134\220\036\030\367\010\246\075\012  
\031\371\207\200\021\156\151\344\226\027\060\377\064\221\143\162  
\070\356\314\034\001\243\035\224\050\244\061\366\172\304\124\327  
\366\345\061\130\003\242\314\316\142\333\224\105\163\265\277\105  
\311\044\265\325\202\002\255\043\171\151\215\270\266\115\316\317  
\114\312\063\043\350\034\210\252\235\213\101\156\026\311\040\345  
\211\236\315\073\332\160\367\176\231\046\040\024\124\045\253\156  
\163\205\346\233\041\235\012\154\202\016\250\370\302\014\372\020

```
\036\154\226\357\207\015\304\017\141\213\255\356\203\053\225\370
\216\222\204\162\071\353\040\352\203\355\203\315\227\156\010\274
\353\116\046\266\163\053\344\323\366\114\376\046\161\342\141\021
\164\112\377\127\032\207\017\165\110\056\317\121\151\027\240\002
\022\141\225\325\321\100\262\020\114\356\304\254\020\103\246\245
\236\012\325\225\142\232\015\317\210\202\305\062\014\344\053\237
\105\346\015\237\050\234\261\271\052\132\127\255\067\017\257\035
\177\333\275\237
```

END

CKA\_NSS\_Mozilla\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "Go Daddy Class 2 CA"

# Issuer: OU=Go Daddy Class 2 Certification Authority,O="The Go Daddy Group, Inc.",C=US

# Serial Number: 0 (0x0)

# Subject: OU=Go Daddy Class 2 Certification Authority,O="The Go Daddy Group, Inc.",C=US

# Not Valid Before: Tue

Jun 29 17:06:20 2004

# Not Valid After : Thu Jun 29 17:06:20 2034

# Fingerprint (SHA-256):

C3:84:6B:F2:4B:9E:93:CA:64:27:4C:0E:C6:7C:1E:CC:5E:02:4F:FC:AC:D2:D7:40:19:35:0E:81:FE:54:6A:E4

# Fingerprint (SHA1): 27:96:BA:E6:3F:18:01:E2:77:26:1B:A0:D7:77:70:02:8F:20:EE:E4

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "Go Daddy Class 2 CA"

CKA\_CERT\_SHA1\_HASH MULTILINE\_OCTAL

```
\047\226\272\346\077\030\001\342\167\046\033\240\327\167\160\002
\217\040\356\344
```

END

CKA\_CERT\_MD5\_HASH MULTILINE\_OCTAL

```
\221\336\006\045\253\332\375\062\027\014\273\045\027\052\204\147
```

END

CKA\_ISSUER MULTILINE\_OCTAL

```
\060\143\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\041\060\037\006\003\125\004\012\023\030\124\150\145\040\107\157
\040\104\141\144\144\171\040\107\162\157\165\160\054\040\111\156
\143\056\061\061\060\057\006\003\125\004\013\023\050\107\157\040
\104\141\144\144\171\040\103\154\141\163\163\040\062\040\103\145
\162\164\151\146\151\143\141\164\151\157\156\040\101\165\164\150
\157\162\151\164\171
```

END

CKA\_SERIAL\_NUMBER

MULTILINE\_OCTAL

```
\002\001\000
```

```

END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "Starfield Class 2 CA"
#
# Issuer: OU=Starfield Class 2 Certification Authority,O="Starfield Technologies, Inc.",C=US
# Serial Number: 0 (0x0)
# Subject: OU=Starfield Class 2 Certification Authority,O="Starfield Technologies, Inc.",C=US
# Not Valid Before: Tue Jun 29 17:39:16 2004
# Not Valid After : Thu Jun 29 17:39:16 2034
# Fingerprint (SHA-256):
14:65:FA:20:53:97:B8:76:FA:A6:F0:A9:95:8E:55:90:E4:0F:CC:7F:AA:4F:B7:C2:C8:67:75:21:FB:5F:B6:58
# Fingerprint (SHA1): AD:7E:1C:28:B0:64:EF:8F:60:03:40:20:14:C3:D0:E3:37:0E:B5:8A
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE
CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Starfield Class 2 CA"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\150\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\045\060\043\006\003\125\004\012\023\034\123\164\141\162\146\151
\145\154\144\040\124\145\143\150\156\157\154\157\147\151\145\163
\054\040\111\156\143\056\061\062\060\060\006\003\125\004\013\023
\051\123\164\141\162\146\151\145\154\144\040\103\154\141\163\163
\040\062\040\103\145\162\164\151\146\151\143\141\164\151\157\156
\040\101\165\164\150\157\162\151\164\171
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\150\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\045\060\043\006\003\125\004\012\023\034\123\164\141\162\146\151
\145\154\144\040\124\145\143\150\156\157\154\157\147\151\145\163
\054\040\111\156\143\056\061\062\060\060\006\003\125\004\013\023
\051\123\164\141\162\146\151\145\154\144\040\103\154\141\163\163
\040\062\040\103\145\162\164\151\146\151\143\141\164\151\157\156
\040\101\165\164\150\157\162\151\164\171
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\001\000
END
CKA_VALUE MULTILINE_OCTAL

```

\060\202\004\017\060\202\002\367\240\003\002\001\002\002\001\000  
\060\015\006\011\052\206\110\206\367\015\001\001\005\005\000\060  
\150\061\013\060\011\006\003\125\004\006\023\002\125\123\061\045  
\060\043\006\003\125\004\012\023\034\123\164\141\162\146\151\145  
\154\144\040\124\145\143\150\156\157\154\157\147\151\145\163\054  
\040\111\156\143\056\061\062\060\060\006\003\125\004\013\023\051  
\123\164\141\162\146\151\145\154\144\040\103\154\141\163\163\040  
\062\040\103\145\162\164\151\146\151\143\141\164\151\157\156\040  
\101\165\164\150\157\162\151\164\171\060\036\027\015\060\064\060  
\066\062\071\061\067\063\071\061\066\132\027\015\063\064\060\066  
\062\071\061\067\063\071\061\066\132\060\150\061\013\060\011\006  
\003\125\004\006\023\002\125\123\061\045\060\043\006\003\125\004  
\012\023\034\123\164\141\162\146\151\145\154\144\040\124\145\143  
\150\156\157\154\157\147\151\145\163\054\040\111\156\143\056\061  
\062\060\060\006\003\125\004\013\023\051\123\164\141\162\146\151  
\145\154\144\040\103\154\141\163\163\040\062\040\103\145\162\164  
\151\146\151\143\141\164\151\157\156\040\101\165\164\150\157\162  
\151\164\171\060\202\001\040\060\015\006\011\052\206\110\206\367  
\015\001\001\001\005\000\003\202\001\015\000\060\202\001\010\002  
\202\001\001\000\267\062\310\376\351\161\246\004\205\255\014\021  
\144\337\316\115\357\310\003\030\207\077\241\253\373\074\246\237  
\360\303\241\332\324\330\156\053\123\220\373\044\244\076\204\360  
\236\350\137\354\345\047\104\365\050\246\077\173\336\340\052\360  
\310\257\123\057\236\312\005\001\223\036\217\146\034\071\247\115  
\372\132\266\163\004\045\146\353\167\177\347\131\306\112\231\045  
\024\124\353\046\307\363\177\031\325\060\160\217\257\260\106\052  
\377\255\353\051\355\327\237\252\004\207\243\324\371\211\245\064  
\137\333\103\221\202\066\331\146\074\261\270\271\202\375\234\072  
\076\020\310\073\357\006\145\146\172\233\031\030\075\377\161\121  
\074\060\056\137\276\075\167\163\262\135\006\154\303\043\126\232  
\053\205\046\222\034\247\002\263\344\077\015\257\010\171\202\270  
\066\075\352\234\323\065\263\274\151\312\365\314\235\350\375\144  
\215\027\200\063\156\136\112\135\231\311\036\207\264\235\032\300  
\325\156\023\065\043\136\337\233\137\075\357\326\367\166\302\352  
\076\273\170\015\034\102\147\153\004\330\370\326\332\157\213\362  
\104\240\001\253\002\001\003\243\201\305\060\201\302\060\035\006  
\003\125\035\016\004\026\004\024\277\137\267\321\316\335\037\206  
\364\133\125\254\334\327\020\302\016\251\210\347\060\201\222\006  
\003\125\035\043\004\201\212\060\201\207\200\024\277\137\267\321  
\316\335\037\206\364\133\125\254\334\327\020\302\016\251\210\347  
\241\154\244\152\060\150\061\013\060\011\006\003\125\004\006\023  
\002\125\123\061\045\060\043\006\003\125\004\012\023\034\123\164  
\141\162\146\151\145\154\144\040\124\145\143\150\156\157\154\157  
\147\151\145\163\054\040\111\156\143\056\061\062\060\060\006\003  
\125\004\013\023\051\123\164\141\162\146\151\145\154\144\040\103  
\154\141\163\163\040\062\040\103\145\162\164\151\146\151\143\141  
\164\151\157\156\040\101\165\164\150\157\162\151\164\171\202\001  
\000\060\014\006\003\125\035\023\004\005\060\003\001\001\377\060

```
\015\006\011\052\206\110\206\367\015\001\001\005\005\000\003\202
\001\001\000\005\235\077\210\235\321\311\032\125\241\254\151\363
\363\131\332\233\001\207\032\117\127\251\241\171\011\052\333\367
\057\262\036\314\307\136\152\330\203\207\241\227\357\111\065\076
\167\006\101\130\142\277\216\130\270\012\147\077\354\263\335\041
\146\037\311\124\372\162\314\075\114\100\330\201\257\167\236\203
\172\273\242\307\365\064\027\216\331\021\100\364\374\054\052\115
\025\177\247\142\135\056\045\323\000\013\040\032\035\150\371\027
\270\364\275\213\355\050\131\335\115\026\213\027\203\310\262\145
\307\055\172\245\252\274\123\206\155\335\127\244\312\370\040\101
\013\150\360\364\373\164\276\126\135\172\171\365\371\035\205\343
\055\225\276\365\161\220\103\314\215\037\232\000\012\207\051\351
\125\042\130\000\043\352\343\022\103\051\133\107\010\335\214\101
\152\145\006\250\345\041\252\101\264\225\041\225\271\175\321\064
\253\023\326\255\274\334\342\075\071\315\275\076\165\160\241\030
\131\003\311\042\264\217\234\325\136\052\327\245\266\324\012\155
\370\267\100\021\106\232\037\171\016\142\277\017\227\354\340\057
\037\027\224
```

END

CKA\_NSS\_Mozilla\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "Starfield Class 2 CA"

# Issuer: OU=Starfield Class 2 Certification Authority,O="Starfield Technologies, Inc.",C=US

# Serial Number: 0 (0x0)

# Subject: OU=Starfield Class 2 Certification Authority,O="Starfield Technologies, Inc.",C=US

# Not Valid Before: Tue Jun 29 17:39:16 2004

# Not Valid After : Thu Jun 29 17:39:16 2034

# Fingerprint (SHA-256):

14:65:FA:20:53:97:B8:76:FA:A6:F0:A9:95:8E:55:90:E4:0F:CC:7F:AA:4F:B7:C2:C8:67:75:21:FB:5F:B6:58

#

Fingerprint (SHA1): AD:7E:1C:28:B0:64:EF:8F:60:03:40:20:14:C3:D0:E3:37:0E:B5:8A

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "Starfield Class 2 CA"

CKA\_CERT\_SHA1\_HASH MULTILINE\_OCTAL

```
\255\176\034\050\260\144\357\217\140\003\100\040\024\303\320\343
\067\016\265\212
```

END

CKA\_CERT\_MD5\_HASH MULTILINE\_OCTAL

```
\062\112\113\273\310\143\151\233\276\164\232\306\335\035\106\044
```

END

CKA\_ISSUER MULTILINE\_OCTAL

```
\060\150\061\013\060\011\006\003\125\004\006\023\002\125\123\061
```

```

\045\060\043\006\003\125\004\012\023\034\123\164\141\162\146\151
\145\154\144\040\124\145\143\150\156\157\154\157\147\151\145\163
\054\040\111\156\143\056\061\062\060\060\006\003\125\004\013\023
\051\123\164\141\162\146\151\145\154\144\040\103\154\141\163\163
\040\062\040\103\145\162\164\151\146\151\143\141\164\151\157\156
\040\101\165\164\150\157\162\151\164\171
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\001\000
END
CKA_TRUST_SERVER_AUTH
CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "DigiCert Assured ID Root CA"
#
# Issuer: CN=DigiCert Assured ID Root CA,OU=www.digicert.com,O=DigiCert Inc,C=US
# Serial Number:0c:e7:e0:e5:17:d8:46:fe:8f:e5:60:fc:1b:f0:30:39
# Subject: CN=DigiCert Assured ID Root CA,OU=www.digicert.com,O=DigiCert Inc,C=US
# Not Valid Before: Fri Nov 10 00:00:00 2006
# Not Valid After : Mon Nov 10 00:00:00 2031
# Fingerprint (SHA-256):
3E:90:99:B5:01:5E:8F:48:6C:00:BC:EA:9D:11:1E:E7:21:FA:BA:35:5A:89:BC:F1:DF:69:56:1E:3D:C6:32:5C
# Fingerprint (SHA1): 05:63:B8:63:0D:62:D7:5A:BB:C8:AB:1E:4B:DF:B5:A8:99:B2:4D:43
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "DigiCert Assured ID Root CA"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT
MULTILINE_OCTAL
\060\145\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\025\060\023\006\003\125\004\012\023\014\104\151\147\151\103\145
\162\164\040\111\156\143\061\031\060\027\006\003\125\004\013\023
\020\167\167\167\056\144\151\147\151\143\145\162\164\056\143\157
\155\061\044\060\042\006\003\125\004\003\023\033\104\151\147\151
\103\145\162\164\040\101\163\163\165\162\145\144\040\111\104\040
\122\157\157\164\040\103\101
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\145\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\025\060\023\006\003\125\004\012\023\014\104\151\147\151\103\145
\162\164\040\111\156\143\061\031\060\027\006\003\125\004\013\023

```

\020\167\167\167\056\144\151\147\151\143\145\162\164\056\143\157  
\155\061\044\060\042\006\003\125\004\003\023\033\104\151\147\151  
\103\145\162\164\040\101\163\163\165\162\145\144\040\111\104\040  
\122\157\157\164\040\103\101

END

CKA\_SERIAL\_NUMBER MULTILINE\_OCTAL

\002\020\014\347\340\345\027\330\106\376\217\345\140\374\033\360  
\060\071

END

CKA\_VALUE

MULTILINE\_OCTAL

\060\202\003\267\060\202\002\237\240\003\002\001\002\002\020\014  
\347\340\345\027\330\106\376\217\345\140\374\033\360\060\071\060  
\015\006\011\052\206\110\206\367\015\001\001\005\005\000\060\145  
\061\013\060\011\006\003\125\004\006\023\002\125\123\061\025\060  
\023\006\003\125\004\012\023\014\104\151\147\151\103\145\162\164  
\040\111\156\143\061\031\060\027\006\003\125\004\013\023\020\167  
\167\167\056\144\151\147\151\143\145\162\164\056\143\157\155\061  
\044\060\042\006\003\125\004\003\023\033\104\151\147\151\103\145  
\162\164\040\101\163\163\165\162\145\144\040\111\104\040\122\157  
\157\164\040\103\101\060\036\027\015\060\066\061\061\061\060\060  
\060\060\060\060\060\132\027\015\063\061\061\061\061\060\060\060  
\060\060\060\060\132\060\145\061\013\060\011\006\003\125\004\006  
\023\002\125\123\061\025\060\023\006\003\125\004\012\023\014\104  
\151\147\151\103\145\162\164\040\111\156\143\061\031\060\027\006  
\003\125\004\013\023\020\167\167\167\056\144\151\147\151\143\145  
\162\164\056\143\157\155\061\044\060\042\006\003\125\004\003\023  
\033\104\151\147\151\103\145\162\164\040\101\163\163\165\162\145  
\144\040\111\104\040\122\157\157\164\040\103\101\060\202\001\042  
\060\015\006\011\052\206\110\206\367\015\001\001\001\005\000\003  
\202\001\017\000\060\202\001\012\002\202\001\001\000\255\016\025  
\316\344\103\200\134\261\207\363\267\140\371\161\022\245\256\334  
\046\224\210\252\364\316\365\040\071\050\130\140\014\370\200\332  
\251\025\225\062\141\074\265\261\050\204\212\212\334\237\012\014  
\203\027\172\217\220\254\212\347\171\123\134\061\204\052\366\017  
\230\062\066\166\314\336\335\074\250\242\357\152\373\041\362\122  
\141\337\237\040\327\037\342\261\331\376\030\144\322\022\133\137  
\371\130\030\065\274\107\315\241\066\371\153\177\324\260\070\076  
\301\033\303\214\063\331\330\057\030\376\050\017\263\247\203\326  
\303\156\104\300\141\065\226\026\376\131\234\213\166\155\327\361  
\242\113\015\053\377\013\162\332\236\140\320\216\220\065\306\170  
\125\207\040\241\317\345\155\012\310\111\174\061\230\063\154\042  
\351\207\320\062\132\242\272\023\202\021\355\071\027\235\231\072  
\162\241\346\372\244\331\325\027\061\165\256\205\175\042\256\077  
\001\106\206\366\050\171\310\261\332\344\127\027\304\176\034\016  
\260\264\222\246\126\263\275\262\227\355\252\247\360\267\305\250  
\077\225\026\320\377\241\226\353\010\137\030\167\117\002\003\001  
\000\001\243\143\060\141\060\016\006\003\125\035\017\001\001\377



```
\004\004\003\002\001\206\060\017\006\003\125\035\023\001\001\377
\004\005\060\003\001\001\377\060\035\006\003\125\035\016\004\026
\004\024\105\353\242\257\364\222\313\202\061\055\121\213\247\247
\041\235\363\155\310\017\060\037\006\003\125\035\043\004\030\060
\026\200\024\105\353\242\257\364\222\313\202\061\055\121\213\247
\247\041\235\363\155\310\017\060\015\006\011\052\206\110\206\367
\015\001\001\005\005\000\003\202\001\001\000\242\016\274\337\342
\355\360\343\162\163\172\144\224\277\367\162\146\330\062\344\102
\165\142\256\207\353\362\325\331\336\126\263\237\314\316\024\050
\271\015\227\140\134\022\114\130\344\323\075\203\111\105\130\227
\065\151\032\250\107\352\126\306\171\253\022\330\147\201\204\337
\177\011\074\224\346\270\046\054\040\275\075\263\050\211\367\137
\377\042\342\227\204\037\351\145\357\207\340\337\301\147\111\263
\135\353\262\011\052\353\046\355\170\276\175\077\053\363\267\046
\065\155\137\211\001\266\111\133\237\001\005\233\253\075\045\301
\314\266\177\302\361\157\206\306\372\144\150\353\201\055\224\353
\102\267\372\214\036\335\142\361\276\120\147\267\154\275\363\361
\037\153\014\066\007\026\177\067\174\251\133\155\172\361\022\106
\140\203\327\047\004\276\113\316\227\276\303\147\052\150\021\337
\200\347\014\063\146\277\023\015\024\156\363\177\037\143\020\036
\372\215\033\045\155\154\217\245\267\141\001\261\322\243\046\241
\020\161\235\255\342\303\371\303\231\121\267\053\007\010\316\056
\346\120\262\247\372\012\105\057\242\360\362
```

END

CKA\_NSS\_Mozilla\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER

CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "DigiCert Assured ID Root CA"

# Issuer: CN=DigiCert Assured ID Root CA,OU=www.digicert.com,O=DigiCert Inc,C=US

# Serial Number:0c:e7:e0:e5:17:d8:46:fe:8f:e5:60:fc:1b:f0:30:39

# Subject: CN=DigiCert Assured ID Root CA,OU=www.digicert.com,O=DigiCert Inc,C=US

# Not Valid Before: Fri Nov 10 00:00:00 2006

# Not Valid After : Mon Nov 10 00:00:00 2031

# Fingerprint (SHA-256):

3E:90:99:B5:01:5E:8F:48:6C:00:BC:EA:9D:11:1E:E7:21:FA:BA:35:5A:89:BC:F1:DF:69:56:1E:3D:C6:32:5C

# Fingerprint (SHA1): 05:63:B8:63:0D:62:D7:5A:BB:C8:AB:1E:4B:DF:B5:A8:99:B2:4D:43

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "DigiCert Assured ID Root CA"

CKA\_CERT\_SHA1\_HASH MULTILINE\_OCTAL

```
\005\143\270\143\015\142\327\132\273\310\253\036\113\337\265\250
```

```
\231\262\115\103
```

END

CKA\_CERT\_MD5\_HASH MULTILINE\_OCTAL  
\207\316\013\173\052\016\111\000\341\130\161\233\067\250\223\162  
END

CKA\_ISSUER  
MULTILINE\_OCTAL  
\060\145\061\013\060\011\006\003\125\004\006\023\002\125\123\061  
\025\060\023\006\003\125\004\012\023\014\104\151\147\151\103\145  
\162\164\040\111\156\143\061\031\060\027\006\003\125\004\013\023  
\020\167\167\167\056\144\151\147\151\143\145\162\164\056\143\157  
\155\061\044\060\042\006\003\125\004\003\023\033\104\151\147\151  
\103\145\162\164\040\101\163\163\165\162\145\144\040\111\104\040  
\122\157\157\164\040\103\101  
END

CKA\_SERIAL\_NUMBER MULTILINE\_OCTAL  
\002\020\014\347\340\345\027\330\106\376\217\345\140\374\033\360  
\060\071  
END

CKA\_TRUST\_SERVER\_AUTH CK\_TRUST CKT\_NSS\_TRUSTED\_DELEGATOR  
CKA\_TRUST\_EMAIL\_PROTECTION CK\_TRUST CKT\_NSS\_TRUSTED\_DELEGATOR  
CKA\_TRUST\_CODE\_SIGNING CK\_TRUST CKT\_NSS\_MUST\_VERIFY\_TRUST  
CKA\_TRUST\_STEP\_UP\_APPROVED CK\_BBOOL CK\_FALSE

#  
# Certificate "DigiCert Global Root CA"  
#  
# Issuer: CN=DigiCert Global Root CA,OU=www.digicert.com,O=DigiCert Inc,C=US  
# Serial Number:08:3b:e0:56:90:42:46:b1:a1:75:6a:c9:59:91:c7:4a  
#  
# Subject: CN=DigiCert Global Root CA,OU=www.digicert.com,O=DigiCert Inc,C=US  
# Not Valid Before: Fri Nov 10 00:00:00 2006  
# Not Valid After : Mon Nov 10 00:00:00 2031  
# Fingerprint (SHA-256):  
43:48:A0:E9:44:4C:78:CB:26:5E:05:8D:5E:89:44:B4:D8:4F:96:62:BD:26:DB:25:7F:89:34:A4:43:C7:01:61  
# Fingerprint (SHA1): A8:98:5D:3A:65:E5:E5:C4:B2:D7:D6:6D:40:C6:DD:2F:B1:9C:54:36

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_CERTIFICATE  
CKA\_TOKEN CK\_BBOOL CK\_TRUE  
CKA\_PRIVATE CK\_BBOOL CK\_FALSE  
CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE  
CKA\_LABEL UTF8 "DigiCert Global Root CA"  
CKA\_CERTIFICATE\_TYPE CK\_CERTIFICATE\_TYPE CKC\_X\_509  
CKA\_SUBJECT MULTILINE\_OCTAL  
\060\141\061\013\060\011\006\003\125\004\006\023\002\125\123\061  
\025\060\023\006\003\125\004\012\023\014\104\151\147\151\103\145  
\162\164\040\111\156\143\061\031\060\027\006\003\125\004\013\023  
\020\167\167\167\056\144\151\147\151\143\145\162\164\056\143\157  
\155\061\040\060\036\006\003\125\004\003\023\027\104\151\147\151  
\103\145\162\164\040\107\154\157\142\141\154\040\122\157\157\164  
\040\103\101

END

CKA\_ID

UTF8 "0"

CKA\_ISSUER MULTILINE\_OCTAL

\060\141\061\013\060\011\006\003\125\004\006\023\002\125\123\061  
\025\060\023\006\003\125\004\012\023\014\104\151\147\151\103\145  
\162\164\040\111\156\143\061\031\060\027\006\003\125\004\013\023  
\020\167\167\167\056\144\151\147\151\143\145\162\164\056\143\157  
\155\061\040\060\036\006\003\125\004\003\023\027\104\151\147\151  
\103\145\162\164\040\107\154\157\142\141\154\040\122\157\157\164  
\040\103\101

END

CKA\_SERIAL\_NUMBER MULTILINE\_OCTAL

\002\020\010\073\340\126\220\102\106\261\241\165\152\311\131\221  
\307\112

END

CKA\_VALUE MULTILINE\_OCTAL

\060\202\003\257\060\202\002\227\240\003\002\001\002\002\020\010  
\073\340\126\220\102\106\261\241\165\152\311\131\221\307\112\060  
\015\006\011\052\206\110\206\367\015\001\001\005\005\000\060\141  
\061\013\060\011\006\003\125\004\006\023\002\125\123\061\025\060  
\023\006\003\125\004\012\023\014\104\151\147\151\103\145\162\164  
\040\111\156\143\061\031\060\027\006\003\125\004\013\023\020\167  
\167\167\056\144\151\147\151\143\145\162\164\056\143\157\155\061  
\040\060\036\006\003\125\004\003\023\027\104\151\147\151\103\145  
\162\164\040\107\154\157\142\141\154\040\122\157\157\164\040\103  
\101\060\036\027\015\060\066\061\061\061\060\060\060\060\060\060  
\060\132\027\015\063\061\061\061\061\060\060\060\060\060\060\060  
\132\060\141\061\013\060\011\006\003\125\004\006\023\002\125\123  
\061\025\060\023\006\003\125\004\012\023\014\104\151\147\151\103  
\145\162\164\040\111\156\143\061\031\060\027\006\003\125\004\013  
\023\020\167\167\167\056\144\151\147\151\143\145\162\164\056\143  
\157\155\061\040\060\036\006\003\125\004\003\023\027\104\151\147  
\151\103\145\162\164\040\107\154\157\142\141\154\040\122\157\157  
\164\040\103\101\060\202\001\042\060\015\006\011\052\206\110\206  
\367\015\001\001\001\005\000\003\202\001\017\000\060\202\001\012  
\002\202\001\001\000\342\073\341\021\162\336\250\244\323\243\127  
\252\120\242\217\013\167\220\311\242\245\356\022\316\226\133\001  
\011\040\314\001\223\247\116\060\267\123\367\103\304\151\000\127  
\235\342\215\042\335\207\006\100\000\201\011\316\316\033\203\277  
\337\315\073\161\106\342\326\146\307\005\263\166\047\026\217\173  
\236\036\225\175\356\267\110\243\010\332\326\257\172\014\071\006  
\145\177\112\135\037\274\027\370\253\276\356\050\327\164\177\172  
\170\231\131\205\150\156\134\043\062\113\277\116\300\350\132\155  
\343\160\277\167\020\277\374\001\366\205\331\250\104\020\130\062  
\251\165\030\325\321\242\276\107\342\047\152\364\232\063\370\111  
\010\140\213\324\137\264\072\204\277\241\252\112\114\175\076\317  
\117\137\154\166\136\240\113\067\221\236\334\042\346\155\316\024

\032\216\152\313\376\315\263\024\144\027\307\133\051\236\062\277  
\362\356\372\323\013\102\324\253\267\101\062\332\014\324\357\370  
\201\325\273\215\130\077\265\033\350\111\050\242\160\332\061\004  
\335\367\262\026\362\114\012\116\007\250\355\112\075\136\265\177  
\243\220\303\257\047\002\003\001\000\001\243\143\060\141\060\016  
\006\003\125\035\017\001\001\377\004\004\003\002\001\206\060\017  
\006\003\125\035\023\001\001\377\004\005\060\003\001\001\377\060  
\035\006\003\125\035\016\004\026\004\024\003\336\120\065\126\321  
\114\273\146\360\243\342\033\033\303\227\262\075\321\125\060\037  
\006\003\125\035\043\004\030\060\026\200\024\003\336\120\065\126  
\321\114\273\146\360\243\342\033\033\303\227\262\075\321\125\060  
\015\006\011\052\206\110\206\367\015\001\001\005\005\000\003\202  
\001\001\000\313\234\067\252\110\023\022\012\372\335\104\234\117  
\122\260\364\337\256\004\365\171\171\010\243\044\030\374\113\053  
\204\300\055\271\325\307\376\364\301\037\130\313\270\155\234\172  
\164\347\230\051\253\021\265\343\160\240\241\315\114\210\231\223  
\214\221\160\342\253\017\034\276\223\251\377\143\325\344\007\140  
\323\243\277\235\133\011\361\325\216\343\123\364\216\143\372\077  
\247\333\264\146\337\142\146\326\321\156\101\215\362\055\265\352  
\167\112\237\235\130\342\053\131\300\100\043\355\055\050\202\105  
\076\171\124\222\046\230\340\200\110\250\067\357\360\326\171\140  
\026\336\254\350\016\315\156\254\104\027\070\057\111\332\341\105  
\076\052\271\066\123\317\072\120\006\367\056\350\304\127\111\154  
\141\041\030\325\004\255\170\074\054\072\200\153\247\353\257\025  
\024\351\330\211\301\271\070\154\342\221\154\212\377\144\271\167  
\045\127\060\300\033\044\243\341\334\351\337\107\174\265\264\044  
\010\005\060\354\055\275\013\277\105\277\120\271\251\363\353\230  
\001\022\255\310\210\306\230\064\137\215\012\074\306\351\325\225  
\225\155\336

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRUST\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRUST\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "DigiCert Global Root CA"

# Issuer: CN=DigiCert Global Root CA,OU=www.digicert.com,O=DigiCert Inc,C=US

# Serial Number:08:3b:e0:56:90:42:46:b1:a1:75:6a:c9:59:91:c7:4a

# Subject: CN=DigiCert Global Root CA,OU=www.digicert.com,O=DigiCert Inc,C=US

# Not Valid Before: Fri Nov 10 00:00:00 2006

# Not Valid After : Mon Nov 10 00:00:00 2031

# Fingerprint (SHA-256):

43:48:A0:E9:44:4C:78:CB:26:5E:05:8D:5E:89:44:B4:D8:4F:96:62:BD:26:DB:25:7F:89:34:A4:43:C7:01:61

#

Fingerprint (SHA1): A8:98:5D:3A:65:E5:E5:C4:B2:D7:D6:6D:40:C6:DD:2F:B1:9C:54:36

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

```

CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "DigiCert Global Root CA"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\250\230\135\072\145\345\345\304\262\327\326\155\100\306\335\057
\261\234\124\066
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\171\344\251\204\015\175\072\226\327\300\117\342\103\114\211\056
END
CKA_ISSUER MULTILINE_OCTAL
\060\141\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\025\060\023\006\003\125\004\012\023\014\104\151\147\151\103\145
\162\164\040\111\156\143\061\031\060\027\006\003\125\004\013\023
\020\167\167\167\056\144\151\147\151\143\145\162\164\056\143\157
\155\061\040\060\036\006\003\125\004\003\023\027\104\151\147\151
\103\145\162\164\040\107\154\157\142\141\154\040\122\157\157\164
\040\103\101
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\020\010\073\340\126\220\102\106\261\241\165\152\311\131\221
\307\112
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "DigiCert High Assurance EV Root CA"
#
# Issuer: CN=DigiCert High Assurance EV Root CA,OU=www.digicert.com,O=DigiCert Inc,C=US
# Serial Number:02:ac:5c:26:6a:0b:40:9b:8f:0b:79:f2:ae:46:25:77
# Subject: CN=DigiCert High Assurance EV Root CA,OU=www.digicert.com,O=DigiCert Inc,C=US
# Not Valid Before: Fri Nov 10 00:00:00 2006
# Not Valid After : Mon Nov 10 00:00:00 2031
# Fingerprint (SHA-256):
74:31:E5:F4:C3:C1:CE:46:90:77:4F:0B:61:E0:54:40:88:3B:A9:A0:1E:D0:0B:A6:AB:D7:80:6E:D3:B1:18:CF
# Fingerprint (SHA1): 5F:B7:EE:06:33:E2:59:DB:AD:0C:4C:9A:E6:D3:8F:1A:61:C7:DC:25
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE
CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "DigiCert High Assurance EV Root CA"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\154\061\013\060\011\006\003\125\004\006\023\002\125\123\061

```

\025\060\023\006\003\125\004\012\023\014\104\151\147\151\103\145  
\162\164\040\111\156\143\061\031\060\027\006\003\125\004\013\023  
\020\167\167\167\056\144\151\147\151\143\145\162\164\056\143\157  
\155\061\053\060\051\006\003\125\004\003\023\042\104\151\147\151  
\103\145\162\164\040\110\151\147\150\040\101\163\163\165\162\141  
\156\143\145\040\105\126\040\122\157\157\164\040\103\101

END

CKA\_ID UTF8 "0"

CKA\_ISSUER MULTILINE\_OCTAL

\060\154\061\013\060\011\006\003\125\004\006\023\002\125\123\061  
\025\060\023\006\003\125\004\012\023\014\104\151\147\151\103\145  
\162\164\040\111\156\143\061\031\060\027\006\003\125\004\013\023  
\020\167\167\167\056\144\151\147\151\143\145\162\164\056\143\157  
\155\061\053\060\051\006\003\125\004\003\023\042\104\151\147\151  
\103\145\162\164\040\110\151\147\150\040\101\163\163\165\162\141  
\156\143\145\040\105\126\040\122\157\157\164\040\103\101

END

CKA\_SERIAL\_NUMBER

MULTILINE\_OCTAL

\002\020\002\254\134\046\152\013\100\233\217\013\171\362\256\106  
\045\167

END

CKA\_VALUE MULTILINE\_OCTAL

\060\202\003\305\060\202\002\255\240\003\002\001\002\002\020\002  
\254\134\046\152\013\100\233\217\013\171\362\256\106\045\167\060  
\015\006\011\052\206\110\206\367\015\001\001\005\005\000\060\154  
\061\013\060\011\006\003\125\004\006\023\002\125\123\061\025\060  
\023\006\003\125\004\012\023\014\104\151\147\151\103\145\162\164  
\040\111\156\143\061\031\060\027\006\003\125\004\013\023\020\167  
\167\167\056\144\151\147\151\143\145\162\164\056\143\157\155\061  
\053\060\051\006\003\125\004\003\023\042\104\151\147\151\103\145  
\162\164\040\110\151\147\150\040\101\163\163\165\162\141\156\143  
\145\040\105\126\040\122\157\157\164\040\103\101\060\036\027\015  
\060\066\061\061\061\060\060\060\060\060\060\060\060\132\027\015\063  
\061\061\061\061\060\060\060\060\060\060\060\132\060\154\061\013  
\060\011\006\003\125\004\006\023\002\125\123\061\025\060\023\006  
\003\125\004\012\023\014\104\151\147\151\103\145\162\164\040\111  
\156\143\061\031\060\027\006\003\125\004\013\023\020\167\167\167  
\056\144\151\147\151\143\145\162\164\056\143\157\155\061\053\060  
\051\006\003\125\004\003\023\042\104\151\147\151\103\145\162\164  
\040\110\151\147\150\040\101\163\163\165\162\141\156\143\145\040  
\105\126\040\122\157\157\164\040\103\101\060\202\001\042\060\015  
\006\011\052\206\110\206\367\015\001\001\001\005\000\003\202\001  
\017\000\060\202\001\012\002\202\001\001\000\306\314\345\163\346  
\373\324\273\345\055\055\062\246\337\345\201\077\311\315\045\111  
\266\161\052\303\325\224\064\147\242\012\034\260\137\151\246\100  
\261\304\267\262\217\320\230\244\251\101\131\072\323\334\224\326  
\074\333\164\070\244\112\314\115\045\202\367\112\245\123\022\070

\356\363\111\155\161\221\176\143\266\253\246\137\303\244\204\370  
\117\142\121\276\370\305\354\333\070\222\343\006\345\010\221\014  
\304\050\101\125\373\313\132\211\025\176\161\350\065\277\115\162  
\011\075\276\072\070\120\133\167\061\033\215\263\307\044\105\232  
\247\254\155\000\024\132\004\267\272\023\353\121\012\230\101\101  
\042\116\145\141\207\201\101\120\246\171\134\211\336\031\112\127  
\325\056\346\135\034\123\054\176\230\315\032\006\026\244\150\163  
\320\064\004\023\134\241\161\323\132\174\125\333\136\144\341\067  
\207\060\126\004\345\021\264\051\200\022\361\171\071\210\242\002  
\021\174\047\146\267\210\267\170\362\312\012\250\070\253\012\144  
\302\277\146\135\225\204\301\241\045\036\207\135\032\120\013\040  
\022\314\101\273\156\013\121\070\270\113\313\002\003\001\000\001  
\243\143\060\141\060\016\006\003\125\035\017\001\001\377\004\004  
\003\002\001\206\060\017\006\003\125\035\023\001\001\377\004\005  
\060\003\001\001\377\060\035\006\003\125\035\016\004\026\004\024  
\261\076\303\151\003\370\277\107\001\324\230\046\032\010\002\357  
\143\144\053\303\060\037\006\003\125\035\043\004\030\060\026\200  
\024\261\076\303\151\003\370\277\107\001\324\230\046\032\010\002  
\357\143\144\053\303\060\015\006\011\052\206\110\206\367\015\001  
\001\005\005\000\003\202\001\001\000\034\032\006\227\334\327\234  
\237\074\210\146\006\010\127\041\333\041\107\370\052\147\252\277  
\030\062\166\100\020\127\301\212\363\172\331\021\145\216\065\372  
\236\374\105\265\236\331\114\061\113\270\221\350\103\054\216\263  
\170\316\333\343\123\171\161\326\345\041\224\001\332\125\207\232  
\044\144\366\212\146\314\336\234\067\315\250\064\261\151\233\043  
\310\236\170\042\053\160\103\343\125\107\061\141\031\357\130\305  
\205\057\116\060\366\240\061\026\043\310\347\342\145\026\063\313  
\277\032\033\240\075\370\312\136\213\061\213\140\010\211\055\014  
\006\134\122\267\304\371\012\230\321\025\137\237\022\276\174\066  
\143\070\275\104\244\177\344\046\053\012\304\227\151\015\351\214  
\342\300\020\127\270\310\166\022\221\125\362\110\151\330\274\052  
\002\133\017\104\324\040\061\333\364\272\160\046\135\220\140\236  
\274\113\027\011\057\264\313\036\103\150\311\007\047\301\322\134  
\367\352\041\271\150\022\234\074\234\277\236\374\200\134\233\143  
\315\354\107\252\045\047\147\240\067\363\000\202\175\124\327\251  
\370\351\056\023\243\167\350\037\112

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "DigiCert High Assurance EV Root CA"

# Issuer: CN=DigiCert High Assurance EV Root CA,OU=www.digicert.com,O=DigiCert Inc,C=US

# Serial Number:02:ac:5c:26:6a:0b:40:9b:8f:0b:79:f2:ae:46:25:77

# Subject: CN=DigiCert High Assurance EV Root CA,OU=www.digicert.com,O=DigiCert Inc,C=US

# Not Valid Before: Fri Nov 10 00:00:00 2006

# Not Valid After : Mon Nov 10 00:00:00 2031

```

# Fingerprint (SHA-256):
74:31:E5:F4:C3:C1:CE:46:90:77:4F:0B:61:E0:54:40:88:3B:A9:A0:1E:D0:0B:A6:AB:D7:80:6E:D3:B1:18:CF
# Fingerprint (SHA1): 5F:B7:EE:06:33:E2:59:DB:AD:0C:4C:9A:E6:D3:8F:1A:61:C7:DC:25
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE
CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "DigiCert High Assurance EV Root CA"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\137\267\356\006\063\342\131\333\255\014\114\232\346\323\217\032
\141\307\334\045
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\324\164\336\127\134\071\262\323\234\205\203\305\300\145\111\212
END
CKA_ISSUER MULTILINE_OCTAL
\060\154\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\025\060\023\006\003\125\004\012\023\014\104\151\147\151\103\145
\162\164\040\111\156\143\061\031\060\027\006\003\125\004\013\023
\020\167\167\167\056\144\151\147\151\143\145\162\164\056\143\157
\155\061\053\060\051\006\003\125\004\003\023\042\104\151\147\151
\103\145\162\164\040\110\151\147\150\040\101\163\163\165\162\141
\156\143\145\040\105\126\040\122\157\157\164\040\103\101
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\020\002\254\134\046\152\013\100\233\217\013\171\362\256\106
\045\167
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION
CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "SwissSign Gold CA - G2"
#
# Issuer: CN=SwissSign Gold CA - G2,O=SwissSign AG,C=CH
# Serial Number:00:bb:40:1c:43:f5:5e:4f:b0
# Subject: CN=SwissSign Gold CA - G2,O=SwissSign AG,C=CH
# Not Valid Before: Wed Oct 25 08:30:35 2006
# Not Valid After : Sat Oct 25 08:30:35 2036
# Fingerprint (SHA-256):
62:DD:0B:E9:B9:F5:0A:16:3E:A0:F8:E7:5C:05:3B:1E:CA:57:EA:55:C8:68:8F:64:7C:68:81:F2:C8:35:7B:95
# Fingerprint (SHA1): D8:C5:38:8A:B7:30:1B:1B:6E:D4:7A:E6:45:25:3A:6F:9F:1A:27:61
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE

```



```
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "SwissSign Gold CA - G2"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\105\061\013\060\011\006\003\125\004\006\023\002\103\110\061
\025\060\023\006\003\125\004\012\023\014\123\167\151\163\163\123
\151\147\156\040\101\107\061\037\060\035\006\003\125\004\003\023
\026\123\167\151\163\163\123\151\147\156\040\107\157\154\144\040
\103\101\040\055\040\107\062
END
CKA_ID
UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\105\061\013\060\011\006\003\125\004\006\023\002\103\110\061
\025\060\023\006\003\125\004\012\023\014\123\167\151\163\163\123
\151\147\156\040\101\107\061\037\060\035\006\003\125\004\003\023
\026\123\167\151\163\163\123\151\147\156\040\107\157\154\144\040
\103\101\040\055\040\107\062
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\011\000\273\100\034\103\365\136\117\260
END
CKA_VALUE MULTILINE_OCTAL
\060\202\005\272\060\202\003\242\240\003\002\001\002\002\011\000
\273\100\034\103\365\136\117\260\060\015\006\011\052\206\110\206
\367\015\001\001\005\005\000\060\105\061\013\060\011\006\003\125
\004\006\023\002\103\110\061\025\060\023\006\003\125\004\012\023
\014\123\167\151\163\163\123\151\147\156\040\101\107\061\037\060
\035\006\003\125\004\003\023\026\123\167\151\163\163\123\151\147
\156\040\107\157\154\144\040\103\101\040\055\040\107\062\060\036
\027\015\060\066\061\060\062\065\060\070\063\060\063\065\132\027
\015\063\066\061\060\062\065\060\070\063\060\063\065\132\060\105
\061\013\060\011\006\003\125\004\006\023\002\103\110\061\025\060
\023\006\003\125\004\012\023\014\123\167\151\163\163\123\151\147
\156\040\101\107\061\037\060\035\006\003\125\004\003\023\026\123
\167\151\163\163\123\151\147\156\040\107\157\154\144\040\103\101
\040\055\040\107\062\060\202\002\042\060\015\006\011\052\206\110
\206\367\015\001\001\001\005\000\003\202\002\017\000\060\202\002
\012\002\202\002\001\000\257\344\356\176\213\044\016\022\156\251
\120\055\026\104\073\222\222\134\312\270\135\204\222\102\023\052
\274\145\127\202\100\076\127\044\315\120\213\045\052\267\157\374
\357\242\320\300\037\002\044\112\023\226\217\043\023\346\050\130
\000\243\107\307\006\247\204\043\053\273\275\226\053\177\125\314
\213\301\127\037\016\142\145\017\335\075\126\212\163\332\256\176
\155\272\201\034\176\102\214\040\065\331\103\115\204\372\204\333
\122\054\363\016\047\167\013\153\277\021\057\162\170\237\056\330
\076\346\030\067\132\052\162\371\332\142\220\222\225\312\037\234
```

\351\263\074\053\313\363\001\023\277\132\317\301\265\012\140\275  
\335\265\231\144\123\270\240\226\263\157\342\046\167\221\214\340  
\142\020\002\237\064\017\244\325\222\063\121\336\276\215\272\204  
\172\140\074\152\333\237\053\354\336\336\001\077\156\115\345\120  
\206\313\264\257\355\104\100\305\312\132\214\332\322\053\174\250  
\356\276\246\345\012\252\016\245\337\005\122\267\125\307\042\135  
\062\152\227\227\143\023\333\311\333\171\066\173\205\072\112\305  
\122\211\371\044\347\235\167\251\202\377\125\034\245\161\151\053  
\321\002\044\362\263\046\324\153\332\004\125\345\301\012\307\155  
\060\067\220\052\344\236\024\063\136\026\027\125\305\133\265\313  
\064\211\222\361\235\046\217\241\007\324\306\262\170\120\333\014  
\014\013\174\013\214\101\327\271\351\335\214\210\367\243\115\262  
\062\314\330\027\332\315\267\316\146\235\324\375\136\377\275\227  
\076\051\165\347\176\247\142\130\257\045\064\245\101\307\075\274  
\015\120\312\003\003\017\010\132\037\225\163\170\142\277\257\162  
\024\151\016\245\345\003\016\170\216\046\050\102\360\007\013\142  
\040\020\147\071\106\372\251\003\314\004\070\172\146\357\040\203  
\265\214\112\126\216\221\000\374\216\134\202\336\210\240\303\342  
\150\156\175\215\357\074\335\145\364\135\254\121\357\044\200\256  
\252\126\227\157\371\255\175\332\141\077\230\167\074\245\221\266  
\034\214\046\332\145\242\011\155\301\342\124\343\271\312\114\114  
\200\217\167\173\140\232\036\337\266\362\110\036\016\272\116\124  
\155\230\340\341\242\032\242\167\120\317\304\143\222\354\107\031  
\235\353\346\153\316\301\002\003\001\000\001\243\201\254\060\201  
\251\060\016\006\003\125\035\017\001\001\377\004\004\003\002\001  
\006\060\017\006\003\125\035\023\001\001\377\004\005\060\003\001  
\001\377\060\035\006\003\125\035\016\004\026\004\024\133\045\173  
\226\244\145\121\176\270\071\363\300\170\146\136\350\072\347\360  
\356\060\037\006\003\125\035\043\004\030\060\026\200\024\133\045  
\173\226\244\145\121\176\270\071\363\300\170\146\136\350\072\347  
\360\356\060\106\006\003\125\035\040\004\077\060\075\060\073\006  
\011\140\205\164\001\131\001\002\001\001\060\056\060\054\006\010  
\053\006\001\005\005\007\002\001\026\040\150\164\164\160\072\057  
\057\162\145\160\157\163\151\164\157\162\171\056\163\167\151\163  
\163\163\151\147\156\056\143\157\155\057\060\015\006\011\052\206  
\110\206\367\015\001\001\005\005\000\003\202\002\001\000\047\272  
\343\224\174\361\256\300\336\027\346\345\330\325\365\124\260\203  
\364\273\315\136\005\173\117\237\165\146\257\074\350\126\176\374  
\162\170\070\003\331\053\142\033\000\271\370\351\140\315\314\316  
\121\212\307\120\061\156\341\112\176\030\057\151\131\266\075\144  
\201\053\343\203\204\346\042\207\216\175\340\356\002\231\141\270  
\036\364\270\053\210\022\026\204\302\061\223\070\226\061\246\271  
\073\123\077\303\044\223\126\133\151\222\354\305\301\273\070\000  
\343\354\027\251\270\334\307\174\001\203\237\062\107\272\122\042  
\064\035\062\172\011\126\247\174\045\066\251\075\113\332\300\202  
\157\012\273\022\310\207\113\047\021\371\036\055\307\223\077\236  
\333\137\046\153\122\331\056\212\361\024\306\104\215\025\251\267  
\277\275\336\246\032\356\256\055\373\110\167\027\376\273\354\257

```
\030\365\052\121\360\071\204\227\225\154\156\033\303\053\304\164
\140\171\045\260\012\047\337\337\136\322\071\317\105\175\102\113
\337\263\054\036\305\306\135\312\125\072\240\234\151\232\217\332
\357\262\260\074\237\207\154\022\053\145\160\025\122\061\032\044
\317\157\061\043\120\037\214\117\217\043\303\164\101\143\034\125
\250\024\335\076\340\121\120\317\361\033\060\126\016\222\260\202
\205\330\203\313\042\144\274\055\270\045\325\124\242\270\006\352
\255\222\244\044\240\301\206\265\112\023\152\107\317\056\013\126
\225\124\313\316\232\333\152\264\246\262\333\101\010\206\047\167
\367\152\240\102\154\013\070\316\327\165\120\062\222\302\337\053
\060\042\110\320\325\101\070\045\135\244\351\135\237\306\224\165
\320\105\375\060\227\103\217\220\253\012\307\206\163\140\112\151
\055\336\245\170\327\006\332\152\236\113\076\167\072\040\023\042
\001\320\277\150\236\143\140\153\065\115\013\155\272\241\075\300
\223\340\177\043\263\125\255\162\045\116\106\371\322\026\357\260
\144\301\001\236\351\312\240\152\230\016\317\330\140\362\057\111
\270\344\102\341\070\065\026\364\310\156\117\367\201\126\350\272
\243\276\043\257\256\375\157\003\340\002\073\060\166\372\033\155
\101\317\001\261\351\270\311\146\364\333\046\363\072\244\164\362
\111\044\133\311\260\320\127\301\372\076\172\341\227\311
```

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "SwissSign Gold CA - G2"

# Issuer: CN=SwissSign Gold CA - G2,O=SwissSign AG,C=CH

# Serial Number:00:bb:40:1c:43:f5:5e:4f:b0

# Subject: CN=SwissSign Gold CA - G2,O=SwissSign AG,C=CH

# Not Valid Before: Wed Oct 25 08:30:35 2006

# Not Valid

After : Sat Oct 25 08:30:35 2036

# Fingerprint (SHA-256):

62:DD:0B:E9:B9:F5:0A:16:3E:A0:F8:E7:5C:05:3B:1E:CA:57:EA:55:C8:68:8F:64:7C:68:81:F2:C8:35:7B:95

# Fingerprint (SHA1): D8:C5:38:8A:B7:30:1B:1B:6E:D4:7A:E6:45:25:3A:6F:9F:1A:27:61

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "SwissSign Gold CA - G2"

CKA\_CERT\_SHA1\_HASH MULTILINE\_OCTAL

```
\330\305\070\212\267\060\033\033\156\324\172\346\105\045\072\157
\237\032\047\141
```

END

CKA\_CERT\_MD5\_HASH MULTILINE\_OCTAL

```
\044\167\331\250\221\321\073\372\210\055\302\377\370\315\063\223
```

END

```

CKA_ISSUER MULTILINE_OCTAL
\060\105\061\013\060\011\006\003\125\004\006\023\002\103\110\061
\025\060\023\006\003\125\004\012\023\014\123\167\151\163\163\123
\151\147\156\040\101\107\061\037\060\035\006\003\125\004\003\023
\026\123\167\151\163\163\123\151\147\156\040\107\157\154\144\040
\103\101\040\055\040\107\062
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\011\000\273\100\034\103\365\136\117\260
END
CKA_TRUST_SERVER_AUTH
CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "SwissSign Silver CA - G2"
#
# Issuer: CN=SwissSign Silver CA - G2,O=SwissSign AG,C=CH
# Serial Number:4f:1b:d4:2f:54:bb:2f:4b
# Subject: CN=SwissSign Silver CA - G2,O=SwissSign AG,C=CH
# Not Valid Before: Wed Oct 25 08:32:46 2006
# Not Valid After : Sat Oct 25 08:32:46 2036
# Fingerprint (SHA-256):
BE:6C:4D:A2:BB:B9:BA:59:B6:F3:93:97:68:37:42:46:C3:C0:05:99:3F:A9:8F:02:0D:1D:ED:BE:D4:8A:81:D5
# Fingerprint (SHA1): 9B:AA:E5:9F:56:EE:21:CB:43:5A:BE:25:93:DF:A7:F0:40:D1:1D:CB
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "SwissSign Silver CA - G2"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\107\061\013\060\011\006\003\125\004\006\023\002\103\110\061
\025\060\023\006\003\125\004\012\023\014\123\167\151\163\163\123
\151\147\156\040\101\107\061\041\060\037\006\003\125\004\003\023
\030\123\167\151\163\163\123\151\147\156\040\123\151\154\166\145
\162\040\103\101\040\055\040\107\062
END
CKA_ID
UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\107\061\013\060\011\006\003\125\004\006\023\002\103\110\061
\025\060\023\006\003\125\004\012\023\014\123\167\151\163\163\123
\151\147\156\040\101\107\061\041\060\037\006\003\125\004\003\023
\030\123\167\151\163\163\123\151\147\156\040\123\151\154\166\145
\162\040\103\101\040\055\040\107\062

```

END

CKA\_SERIAL\_NUMBER MULTILINE\_OCTAL

\002\010\117\033\324\057\124\273\057\113

END

CKA\_VALUE MULTILINE\_OCTAL

\060\202\005\275\060\202\003\245\240\003\002\001\002\002\010\117  
\033\324\057\124\273\057\113\060\015\006\011\052\206\110\206\367  
\015\001\001\005\005\000\060\107\061\013\060\011\006\003\125\004  
\006\023\002\103\110\061\025\060\023\006\003\125\004\012\023\014  
\123\167\151\163\163\123\151\147\156\040\101\107\061\041\060\037  
\006\003\125\004\003\023\030\123\167\151\163\163\123\151\147\156  
\040\123\151\154\166\145\162\040\103\101\040\055\040\107\062\060  
\036\027\015\060\066\061\060\062\065\060\070\063\062\064\066\132  
\027\015\063\066\061\060\062\065\060\070\063\062\064\066\132\060  
\107\061\013\060\011\006\003\125\004\006\023\002\103\110\061\025  
\060\023\006\003\125\004\012\023\014\123\167\151\163\163\123\151  
\147\156\040\101\107\061\041\060\037\006\003\125\004\003\023\030  
\123\167\151\163\163\123\151\147\156\040\123\151\154\166\145\162  
\040\103\101\040\055\040\107\062\060\202\002\042\060\015\006\011  
\052\206\110\206\367\015\001\001\001\005\000\003\202\002\017\000  
\060\202\002\012\002\202\002\001\000\304\361\207\177\323\170\061  
\367\070\311\370\303\231\103\274\307\367\274\067\347\116\161\272  
\113\217\245\163\035\134\156\230\256\003\127\256\070\067\103\057  
\027\075\037\310\316\150\020\301\170\256\031\003\053\020\372\054  
\171\203\366\350\271\150\271\125\362\004\104\247\071\371\374\004  
\213\036\361\242\115\047\371\141\173\272\267\345\242\023\266\353  
\141\076\320\154\321\346\373\372\136\355\035\264\236\240\065\133  
\241\222\313\360\111\222\376\205\012\005\076\346\331\013\342\117  
\273\334\225\067\374\221\351\062\065\042\321\037\072\116\047\205  
\235\260\025\224\062\332\141\015\107\115\140\102\256\222\107\350  
\203\132\120\130\351\212\213\271\135\241\334\335\231\112\037\066  
\147\273\110\344\203\266\067\353\110\072\257\017\147\217\027\007  
\350\004\312\357\152\061\207\324\300\266\371\224\161\173\147\144  
\270\266\221\112\102\173\145\056\060\152\014\365\220\356\225\346  
\362\315\202\354\331\241\112\354\366\262\113\345\105\205\346\155  
\170\223\004\056\234\202\155\066\251\304\061\144\037\206\203\013  
\052\364\065\012\170\311\125\317\101\260\107\351\060\237\231\276  
\141\250\006\204\271\050\172\137\070\331\033\251\070\260\203\177  
\163\301\303\073\110\052\202\017\041\233\270\314\250\065\303\204  
\033\203\263\076\276\244\225\151\001\072\211\000\170\004\331\311  
\364\231\031\253\126\176\133\213\206\071\025\221\244\020\054\011  
\062\200\140\263\223\300\052\266\030\013\235\176\215\111\362\020  
\112\177\371\325\106\057\031\222\243\231\247\046\254\273\214\074  
\346\016\274\107\007\334\163\121\361\160\144\057\010\371\264\107  
\035\060\154\104\352\051\067\205\222\150\146\274\203\070\376\173  
\071\056\323\120\360\037\373\136\140\266\251\246\372\047\101\361  
\233\030\162\362\365\204\164\112\311\147\304\124\256\110\144\337  
\214\321\156\260\035\341\007\217\010\036\231\234\161\351\114\330

\245\367\107\022\037\164\321\121\236\206\363\302\242\043\100\013  
\163\333\113\246\347\163\006\214\301\240\351\301\131\254\106\372  
\346\057\370\317\161\234\106\155\271\304\025\215\070\171\003\105  
\110\357\304\135\327\010\356\207\071\042\206\262\015\017\130\103  
\367\161\251\110\056\375\352\326\037\002\003\001\000\001\243\201  
\254\060\201\251\060\016\006\003\125\035\017\001\001\377\004\004  
\003\002\001\006\060\017\006\003\125\035\023\001\001\377\004\005  
\060\003\001\001\377\060\035\006\003\125\035\016\004\026\004\024  
\027\240\315\301\344\101\266\072\133\073\313\105\235\275\034\302  
\230\372\206\130\060\037\006\003\125\035\043\004\030\060\026\200  
\024\027\240\315\301\344\101\266\072\133\073\313\105\235\275\034  
\302\230\372\206\130\060\106\006\003\125\035\040\004\077\060\075  
\060\073\006\011\140\205\164\001\131\001\003\001\001\060\056\060  
\054\006\010\053\006\001\005\005\007\002\001\026\040\150\164\164  
\160\072\057\057\162\145\160\157\163\151\164\157\162\171\056\163  
\167\151\163\163\163\151\147\156\056\143\157\155\057\060\015\006  
\011\052\206\110\206\367\015\001\001\005\005\000\003\202\002\001  
\000\163\306\201\340\047\322\055\017\340\225\060\342\232\101\177  
\120\054\137\137\142\141\251\206\152\151\030\014\164\111\326\135  
\204\352\101\122\030\157\130\255\120\126\040\152\306\275\050\151  
\130\221\334\221\021\065\251\072\035\274\032\245\140\236\330\037  
\177\105\221\151\331\176\273\170\162\301\006\017\052\316\217\205  
\160\141\254\240\315\013\270\071\051\126\204\062\116\206\273\075  
\304\052\331\327\037\162\356\376\121\241\042\101\261\161\002\143  
\032\202\260\142\253\136\127\022\037\337\313\335\165\240\300\135  
\171\220\214\033\340\120\346\336\061\376\230\173\160\137\245\220  
\330\255\370\002\266\157\323\140\335\100\113\042\305\075\255\072  
\172\237\032\032\107\221\171\063\272\202\334\062\151\003\226\156  
\037\113\360\161\376\343\147\162\240\261\277\134\213\344\372\231  
\042\307\204\271\033\215\043\227\077\355\045\340\317\145\273\365  
\141\004\357\335\036\262\132\101\042\132\241\237\135\054\350\133  
\311\155\251\014\014\170\252\140\306\126\217\001\132\014\150\274  
\151\031\171\304\037\176\227\005\277\305\351\044\121\136\324\325  
\113\123\355\331\043\132\066\003\145\243\301\003\255\101\060\363  
\106\033\205\220\257\145\265\325\261\344\026\133\170\165\035\227  
\172\155\131\251\052\217\173\336\303\207\211\020\231\111\163\170  
\310\075\275\121\065\164\052\325\361\176\151\033\052\273\073\275  
\045\270\232\132\075\162\141\220\146\207\356\014\326\115\324\021  
\164\013\152\376\013\003\374\243\125\127\211\376\112\313\256\133  
\027\005\310\362\215\043\061\123\070\322\055\152\077\202\271\215  
\010\152\367\136\101\164\156\303\021\176\007\254\051\140\221\077  
\070\312\127\020\015\275\060\057\307\245\346\101\240\332\256\005  
\207\232\240\244\145\154\114\011\014\211\272\270\323\271\300\223  
\212\060\372\215\345\232\153\025\001\116\147\252\332\142\126\076  
\204\010\146\322\304\066\175\247\076\020\374\210\340\324\200\345  
\000\275\252\363\116\006\243\172\152\371\142\162\343\011\117\353  
\233\016\001\043\361\237\273\174\334\334\154\021\227\045\262\362  
\264\143\024\322\006\052\147\214\203\365\316\352\007\330\232\152

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\036\354\344\012\273\052\114\353\011\140\071\316\312\142\330\056
\156
END
CKA_NSS_MOZILLA_CA_POLICY
CK_BBOOL CK_TRUE
CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE
CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

# Trust for "SwissSign Silver CA - G2"
# Issuer: CN=SwissSign Silver CA - G2,O=SwissSign AG,C=CH
# Serial Number:4f:1b:d4:2f:54:bb:2f:4b
#
# Subject: CN=SwissSign Silver CA - G2,O=SwissSign AG,C=CH
# Not Valid Before: Wed Oct 25 08:32:46 2006
# Not Valid After : Sat Oct 25 08:32:46 2036
# Fingerprint (SHA-256):
BE:6C:4D:A2:BB:B9:BA:59:B6:F3:93:97:68:37:42:46:C3:C0:05:99:3F:A9:8F:02:0D:1D:ED:BE:D4:8A:81:D5
# Fingerprint (SHA1): 9B:AA:E5:9F:56:EE:21:CB:43:5A:BE:25:93:DF:A7:F0:40:D1:1D:CB
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "SwissSign Silver CA - G2"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\233\252\345\237\126\356\041\313\103\132\276\045\223\337\247\360
\100\321\035\313
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\340\006\241\311\175\317\311\374\015\300\126\165\226\330\142\023
END
CKA_ISSUER MULTILINE_OCTAL
\060\107\061\013\060\011\006\003\125\004\006\023\002\103\110\061
\025\060\023\006\003\125\004\012\023\014\123\167\151\163\163\123
\151\147\156\040\101\107\061\041\060\037\006\003\125\004\003\023
\030\123\167\151\163\163\123\151\147\156\040\123\151\154\166\145
\162\040\103\101\040\055\040\107\062
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\010\117\033\324\057\124\273\057\113
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "SecureTrust CA"

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#
# Issuer: CN=SecureTrust CA,O=SecureTrust Corporation,C=US
# Serial Number:0c:f0:8e:5c:08:16:a5:ad:42:7f:f0:eb:27:18:59:d0
# Subject: CN=SecureTrust CA,O=SecureTrust Corporation,C=US
# Not Valid Before: Tue Nov 07 19:31:18 2006
# Not Valid After : Mon Dec 31 19:40:55 2029
# Fingerprint (SHA-256):
F1:C1:B5:0A:E5:A2:0D:D8:03:0E:C9:F6:BC:24:82:3D:D3:67:B5:25:57:59:B4:E7:1B:61:FC:E9:F7:37:5D:73
# Fingerprint (SHA1): 87:82:C6:C3:04:35:3B:CF:D2:96:92:D2:59:3E:7D:44:D9:34:FF:11
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL
CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "SecureTrust CA"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\110\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\040\060\036\006\003\125\004\012\023\027\123\145\143\165\162\145
\124\162\165\163\164\040\103\157\162\160\157\162\141\164\151\157
\156\061\027\060\025\006\003\125\004\003\023\016\123\145\143\165
\162\145\124\162\165\163\164\040\103\101
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\110\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\040\060\036\006\003\125\004\012\023\027\123\145\143\165\162\145
\124\162\165\163\164\040\103\157\162\160\157\162\141\164\151\157
\156\061\027\060\025\006\003\125\004\003\023\016\123\145\143\165
\162\145\124\162\165\163\164\040\103\101
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\020\014\360\216\134\010\026\245\255\102\177\360\353\047\030
\131\320
END
CKA_VALUE MULTILINE_OCTAL
\060\202\003\270\060\202\002\240\240\003\002\001\002\002\020\014
\360\216\134\010\026\245\255\102\177\360\353\047\030\131\320\060
\015\006\011\052\206\110\206\367\015\001\001\005\005\000\060\110
\061\013\060\011\006\003\125\004\006\023\002\125\123\061\040\060
\036\006\003\125\004\012\023\027\123\145\143\165\162\145\124\162
\165\163\164\040\103\157\162\160\157\162\141\164\151\157\156\061
\027\060\025\006\003\125\004\003\023\016\123\145\143\165\162\145
\124\162\165\163\164\040\103\101\060\036\027\015\060\066\061\061
\060\067\061\071\063\061\061\070\132\027\015\062\071\061\062\063
\061\061\071\064\060\065\065\132\060\110\061\013\060\011\006\003
\125\004\006\023\002\125\123\061\040\060\036\006\003\125\004\012
\023\027\123\145\143\165\162\145\124\162\165\163\164\040\103\157

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\162\160\157\162\141\164\151\157\156\061\027\060\025\006\003\125  
\004\003\023\016\123\145\143\165\162\145\124\162\165\163\164\040  
\103\101\060\202\001\042\060\015\006\011\052\206\110\206\367\015  
\001\001\001\005\000\003\202\001\017\000\060\202\001\012\002\202  
\001\001\000\253\244\201\345\225\315\365\366\024\216\302\117\312  
\324\342\170\225\130\234\101\341\015\231\100\044\027\071\221\063  
\146\351\276\341\203\257\142\134\211\321\374\044\133\141\263\340  
\021\021\101\034\035\156\360\270\273\370\336\247\201\272\246\110  
\306\237\035\275\276\216\251\101\076\270\224\355\051\032\324\216  
\322\003\035\003\357\155\015\147\034\127\327\006\255\312\310\365  
\376\016\257\146\045\110\004\226\013\135\243\272\026\303\010\117  
\321\106\370\024\134\362\310\136\001\231\155\375\210\314\206\250  
\301\157\061\102\154\122\076\150\313\363\031\064\337\273\207\030  
\126\200\046\304\320\334\300\157\337\336\240\302\221\026\240\144  
\021\113\104\274\036\366\347\372\143\336\146\254\166\244\161\243  
\354\066\224\150\172\167\244\261\347\016\057\201\172\342\265\162  
\206\357\242\153\213\360\017\333\323\131\077\272\162\274\104\044  
\234\343\163\263\367\257\127\057\102\046\235\251\164\272\000\122  
\362\113\315\123\174\107\013\066\205\016\146\251\010\227\026\064  
\127\301\146\367\200\343\355\160\124\307\223\340\056\050\025\131  
\207\272\273\002\003\001\000\001\243\201\235\060\201\232\060\023  
\006\011\053\006\001\004\001\202\067\024\002\004\006\036\004\000  
\103\000\101\060\013\006\003\125\035\017\004\004\003\002\001\206  
\060\017\006\003\125\035\023\001\001\377\004\005\060\003\001\001  
\377\060\035\006\003\125\035\016\004\026\004\024\102\062\266\026  
\372\004\375\376\135\113\172\303\375\367\114\100\035\132\103\257  
\060\064\006\003\125\035\037\004\055\060\053\060\051\240\047\240  
\045\206\043\150\164\164\160\072\057\057\143\162\154\056\163\145  
\143\165\162\145\164\162\165\163\164\056\143\157\155\057\123\124  
\103\101\056\143\162\154\060\020\006\011\053\006\001\004\001\202  
\067\025\001\004\003\002\001\000\060\015\006\011\052\206\110\206  
\367\015\001\001\005\005\000\003\202\001\001\000\060\355\117\112  
\341\130\072\122\162\133\265\246\243\145\030\246\273\121\073\167  
\351\235\352\323\237\134\340\105\145\173\015\312\133\342\160\120  
\262\224\005\024\256\111\307\215\101\007\022\163\224\176\014\043  
\041\375\274\020\177\140\020\132\162\365\230\016\254\354\271\177  
\335\172\157\135\323\034\364\377\210\005\151\102\251\005\161\310  
\267\254\046\350\056\264\214\152\377\161\334\270\261\337\231\274  
\174\041\124\053\344\130\242\273\127\051\256\236\251\243\031\046  
\017\231\056\010\260\357\375\151\317\231\032\011\215\343\247\237  
\053\311\066\064\173\044\263\170\114\225\027\244\006\046\036\266  
\144\122\066\137\140\147\331\234\305\005\164\013\347\147\043\322  
\010\374\210\351\256\213\177\341\060\364\067\176\375\306\062\332  
\055\236\104\060\060\154\356\007\336\322\064\374\322\377\100\366  
\113\364\146\106\006\124\246\362\062\012\143\046\060\153\233\321  
\334\213\107\272\341\271\325\142\320\242\240\364\147\005\170\051  
\143\032\157\004\326\370\306\114\243\232\261\067\264\215\345\050  
\113\035\236\054\302\270\150\274\355\002\356\061

```

END
CKA_NSS_MOZILLA_CA_POLICY
CK_BBOOL CK_TRUE
CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE
CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

# Trust for "SecureTrust CA"
#
Issuer: CN=SecureTrust CA,O=SecureTrust Corporation,C=US
# Serial Number:0c:f0:8e:5c:08:16:a5:ad:42:7f:f0:eb:27:18:59:d0
# Subject: CN=SecureTrust CA,O=SecureTrust Corporation,C=US
# Not Valid Before: Tue Nov 07 19:31:18 2006
# Not Valid After : Mon Dec 31 19:40:55 2029
# Fingerprint (SHA-256):
F1:C1:B5:0A:E5:A2:0D:D8:03:0E:C9:F6:BC:24:82:3D:D3:67:B5:25:57:59:B4:E7:1B:61:FC:E9:F7:37:5D:73
# Fingerprint (SHA1): 87:82:C6:C3:04:35:3B:CF:D2:96:92:D2:59:3E:7D:44:D9:34:FF:11
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "SecureTrust CA"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\207\202\306\303\004\065\073\317\322\226\222\322\131\076\175\104
\331\064\377\021
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\334\062\303\247\155\045\127\307\150\011\235\352\055\251\242\321
END
CKA_ISSUER MULTILINE_OCTAL
\060\110\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\040\060\036\006\003\125\004\012\023\027\123\145\143\165\162\145
\124\162\165\163\164\040\103\157\162\160\157\162\141\164\151\157
\156\061\027\060\025\006\003\125\004\003\023\016\123\145\143\165
\162\145\124\162\165\163\164\040\103\101
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\020\014\360\216\134\010\026\245\255\102\177\360\353\047\030
\131\320
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "Secure Global CA"
#

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```
# Issuer: CN=Secure Global CA,O=SecureTrust Corporation,C=US
# Serial Number:07:56:22:a4:e8:d4:8a:89:4d:f4:13:c8:f0:f8:ea:a5
# Subject: CN=Secure Global CA,O=SecureTrust Corporation,C=US
# Not Valid Before: Tue Nov 07 19:42:28 2006
# Not Valid After : Mon Dec 31 19:52:06 2029
# Fingerprint (SHA-256):
42:00:F5:04:3A:C8:59:0E:BB:52:7D:20:9E:D1:50:30:29:FB:CB:D4:1C:A1:B5:06:EC:27:F1:5A:DE:7D:AC:69
# Fingerprint (SHA1): 3A:44:73:5A:E5:81:90:1F:24:86:61:46:1E:3B:9C:C4:5F:F5:3A:1B
CKA_CLASS
CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Secure Global CA"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\112\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\040\060\036\006\003\125\004\012\023\027\123\145\143\165\162\145
\124\162\165\163\164\040\103\157\162\160\157\162\141\164\151\157
\156\061\031\060\027\006\003\125\004\003\023\020\123\145\143\165
\162\145\040\107\154\157\142\141\154\040\103\101
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\112\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\040\060\036\006\003\125\004\012\023\027\123\145\143\165\162\145
\124\162\165\163\164\040\103\157\162\160\157\162\141\164\151\157
\156\061\031\060\027\006\003\125\004\003\023\020\123\145\143\165
\162\145\040\107\154\157\142\141\154\040\103\101
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\020\007\126\042\244\350\324\212\211\115\364\023\310\360\370
\352\245
END
CKA_VALUE
MULTILINE_OCTAL
\060\202\003\274\060\202\002\244\240\003\002\001\002\002\020\007
\126\042\244\350\324\212\211\115\364\023\310\360\370\352\245\060
\015\006\011\052\206\110\206\367\015\001\001\005\005\000\060\112
\061\013\060\011\006\003\125\004\006\023\002\125\123\061\040\060
\036\006\003\125\004\012\023\027\123\145\143\165\162\145\124\162
\165\163\164\040\103\157\162\160\157\162\141\164\151\157\156\061
\031\060\027\006\003\125\004\003\023\020\123\145\143\165\162\145
\040\107\154\157\142\141\154\040\103\101\060\036\027\015\060\066
\061\061\060\067\061\071\064\062\062\070\132\027\015\062\071\061
\062\063\061\061\071\065\062\060\066\132\060\112\061\013\060\011
\006\003\125\004\006\023\002\125\123\061\040\060\036\006\003\125
\004\012\023\027\123\145\143\165\162\145\124\162\165\163\164\040
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\103\157\162\160\157\162\141\164\151\157\156\061\031\060\027\006  
\003\125\004\003\023\020\123\145\143\165\162\145\040\107\154\157  
\142\141\154\040\103\101\060\202\001\042\060\015\006\011\052\206  
\110\206\367\015\001\001\001\005\000\003\202\001\017\000\060\202  
\001\012\002\202\001\001\000\257\065\056\330\254\154\125\151\006  
\161\345\023\150\044\263\117\330\314\041\107\370\361\140\070\211  
\211\003\351\275\352\136\106\123\011\334\134\365\132\350\367\105  
\052\002\353\061\141\327\051\063\114\316\307\174\012\067\176\017  
\272\062\230\341\035\227\257\217\307\334\311\070\226\363\333\032  
\374\121\355\150\306\320\156\244\174\044\321\256\102\310\226\120  
\143\056\340\376\165\376\230\247\137\111\056\225\343\071\063\144  
\216\036\244\137\220\322\147\074\262\331\376\101\271\125\247\011  
\216\162\005\036\213\335\104\205\202\102\320\111\300\035\140\360  
\321\027\054\225\353\366\245\301\222\243\305\302\247\010\140\015  
\140\004\020\226\171\236\026\064\346\251\266\372\045\105\071\310  
\036\145\371\223\365\252\361\122\334\231\230\075\245\206\032\014  
\065\063\372\113\245\004\006\025\034\061\200\357\252\030\153\302  
\173\327\332\316\371\063\040\325\365\275\152\063\055\201\004\373  
\260\134\324\234\243\342\134\035\343\251\102\165\136\173\324\167  
\357\071\124\272\311\012\030\033\022\231\111\057\210\113\375\120  
\142\321\163\347\217\172\103\002\003\001\000\001\243\201\235\060  
\201\232\060\023\006\011\053\006\001\004\001\202\067\024\002\004  
\006\036\004\000\103\000\101\060\013\006\003\125\035\017\004\004  
\003\002\001\206\060\017\006\003\125\035\023\001\001\377\004\005  
\060\003\001\001\377\060\035\006\003\125\035\016\004\026\004\024  
\257\104\004\302\101\176\110\203\333\116\071\002\354\354\204\172  
\346\316\311\244\060\064\006\003\125\035\037\004\055\060\053\060  
\051\240\047\240\045\206\043\150\164\164\160\072\057\057\143\162  
\154\056\163\145\143\165\162\145\164\162\165\163\164\056\143\157  
\155\057\123\107\103\101\056\143\162\154\060\020\006\011\053\006  
\001\004\001\202\067\025\001\004\003\002\001\000\060\015\006\011  
\052\206\110\206\367\015\001\001\005\005\000\003\202\001\001\000  
\143\032\010\100\175\244\136\123\015\167\330\172\256\037\015\013  
\121\026\003\357\030\174\310\343\257\152\130\223\024\140\221\262  
\204\334\210\116\276\071\212\072\363\346\202\211\135\001\067\263  
\253\044\244\025\016\222\065\132\112\104\136\116\127\372\165\316  
\037\110\316\146\364\074\100\046\222\230\154\033\356\044\106\014  
\027\263\122\245\333\245\221\221\317\067\323\157\347\047\010\072  
\116\031\037\072\247\130\134\027\317\171\077\213\344\247\323\046  
\043\235\046\017\130\151\374\107\176\262\320\215\213\223\277\051  
\117\103\151\164\166\147\113\317\007\214\346\002\367\265\341\264  
\103\265\113\055\024\237\371\334\046\015\277\246\107\164\006\330  
\210\321\072\051\060\204\316\322\071\200\142\033\250\307\127\111  
\274\152\125\121\147\025\112\276\065\007\344\325\165\230\067\171  
\060\024\333\051\235\154\305\151\314\107\125\242\060\367\314\134  
\177\302\303\230\034\153\116\026\200\353\172\170\145\105\242\000  
\032\257\014\015\125\144\064\110\270\222\271\361\264\120\051\362  
\117\043\037\332\154\254\037\104\341\335\043\170\121\133\307\026

```

END
CKA_NSS_MOZILLA_CA_POLICY
CK_BBOOL CK_TRUE
CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE
CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

# Trust for "Secure Global CA"
# Issuer: CN=Secure Global CA,O=SecureTrust Corporation,C=US
# Serial Number:07:56:22:a4:e8:d4:8a:89:4d:f4:13:c8:f0:f8:ea:a5
# Subject: CN=Secure Global CA,O=SecureTrust Corporation,C=US
# Not Valid Before: Tue Nov 07 19:42:28 2006
# Not Valid After : Mon Dec 31 19:52:06 2029
# Fingerprint (SHA-256):
42:00:F5:04:3A:C8:59:0E:BB:52:7D:20:9E:D1:50:30:29:FB:CB:D4:1C:A1:B5:06:EC:27:F1:5A:DE:7D:AC:69
# Fingerprint (SHA1): 3A:44:73:5A:E5:81:90:1F:24:86:61:46:1E:3B:9C:C4:5F:F5:3A:1B
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Secure Global CA"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\072\104\163\132\345\201\220\037\044\206\141\106\036\073\234\304
\137\365\072\033
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\317\364\047\015\324\355\334\145\026\111\155\075\332\277\156\336
END
CKA_ISSUER
MULTILINE_OCTAL
\060\112\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\040\060\036\006\003\125\004\012\023\027\123\145\143\165\162\145
\124\162\165\163\164\040\103\157\162\160\157\162\141\164\151\157
\156\061\031\060\027\006\003\125\004\003\023\020\123\145\143\165
\162\145\040\107\154\157\142\141\154\040\103\101
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\020\007\126\042\244\350\324\212\211\115\364\023\310\360\370
\352\245
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "COMODO Certification Authority"
#
# Issuer: CN=COMODO Certification Authority,O=COMODO CA Limited,L=Salford,ST=Greater

```

```
Manchester,C=GB
# Serial Number:4e:81:2d:8a:82:65:e0:0b:02:ee:3e:35:02:46:e5:3d
# Subject: CN=COMODO Certification Authority,O=COMODO CA Limited,L=Salford,ST=Greater
Manchester,C=GB
# Not Valid Before: Fri Dec 01 00:00:00 2006
# Not Valid After : Mon Dec 31 23:59:59 2029
# Fingerprint (SHA-256):
0C:2C:D6:3D:F7:80:6F:A3:99:ED:E8:09:11:6B:57:5B:F8:79:89:F0:65:18:F9:80:8C:86:05:03:17:8B:AF:66
# Fingerprint (SHA1): 66:31:BF:9E:F7:4F:9E:B6:C9:D5:A6:0C:BA:6A:BE:D1:F7:BD:EF:7B
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "COMODO Certification Authority"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\201\201\061\013\060\011\006\003\125\004\006\023\002\107\102
\061\033\060\031\006\003\125\004\010\023\022\107\162\145\141\164
\145\162\040\115\141\156\143\150\145\163\164\145\162\061\020\060
\016\006\003\125\004\007\023\007\123\141\154\146\157\162\144\061
\032\060\030\006\003\125\004\012\023\021\103\117\115\117\104\117
\040\103\101\040\114\151\155\151\164\145\144\061\047\060\045\006
\003\125\004\003\023\036\103\117\115\117\104\117\040\103\145\162
\164\151\146\151\143\141\164\151\157\156\040\101\165\164\150\157
\162\151\164\171
END
CKA_ID
UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\201\201\061\013\060\011\006\003\125\004\006\023\002\107\102
\061\033\060\031\006\003\125\004\010\023\022\107\162\145\141\164
\145\162\040\115\141\156\143\150\145\163\164\145\162\061\020\060
\016\006\003\125\004\007\023\007\123\141\154\146\157\162\144\061
\032\060\030\006\003\125\004\012\023\021\103\117\115\117\104\117
\040\103\101\040\114\151\155\151\164\145\144\061\047\060\045\006
\003\125\004\003\023\036\103\117\115\117\104\117\040\103\145\162
\164\151\146\151\143\141\164\151\157\156\040\101\165\164\150\157
\162\151\164\171
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\020\116\201\055\212\202\145\340\013\002\356\076\065\002\106
\345\075
END
CKA_VALUE MULTILINE_OCTAL
\060\202\004\035\060\202\003\005\240\003\002\001\002\002\020\116
\201\055\212\202\145\340\013\002\356\076\065\002\106\345\075\060
\015\006\011\052\206\110\206\367\015\001\001\005\005\000\060\201
\201\061\013\060\011\006\003\125\004\006\023\002\107\102\061\033
```

\060\031\006\003\125\004\010\023\022\107\162\145\141\164\145\162  
\040\115\141\156\143\150\145\163\164\145\162\061\020\060\016\006  
\003\125\004\007\023\007\123\141\154\146\157\162\144\061\032\060  
\030\006\003\125\004\012\023\021\103\117\115\117\104\117\040\103  
\101\040\114\151\155\151\164\145\144\061\047\060\045\006\003\125  
\004\003\023\036\103\117\115\117\104\117\040\103\145\162\164\151  
\146\151\143\141\164\151\157\156\040\101\165\164\150\157\162\151  
\164\171\060\036\027\015\060\066\061\062\060\061\060\060\060\060  
\060\060\132\027\015\062\071\061\062\063\061\062\063\065\071\065  
\071\132\060\201\201\061\013\060\011\006\003\125\004\006\023\002  
\107\102\061\033\060\031\006\003\125\004\010\023\022\107\162\145  
\141\164\145\162\040\115\141\156\143\150\145\163\164\145\162\061  
\020\060\016\006\003\125\004\007\023\007\123\141\154\146\157\162  
\144\061\032\060\030\006\003\125\004\012\023\021\103\117\115\117  
\104\117\040\103\101\040\114\151\155\151\164\145\144\061\047\060  
\045\006\003\125\004\003\023\036\103\117\115\117\104\117\040\103  
\145\162\164\151\146\151\143\141\164\151\157\156\040\101\165\164  
\150\157\162\151\164\171\060\202\001\042\060\015\006\011\052\206  
\110\206\367\015\001\001\001\005\000\003\202\001\017\000\060\202  
\001\012\002\202\001\001\000\320\100\213\213\162\343\221\033\367  
\121\301\033\124\004\230\323\251\277\301\346\212\135\073\207\373  
\273\210\316\015\343\057\077\006\226\360\242\051\120\231\256\333  
\073\241\127\260\164\121\161\315\355\102\221\115\101\376\251\310  
\330\152\206\167\104\273\131\146\227\120\136\264\324\054\160\104  
\317\332\067\225\102\151\074\060\304\161\263\122\360\041\115\241  
\330\272\071\174\034\236\243\044\235\362\203\026\230\252\026\174  
\103\233\025\133\267\256\064\221\376\324\142\046\030\106\232\077  
\353\301\371\361\220\127\353\254\172\015\213\333\162\060\152\146  
\325\340\106\243\160\334\150\331\377\004\110\211\167\336\265\351  
\373\147\155\101\351\274\071\275\062\331\142\002\361\261\250\075  
\156\067\234\342\057\342\323\242\046\213\306\270\125\103\210\341  
\043\076\245\322\044\071\152\107\253\000\324\241\263\251\045\376  
\015\077\247\035\272\323\121\301\013\244\332\254\070\357\125\120  
\044\005\145\106\223\064\117\055\215\255\306\324\041\031\322\216  
\312\005\141\161\007\163\107\345\212\031\022\275\004\115\316\116  
\234\245\110\254\273\046\367\002\003\001\000\001\243\201\216\060  
\201\213\060\035\006\003\125\035\016\004\026\004\024\013\130\345  
\213\306\114\025\067\244\100\251\060\251\041\276\107\066\132\126  
\377\060\016\006\003\125\035\017\001\001\377\004\004\003\002\001  
\006\060\017\006\003\125\035\023\001\001\377\004\005\060\003\001  
\001\377\060\111\006\003\125\035\037\004\102\060\100\060\076\240  
\074\240\072\206\070\150\164\164\160\072\057\057\143\162\154\056  
\143\157\155\157\144\157\143\141\056\143\157\155\057\103\117\115  
\117\104\117\103\145\162\164\151\146\151\143\141\164\151\157\156  
\101\165\164\150\157\162\151\164\171\056\143\162\154\060\015\006  
\011\052\206\110\206\367\015\001\001\005\005\000\003\202\001\001  
\000\076\230\236\233\366\033\351\327\071\267\170\256\035\162\030  
\111\323\207\344\103\202\353\077\311\252\365\250\265\357\125\174

\041\122\145\371\325\015\341\154\364\076\214\223\163\221\056\002  
\304\116\007\161\157\300\217\070\141\010\250\036\201\012\300\057  
\040\057\101\213\221\334\110\105\274\361\306\336\272\166\153\063  
\310\000\055\061\106\114\355\347\235\317\210\224\377\063\300\126  
\350\044\206\046\270\330\070\070\337\052\153\335\022\314\307\077  
\107\027\114\242\302\006\226\011\326\333\376\077\074\106\101\337  
\130\342\126\017\074\073\301\034\223\065\331\070\122\254\356\310  
\354\056\060\116\224\065\264\044\037\113\170\151\332\362\002\070  
\314\225\122\223\360\160\045\131\234\040\147\304\356\371\213\127  
\141\364\222\166\175\077\204\215\125\267\350\345\254\325\361\365  
\031\126\246\132\373\220\034\257\223\353\345\034\324\147\227\135  
\004\016\276\013\203\246\027\203\271\060\022\240\305\063\025\005  
\271\015\373\307\005\166\343\330\112\215\374\064\027\243\306\041  
\050\276\060\105\061\036\307\170\276\130\141\070\254\073\342\001  
\145

END

CKA\_NSS\_Mozilla\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "COMODO Certification Authority"

# Issuer: CN=COMODO Certification Authority,O=COMODO CA Limited,L=Salford,ST=Greater  
Manchester,C=GB

# Serial Number:4e:81:2d:8a:82:65:e0:0b:02:ee:3e:35:02:46:e5:3d

# Subject: CN=COMODO Certification Authority,O=COMODO CA Limited,L=Salford,ST=Greater  
Manchester,C=GB

# Not Valid Before: Fri Dec 01 00:00:00 2006

# Not Valid After : Mon Dec 31 23:59:59 2029

# Fingerprint (SHA-256):

0C:2C:D6:3D:F7:80:6F:A3:99:ED:E8:09:11:6B:57:5B:F8:79:89:F0:65:18:F9:80:8C:86:05:03:17:8B:AF:66

# Fingerprint (SHA1): 66:31:BF:9E:F7:4F:9E:B6:C9:D5:A6:0C:BA:6A:BE:D1:F7:BD:EF:7B

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE

CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "COMODO Certification Authority"

CKA\_CERT\_SHA1\_HASH MULTILINE\_OCTAL

\146\061\277\236\367\117\236\266\311\325\246\014\272\152\276\321  
\367\275\357\173

END

CKA\_CERT\_MD5\_HASH MULTILINE\_OCTAL

\134\110\334\367\102\162\354\126\224\155\034\314\161\065\200\165

END

CKA\_ISSUER MULTILINE\_OCTAL

\060\201\201\061\013\060\011\006\003\125\004\006\023\002\107\102  
\061\033\060\031\006\003\125\004\010\023\022\107\162\145\141\164



```
\145\162\040\115\141\156\143\150\145\163\164\145\162\061\020\060
\016\006\003\125\004\007\023\007\123\141\154\146\157\162\144\061
\032\060\030\006\003\125\004\012\023\021\103\117\115\117\104\117
\040\103\101\040\114\151\155\151\164\145\144\061\047\060\045\006
\003\125\004\003\023\036\103\117\115\117\104\117\040\103\145\162
\164\151\146\151\143\141\164\151\157\156\040\101\165\164\150\157
\162\151\164\171
```

END

CKA\_SERIAL\_NUMBER MULTILINE\_OCTAL

```
\002\020\116\201\055\212\202\145\340\013\002\356\076\065\002\106
\345\075
```

END

CKA\_TRUST\_SERVER\_AUTH CK\_TRUST

CKT\_NSS\_TRUSTED\_DELEGATOR

CKA\_TRUST\_EMAIL\_PROTECTION CK\_TRUST CKT\_NSS\_TRUSTED\_DELEGATOR

CKA\_TRUST\_CODE\_SIGNING CK\_TRUST CKT\_NSS\_MUST\_VERIFY\_TRUST

CKA\_TRUST\_STEP\_UP\_APPROVED CK\_BBOOL CK\_FALSE

#

# Certificate "COMODO ECC Certification Authority"

#

# Issuer: CN=COMODO ECC Certification Authority,O=COMODO CA Limited,L=Salford,ST=Greater Manchester,C=GB

# Serial Number: 1f:47:af:aa:62:00:70:50:54:4c:01:9e:9b:63:99:2a

# Subject: CN=COMODO ECC Certification Authority,O=COMODO CA Limited,L=Salford,ST=Greater Manchester,C=GB

# Not Valid Before: Thu Mar 06 00:00:00 2008

# Not Valid After : Mon Jan 18 23:59:59 2038

# Fingerprint (SHA-256):

17:93:92:7A:06:14:54:97:89:AD:CE:2F:8F:34:F7:F0:B6:6D:0F:3A:E3:A3:B8:4D:21:EC:15:DB:BA:4F:AD:C7

# Fingerprint (SHA1): 9F:74:4E:9F:2B:4D:BA:EC:0F:31:2C:50:B6:56:3B:8E:2D:93:C3:11

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_CERTIFICATE

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "COMODO ECC Certification Authority"

CKA\_CERTIFICATE\_TYPE

CK\_CERTIFICATE\_TYPE CKC\_X\_509

CKA\_SUBJECT MULTILINE\_OCTAL

```
\060\201\205\061\013\060\011\006\003\125\004\006\023\002\107\102
\061\033\060\031\006\003\125\004\010\023\022\107\162\145\141\164
\145\162\040\115\141\156\143\150\145\163\164\145\162\061\020\060
\016\006\003\125\004\007\023\007\123\141\154\146\157\162\144\061
\032\060\030\006\003\125\004\012\023\021\103\117\115\117\104\117
\040\103\101\040\114\151\155\151\164\145\144\061\053\060\051\006
\003\125\004\003\023\042\103\117\115\117\104\117\040\105\103\103
\040\103\145\162\164\151\146\151\143\141\164\151\157\156\040\101
\165\164\150\157\162\151\164\171
```

END

CKA\_ID UTF8 "0"

CKA\_ISSUER MULTILINE\_OCTAL

\060\201\205\061\013\060\011\006\003\125\004\006\023\002\107\102  
\061\033\060\031\006\003\125\004\010\023\022\107\162\145\141\164  
\145\162\040\115\141\156\143\150\145\163\164\145\162\061\020\060  
\016\006\003\125\004\007\023\007\123\141\154\146\157\162\144\061  
\032\060\030\006\003\125\004\012\023\021\103\117\115\117\104\117  
\040\103\101\040\114\151\155\151\164\145\144\061\053\060\051\006  
\003\125\004\003\023\042\103\117\115\117\104\117\040\105\103\103  
\040\103\145\162\164\151\146\151\143\141\164\151\157\156\040\101  
\165\164\150\157\162\151\164\171

END

CKA\_SERIAL\_NUMBER

MULTILINE\_OCTAL

\002\020\037\107\257\252\142\000\160\120\124\114\001\236\233\143  
\231\052

END

CKA\_VALUE MULTILINE\_OCTAL

\060\202\002\211\060\202\002\017\240\003\002\001\002\002\020\037  
\107\257\252\142\000\160\120\124\114\001\236\233\143\231\052\060  
\012\006\010\052\206\110\316\075\004\003\003\060\201\205\061\013  
\060\011\006\003\125\004\006\023\002\107\102\061\033\060\031\006  
\003\125\004\010\023\022\107\162\145\141\164\145\162\040\115\141  
\156\143\150\145\163\164\145\162\061\020\060\016\006\003\125\004  
\007\023\007\123\141\154\146\157\162\144\061\032\060\030\006\003  
\125\004\012\023\021\103\117\115\117\104\117\040\103\101\040\114  
\151\155\151\164\145\144\061\053\060\051\006\003\125\004\003\023  
\042\103\117\115\117\104\117\040\105\103\103\040\103\145\162\164  
\151\146\151\143\141\164\151\157\156\040\101\165\164\150\157\162  
\151\164\171\060\036\027\015\060\070\060\063\060\066\060\060\060  
\060\060\060\132\027\015\063\070\060\061\061\070\062\063\065\071  
\065\071\132\060\201\205\061\013\060\011\006\003\125\004\006\023  
\002\107\102\061\033\060\031\006\003\125\004\010\023\022\107\162  
\145\141\164\145\162\040\115\141\156\143\150\145\163\164\145\162  
\061\020\060\016\006\003\125\004\007\023\007\123\141\154\146\157  
\162\144\061\032\060\030\006\003\125\004\012\023\021\103\117\115  
\117\104\117\040\103\101\040\114\151\155\151\164\145\144\061\053  
\060\051\006\003\125\004\003\023\042\103\117\115\117\104\117\040  
\105\103\103\040\103\145\162\164\151\146\151\143\141\164\151\157  
\156\040\101\165\164\150\157\162\151\164\171\060\166\060\020\006  
\007\052\206\110\316\075\002\001\006\005\053\201\004\000\042\003  
\142\000\004\003\107\173\057\165\311\202\025\205\373\165\344\221  
\026\324\253\142\231\365\076\122\013\006\316\101\000\177\227\341  
\012\044\074\035\001\004\356\075\322\215\011\227\014\340\165\344  
\372\373\167\212\052\365\003\140\113\066\213\026\043\026\255\011  
\161\364\112\364\050\120\264\376\210\034\156\077\154\057\057\011  
\131\133\245\133\013\063\231\342\303\075\211\371\152\054\357\262

```
\323\006\351\243\102\060\100\060\035\006\003\125\035\016\004\026
\004\024\165\161\247\031\110\031\274\235\235\352\101\107\337\224
\304\110\167\231\323\171\060\016\006\003\125\035\017\001\001\377
\004\004\003\002\001\006\060\017\006\003\125\035\023\001\001\377
\004\005\060\003\001\001\377\060\012\006\010\052\206\110\316\075
\004\003\003\003\150\000\060\145\002\061\000\357\003\133\172\254
\267\170\012\162\267\210\337\377\265\106\024\011\012\372\240\346
\175\010\306\032\207\275\030\250\163\275\046\312\140\014\235\316
\231\237\317\134\017\060\341\276\024\061\352\002\060\024\364\223
\074\111\247\063\172\220\106\107\263\143\175\023\233\116\267\157
\030\067\200\123\376\335\040\340\065\232\066\321\307\001\271\346
\334\335\363\377\035\054\072\026\127\331\222\071\326
```

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "COMODO ECC Certification Authority"

# Issuer: CN=COMODO ECC Certification Authority,O=COMODO CA Limited,L=Salford,ST=Greater Manchester,C=GB

# Serial Number: 1f:47:af:aa:62:00:70:50:54:4c:01:9e:9b:63:99:2a

# Subject: CN=COMODO ECC Certification Authority,O=COMODO CA Limited,L=Salford,ST=Greater Manchester,C=GB

# Not Valid Before: Thu Mar 06 00:00:00 2008

# Not Valid After : Mon Jan 18 23:59:59 2038

# Fingerprint (SHA-256):

17:93:92:7A:06:14:54:97:89:AD:CE:2F:8F:34:F7:F0:B6:6D:0F:3A:E3:A3:B8:4D:21:EC:15:DB:BA:4F:AD:C7

# Fingerprint (SHA1): 9F:74:4E:9F:2B:4D:BA:EC:0F:31:2C:50:B6:56:3B:8E:2D:93:C3:11

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "COMODO ECC Certification Authority"

CKA\_CERT\_SHA1\_HASH MULTILINE\_OCTAL

```
\237\164\116\237\053\115\272\354\017\061\054\120\266\126\073\216
\055\223\303\021
```

END

CKA\_CERT\_MD5\_HASH

MULTILINE\_OCTAL

```
\174\142\377\164\235\061\123\136\150\112\325\170\252\036\277\043
```

END

CKA\_ISSUER MULTILINE\_OCTAL

```
\060\201\205\061\013\060\011\006\003\125\004\006\023\002\107\102
\061\033\060\031\006\003\125\004\010\023\022\107\162\145\141\164
\145\162\040\115\141\156\143\150\145\163\164\145\162\061\020\060
\016\006\003\125\004\007\023\007\123\141\154\146\157\162\144\061
\032\060\030\006\003\125\004\012\023\021\103\117\115\117\104\117
```

```
\040\103\101\040\114\151\155\151\164\145\144\061\053\060\051\006
\003\125\004\003\023\042\103\117\115\117\104\117\040\105\103\103
\040\103\145\162\164\151\146\151\143\141\164\151\157\156\040\101
\165\164\150\157\162\151\164\171
```

END

CKA\_SERIAL\_NUMBER MULTILINE\_OCTAL

```
\002\020\037\107\257\252\142\000\160\120\124\114\001\236\233\143
\231\052
```

END

CKA\_TRUST\_SERVER\_AUTH CK\_TRUST CKT\_NSS\_TRUSTED\_DELEGATOR

CKA\_TRUST\_EMAIL\_PROTECTION CK\_TRUST CKT\_NSS\_TRUSTED\_DELEGATOR

CKA\_TRUST\_CODE\_SIGNING

CK\_TRUST CKT\_NSS\_MUST\_VERIFY\_TRUST

CKA\_TRUST\_STEP\_UP\_APPROVED CK\_BBOOL CK\_FALSE

#

# Certificate "OISTE WISeKey Global Root GA CA"

#

# Issuer: CN=OISTE WISeKey Global Root GA CA,OU=OISTE Foundation Endorsed,OU=Copyright (c)  
2005,O=WISeKey,C=CH

# Serial Number:41:3d:72:c7:f4:6b:1f:81:43:7d:f1:d2:28:54:df:9a

# Subject: CN=OISTE WISeKey Global Root GA CA,OU=OISTE Foundation Endorsed,OU=Copyright (c)  
2005,O=WISeKey,C=CH

# Not Valid Before: Sun Dec 11 16:03:44 2005

# Not Valid After : Fri Dec 11 16:09:51 2037

# Fingerprint (SHA-256):

41:C9:23:86:6A:B4:CA:D6:B7:AD:57:80:81:58:2E:02:07:97:A6:CB:DF:4F:FF:78:CE:83:96:B3:89:37:D7:F5

# Fingerprint (SHA1): 59:22:A1:E1:5A:EA:16:35:21:F8:98:39:6A:46:46:B0:44:1B:0F:A9

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_CERTIFICATE

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "OISTE WISeKey Global Root GA CA"

CKA\_CERTIFICATE\_TYPE CK\_CERTIFICATE\_TYPE CKC\_X\_509

CKA\_SUBJECT MULTILINE\_OCTAL

```
\060\201\212\061\013\060\011\006\003\125\004\006\023\002\103\110
\061\020\060\016\006\003\125\004\012\023\007\127\111\123\145\113
\145\171\061\033\060\031\006\003\125\004\013\023\022\103\157\160
\171\162\151\147\150\164\040\050\143\051\040\062\060\060\065\061
\042\060\040\006\003\125\004\013\023\031\117\111\123\124\105\040
\106\157\165\156\144\141\164\151\157\156\040\105\156\144\157\162
\163\145\144\061\050\060\046\006\003\125\004\003\023\037\117\111
\123\124\105\040\127\111\123\145\113\145\171\040\107\154\157\142
\141\154\040\122\157\157\164\040\107\101\040\103\101
```

END

CKA\_ID

UTF8 "0"

CKA\_ISSUER MULTILINE\_OCTAL

\060\201\212\061\013\060\011\006\003\125\004\006\023\002\103\110  
\061\020\060\016\006\003\125\004\012\023\007\127\111\123\145\113  
\145\171\061\033\060\031\006\003\125\004\013\023\022\103\157\160  
\171\162\151\147\150\164\040\050\143\051\040\062\060\060\065\061  
\042\060\040\006\003\125\004\013\023\031\117\111\123\124\105\040  
\106\157\165\156\144\141\164\151\157\156\040\105\156\144\157\162  
\163\145\144\061\050\060\046\006\003\125\004\003\023\037\117\111  
\123\124\105\040\127\111\123\145\113\145\171\040\107\154\157\142  
\141\154\040\122\157\157\164\040\107\101\040\103\101

END

CKA\_SERIAL\_NUMBER

MULTILINE\_OCTAL

\002\020\101\075\162\307\364\153\037\201\103\175\361\322\050\124  
\337\232

END

CKA\_VALUE MULTILINE\_OCTAL

\060\202\003\361\060\202\002\331\240\003\002\001\002\002\020\101  
\075\162\307\364\153\037\201\103\175\361\322\050\124\337\232\060  
\015\006\011\052\206\110\206\367\015\001\001\005\005\000\060\201  
\212\061\013\060\011\006\003\125\004\006\023\002\103\110\061\020  
\060\016\006\003\125\004\012\023\007\127\111\123\145\113\145\171  
\061\033\060\031\006\003\125\004\013\023\022\103\157\160\171\162  
\151\147\150\164\040\050\143\051\040\062\060\060\065\061\042\060  
\040\006\003\125\004\013\023\031\117\111\123\124\105\040\106\157  
\165\156\144\141\164\151\157\156\040\105\156\144\157\162\163\145  
\144\061\050\060\046\006\003\125\004\003\023\037\117\111\123\124  
\105\040\127\111\123\145\113\145\171\040\107\154\157\142\141\154  
\040\122\157\157\164\040\107\101\040\103\101\060\036\027\015\060  
\065\061\062\061\061\061\066\060\063\064\064\132\027\015\063\067  
\061\062\061\061\061\066\060\071\065\061\132\060\201\212\061\013  
\060\011\006\003\125\004\006\023\002\103\110\061\020\060\016\006  
\003\125\004\012\023\007\127\111\123\145\113\145\171\061\033\060  
\031\006\003\125\004\013\023\022\103\157\160\171\162\151\147\150  
\164\040\050\143\051\040\062\060\060\065\061\042\060\040\006\003  
\125\004\013\023\031\117\111\123\124\105\040\106\157\165\156\144  
\141\164\151\157\156\040\105\156\144\157\162\163\145\144\061\050  
\060\046\006\003\125\004\003\023\037\117\111\123\124\105\040\127  
\111\123\145\113\145\171\040\107\154\157\142\141\154\040\122\157  
\157\164\040\107\101\040\103\101\060\202\001\042\060\015\006\011  
\052\206\110\206\367\015\001\001\001\005\000\003\202\001\017\000  
\060\202\001\012\002\202\001\001\000\313\117\263\000\233\075\066  
\335\371\321\111\152\153\020\111\037\354\330\053\262\306\370\062  
\201\051\103\225\114\232\031\043\041\025\105\336\343\310\034\121  
\125\133\256\223\350\067\377\053\153\351\324\352\276\052\335\250  
\121\053\327\146\303\141\134\140\002\310\365\316\162\173\073\270  
\362\116\145\010\232\315\244\152\031\301\001\273\163\246\327\366  
\303\335\315\274\244\213\265\231\141\270\001\242\243\324\115\324  
\005\075\221\255\370\264\010\161\144\257\160\361\034\153\176\366

\303\167\235\044\163\173\344\014\214\341\331\066\341\231\213\005  
\231\013\355\105\061\011\312\302\000\333\367\162\240\226\252\225  
\207\320\216\307\266\141\163\015\166\146\214\334\033\264\143\242  
\237\177\223\023\060\361\241\047\333\331\377\054\125\210\221\240  
\340\117\007\260\050\126\214\030\033\227\104\216\211\335\340\027  
\156\347\052\357\217\071\012\061\204\202\330\100\024\111\056\172  
\101\344\247\376\343\144\314\301\131\161\113\054\041\247\133\175  
\340\035\321\056\201\233\303\330\150\367\275\226\033\254\160\261  
\026\024\013\333\140\271\046\001\005\002\003\001\000\001\243\121  
\060\117\060\013\006\003\125\035\017\004\004\003\002\001\206\060  
\017\006\003\125\035\023\001\001\377\004\005\060\003\001\001\377  
\060\035\006\003\125\035\016\004\026\004\024\263\003\176\256\066  
\274\260\171\321\334\224\046\266\021\276\041\262\151\206\224\060  
\020\006\011\053\006\001\004\001\202\067\025\001\004\003\002\001  
\000\060\015\006\011\052\206\110\206\367\015\001\001\005\005\000  
\003\202\001\001\000\113\241\377\013\207\156\263\371\301\103\261  
\110\363\050\300\035\056\311\011\101\372\224\000\034\244\244\253  
\111\117\217\075\036\357\115\157\275\274\244\366\362\046\060\311  
\020\312\035\210\373\164\031\037\205\105\275\260\154\121\371\066  
\176\333\365\114\062\072\101\117\133\107\317\350\013\055\266\304  
\031\235\164\305\107\306\073\152\017\254\024\333\074\364\163\234  
\251\005\337\000\334\164\170\372\370\065\140\131\002\023\030\174  
\274\373\115\260\040\155\103\273\140\060\172\147\063\134\305\231  
\321\370\055\071\122\163\373\214\252\227\045\134\162\331\010\036  
\253\116\074\343\201\061\237\003\246\373\300\376\051\210\125\332  
\204\325\120\003\266\342\204\243\246\066\252\021\072\001\341\030  
\113\326\104\150\263\075\371\123\164\204\263\106\221\106\226\000  
\267\200\054\266\341\343\020\342\333\242\347\050\217\001\226\142  
\026\076\000\343\034\245\066\201\030\242\114\122\166\300\021\243  
\156\346\035\272\343\132\276\066\123\305\076\165\217\206\151\051  
\130\123\265\234\273\157\237\134\305\030\354\335\057\341\230\311  
\374\276\337\012\015

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "OISTE WISeKey Global Root GA CA"

# Issuer: CN=OISTE WISeKey Global Root GA CA,OU=OISTE Foundation Endorsed,OU=Copyright (c)  
2005,O=WISeKey,C=CH

# Serial Number:41:3d:72:c7:f4:6b:1f:81:43:7d:f1:d2:28:54:df:9a

# Subject: CN=OISTE WISeKey Global Root GA CA,OU=OISTE Foundation Endorsed,OU=Copyright (c)  
2005,O=WISeKey,C=CH

# Not Valid Before: Sun Dec 11 16:03:44 2005

# Not Valid After : Fri

Dec 11 16:09:51 2037

# Fingerprint (SHA-256):

```
41:C9:23:86:6A:B4:CA:D6:B7:AD:57:80:81:58:2E:02:07:97:A6:CB:DF:4F:FF:78:CE:83:96:B3:89:37:D7:F5
# Fingerprint (SHA1): 59:22:A1:E1:5A:EA:16:35:21:F8:98:39:6A:46:46:B0:44:1B:0F:A9
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "OISTE WISeKey Global Root GA CA"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\131\042\241\341\132\352\026\065\041\370\230\071\152\106\106\260
\104\033\017\251
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\274\154\121\063\247\351\323\146\143\124\025\162\033\041\222\223
END
CKA_ISSUER MULTILINE_OCTAL
\060\201\212\061\013\060\011\006\003\125\004\006\023\002\103\110
\061\020\060\016\006\003\125\004\012\023\007\127\111\123\145\113
\145\171\061\033\060\031\006\003\125\004\013\023\022\103\157\160
\171\162\151\147\150\164\040\050\143\051\040\062\060\060\065\061
\042\060\040\006\003\125\004\013\023\031\117\111\123\124\105\040
\106\157\165\156\144\141\164\151\157\156\040\105\156\144\157\162
\163\145\144\061\050\060\046\006\003\125\004\003\023\037\117\111
\123\124\105\040\127\111\123\145\113\145\171\040\107\154\157\142
\141\154\040\122\157\157\164\040\107\101\040\103\101
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\020\101\075\162\307\364\153\037\201\103\175\361\322\050\124
\337\232
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "Certigna"
#
# Issuer: CN=Certigna,O=Dhimyotis,C=FR
# Serial Number:00:fe:dc:e3:01:0f:c9:48:ff
# Subject: CN=Certigna,O=Dhimyotis,C=FR
# Not Valid Before: Fri Jun 29 15:13:05 2007
# Not Valid After : Tue Jun 29 15:13:05 2027
# Fingerprint (SHA-256):
E3:B6:A2:DB:2E:D7:CE:48:84:2F:7A:C5:32:41:C7:B7:1D:54:14:4B:FB:40:C1:1F:3F:1D:0B:42:F5:EE:A1:2D
# Fingerprint (SHA1): B1:2E:13:63:45:86:A4:6F:1A:B2:60:68:37:58:2D:C4:AC:FD:94:97
CKA_CLASS
```

```
CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Certigna"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\064\061\013\060\011\006\003\125\004\006\023\002\106\122\061
\022\060\020\006\003\125\004\012\014\011\104\150\151\155\171\157
\164\151\163\061\021\060\017\006\003\125\004\003\014\010\103\145
\162\164\151\147\156\141
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\064\061\013\060\011\006\003\125\004\006\023\002\106\122\061
\022\060\020\006\003\125\004\012\014\011\104\150\151\155\171\157
\164\151\163\061\021\060\017\006\003\125\004\003\014\010\103\145
\162\164\151\147\156\141
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\011\000\376\334\343\001\017\311\110\377
END
CKA_VALUE MULTILINE_OCTAL
\060\202\003\250\060\202\002\220\240\003\002\001\002\002\011\000
\376\334\343\001\017\311\110\377\060\015\006\011\052\206\110\206
\367\015\001\001\005\005\000\060\064\061\013\060\011\006\003\125
\004\006\023\002\106\122\061\022\060\020\006\003\125\004\012\014
\011\104\150\151\155\171\157\164\151\163\061\021\060\017\006\003
\125\004\003\014\010\103\145\162\164\151\147\156\141\060\036\027
\015\060\067\060\066\062\071\061\065\061\063\060\065\132\027\015
\062\067\060\066\062\071\061\065\061\063\060\065\132\060\064\061
\013\060\011\006\003\125\004\006\023\002\106\122\061\022\060\020
\006\003\125\004\012\014\011\104\150\151\155\171\157\164\151\163
\061\021\060\017\006\003\125\004\003\014\010\103\145\162\164\151
\147\156\141\060\202\001\042\060\015\006\011\052\206\110\206\367
\015\001\001\001\005\000\003\202\001\017\000\060\202\001\012\002
\202\001\001\000\310\150\361\311\326\326\263\064\165\046\202\036
\354\264\276\352\134\341\046\355\021\107\141\341\242\174\026\170
\100\041\344\140\236\132\310\143\341\304\261\226\222\377\030\155
\151\043\341\053\142\367\335\342\066\057\221\007\271\110\317\016
\354\171\266\054\347\064\113\160\010\045\243\074\207\033\031\362
\201\007\017\070\220\031\323\021\376\206\264\362\321\136\036\036
\226\315\200\154\316\073\061\223\266\362\240\320\251\225\022\175
\245\232\314\153\310\204\126\212\063\251\347\042\025\123\026\360
\314\027\354\127\137\351\242\012\230\011\336\343\137\234\157\334
\110\343\205\013\025\132\246\272\237\254\110\343\011\262\367\364
\062\336\136\064\276\034\170\135\102\133\316\016\042\217\115\220
\327\175\062\030\263\013\054\152\277\216\077\024\021\211\040\016
```



\167\024\265\075\224\010\207\367\045\036\325\262\140\000\354\157  
\052\050\045\156\052\076\030\143\027\045\077\076\104\040\026\366  
\046\310\045\256\005\112\264\347\143\054\363\214\026\123\176\134  
\373\021\032\010\301\106\142\237\042\270\361\302\215\151\334\372  
\072\130\006\337\002\003\001\000\001\243\201\274\060\201\271\060  
\017\006\003\125\035\023\001\001\377\004\005\060\003\001\001\377  
\060\035\006\003\125\035\016\004\026\004\024\032\355\376\101\071  
\220\264\044\131\276\001\362\122\325\105\366\132\071\334\021\060  
\144\006\003\125\035\043\004\135\060\133\200\024\032\355\376\101  
\071\220\264\044\131\276\001\362\122\325\105\366\132\071\334\021  
\241\070\244\066\060\064\061\013\060\011\006\003\125\004\006\023  
\002\106\122\061\022\060\020\006\003\125\004\012\014\011\104\150  
\151\155\171\157\164\151\163\061\021\060\017\006\003\125\004\003  
\014\010\103\145\162\164\151\147\156\141\202\011\000\376\334\343  
\001\017\311\110\377\060\016\006\003\125\035\017\001\001\377\004  
\004\003\002\001\006\060\021\006\011\140\206\110\001\206\370\102  
\001\001\004\004\003\002\000\007\060\015\006\011\052\206\110\206  
\367\015\001\001\005\005\000\003\202\001\001\000\205\003\036\222  
\161\366\102\257\341\243\141\236\353\363\300\017\362\245\324\332  
\225\346\326\276\150\066\075\176\156\037\114\212\357\321\017\041  
\155\136\245\122\143\316\022\370\357\052\332\157\353\067\376\023  
\002\307\313\073\076\042\153\332\141\056\177\324\162\075\335\060  
\341\036\114\100\031\214\017\327\234\321\203\060\173\230\131\334  
\175\306\271\014\051\114\241\063\242\353\147\072\145\204\323\226  
\342\355\166\105\160\217\265\053\336\371\043\326\111\156\074\024  
\265\306\237\065\036\120\320\301\217\152\160\104\002\142\313\256  
\035\150\101\247\252\127\350\123\252\007\322\006\366\325\024\006  
\013\221\003\165\054\154\162\265\141\225\232\015\213\271\015\347  
\365\337\124\315\336\346\330\326\011\010\227\143\345\301\056\260  
\267\104\046\300\046\300\257\125\060\236\073\325\066\052\031\004  
\364\134\036\377\317\054\267\377\320\375\207\100\021\325\021\043  
\273\110\300\041\251\244\050\055\375\025\370\260\116\053\364\060  
\133\041\374\021\221\064\276\101\357\173\235\227\165\377\227\225  
\300\226\130\057\352\273\106\327\273\344\331\056

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "Certigna"

# Issuer: CN=Certigna,O=Dhimyotis,C=FR

# Serial Number:00:fe:dc:e3:01:0f:c9:48:ff

# Subject: CN=Certigna,O=Dhimyotis,C=FR

# Not Valid Before: Fri Jun 29 15:13:05 2007

#

Not Valid After : Tue Jun 29 15:13:05 2027

# Fingerprint (SHA-256):

```

E3:B6:A2:DB:2E:D7:CE:48:84:2F:7A:C5:32:41:C7:B7:1D:54:14:4B:FB:40:C1:1F:3F:1D:0B:42:F5:EE:A1:2D
# Fingerprint (SHA1): B1:2E:13:63:45:86:A4:6F:1A:B2:60:68:37:58:2D:C4:AC:FD:94:97
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Certigna"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\261\056\023\143\105\206\244\157\032\262\140\150\067\130\055\304
\254\375\224\227
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\253\127\246\133\175\102\202\031\265\330\130\046\050\136\375\377
END
CKA_ISSUER MULTILINE_OCTAL
\060\064\061\013\060\011\006\003\125\004\006\023\002\106\122\061
\022\060\020\006\003\125\004\012\014\011\104\150\151\155\171\157
\164\151\163\061\021\060\017\006\003\125\004\003\014\010\103\145
\162\164\151\147\156\141
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\011\000\376\334\343\001\017\311\110\377
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION
CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "ePKI Root Certification Authority"
#
# Issuer: OU=ePKI Root Certification Authority,O="Chunghwa Telecom Co., Ltd.",C=TW
# Serial Number: 15:c8:bd:65:47:5c:af:b8:97:00:5e:e4:06:d2:bc:9d
# Subject: OU=ePKI Root Certification Authority,O="Chunghwa Telecom Co., Ltd.",C=TW
# Not Valid Before: Mon Dec 20 02:31:27 2004
# Not Valid After : Wed Dec 20 02:31:27 2034
# Fingerprint (SHA-256):
C0:A6:F4:DC:63:A2:4B:FD:CF:54:EF:2A:6A:08:2A:0A:72:DE:35:80:3E:2F:F5:FF:52:7A:E5:D8:72:06:DF:D5
# Fingerprint (SHA1): 67:65:0D:F1:7E:8E:7E:5B:82:40:A4:F4:56:4B:CF:E2:3D:69:C6:F0
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "ePKI Root Certification Authority"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT

```

MULTILINE\_OCTAL

\060\136\061\013\060\011\006\003\125\004\006\023\002\124\127\061  
\043\060\041\006\003\125\004\012\014\032\103\150\165\156\147\150  
\167\141\040\124\145\154\145\143\157\155\040\103\157\056\054\040  
\114\164\144\056\061\052\060\050\006\003\125\004\013\014\041\145  
\120\113\111\040\122\157\157\164\040\103\145\162\164\151\146\151  
\143\141\164\151\157\156\040\101\165\164\150\157\162\151\164\171  
END

CKA\_ID UTF8 "0"

CKA\_ISSUER MULTILINE\_OCTAL

\060\136\061\013\060\011\006\003\125\004\006\023\002\124\127\061  
\043\060\041\006\003\125\004\012\014\032\103\150\165\156\147\150  
\167\141\040\124\145\154\145\143\157\155\040\103\157\056\054\040  
\114\164\144\056\061\052\060\050\006\003\125\004\013\014\041\145  
\120\113\111\040\122\157\157\164\040\103\145\162\164\151\146\151  
\143\141\164\151\157\156\040\101\165\164\150\157\162\151\164\171  
END

CKA\_SERIAL\_NUMBER MULTILINE\_OCTAL

\002\020\025\310\275\145\107\134\257\270\227\000\136\344\006\322  
\274\235

END

CKA\_VALUE MULTILINE\_OCTAL

\060\202\005\260\060\202\003\230\240\003\002\001\002\002\020\025  
\310\275\145\107\134\257\270\227\000\136\344\006\322\274\235\060  
\015\006\011\052\206\110\206\367\015\001\001\005\005\000\060\136  
\061\013\060\011\006\003\125\004\006\023\002\124\127\061\043\060  
\041\006\003\125\004\012\014\032\103\150\165\156\147\150\167\141  
\040\124\145\154\145\143\157\155\040\103\157\056\054\040\114\164  
\144\056\061\052\060\050\006\003\125\004\013\014\041\145\120\113  
\111\040\122\157\157\164\040\103\145\162\164\151\146\151\143\141  
\164\151\157\156\040\101\165\164\150\157\162\151\164\171\060\036  
\027\015\060\064\061\062\062\060\060\062\063\061\062\067\132\027  
\015\063\064\061\062\062\060\060\062\063\061\062\067\132\060\136  
\061\013\060\011\006\003\125\004\006\023\002\124\127\061\043\060  
\041\006\003\125\004\012\014\032\103\150\165\156\147\150\167\141  
\040\124\145\154\145\143\157\155\040\103\157\056\054\040\114\164  
\144\056\061\052\060\050\006\003\125\004\013\014\041\145\120\113  
\111\040\122\157\157\164\040\103\145\162\164\151\146\151\143\141  
\164\151\157\156\040\101\165\164\150\157\162\151\164\171\060\202  
\002\042\060\015\006\011\052\206\110\206\367\015\001\001\001\005  
\000\003\202\002\017\000\060\202\002\012\002\202\002\001\000\341  
\045\017\356\215\333\210\063\165\147\315\255\037\175\072\116\155  
\235\323\057\024\363\143\164\313\001\041\152\067\352\204\120\007  
\113\046\133\011\103\154\041\236\152\310\325\003\365\140\151\217  
\314\360\042\344\037\347\367\152\042\061\267\054\025\362\340\376  
\000\152\103\377\207\145\306\265\032\301\247\114\155\042\160\041  
\212\061\362\227\164\211\011\022\046\034\236\312\331\022\242\225  
\074\332\351\147\277\010\240\144\343\326\102\267\105\357\227\364

\366\365\327\265\112\025\002\130\175\230\130\113\140\274\315\327  
\015\232\023\063\123\321\141\371\172\325\327\170\263\232\063\367  
\000\206\316\035\115\224\070\257\250\354\170\121\160\212\134\020  
\203\121\041\367\021\075\064\206\136\345\110\315\227\201\202\065  
\114\031\354\145\366\153\305\005\241\356\107\023\326\263\041\047  
\224\020\012\331\044\073\272\276\104\023\106\060\077\227\074\330  
\327\327\152\356\073\070\343\053\324\227\016\271\033\347\007\111  
\177\067\052\371\167\170\317\124\355\133\106\235\243\200\016\221  
\103\301\326\133\137\024\272\237\246\215\044\107\100\131\277\162  
\070\262\066\154\067\377\231\321\135\016\131\012\253\151\367\300  
\262\004\105\172\124\000\256\276\123\366\265\347\341\370\074\243  
\061\322\251\376\041\122\144\305\246\147\360\165\007\006\224\024  
\201\125\306\047\344\001\217\027\301\152\161\327\276\113\373\224  
\130\175\176\021\063\261\102\367\142\154\030\326\317\011\150\076  
\177\154\366\036\217\142\255\245\143\333\011\247\037\042\102\101  
\036\157\231\212\076\327\371\077\100\172\171\260\245\001\222\322  
\235\075\010\025\245\020\001\055\263\062\166\250\225\015\263\172  
\232\373\007\020\170\021\157\341\217\307\272\017\045\032\164\052  
\345\034\230\101\231\337\041\207\350\225\006\152\012\263\152\107  
\166\145\366\072\317\217\142\027\031\173\012\050\315\032\322\203  
\036\041\307\054\277\276\377\141\150\267\147\033\273\170\115\215  
\316\147\345\344\301\216\267\043\146\342\235\220\165\064\230\251  
\066\053\212\232\224\271\235\354\314\212\261\370\045\211\134\132  
\266\057\214\037\155\171\044\247\122\150\303\204\065\342\146\215  
\143\016\045\115\325\031\262\346\171\067\247\042\235\124\061\002  
\003\001\000\001\243\152\060\150\060\035\006\003\125\035\016\004  
\026\004\024\036\014\367\266\147\362\341\222\046\011\105\300\125  
\071\056\167\077\102\112\242\060\014\006\003\125\035\023\004\005  
\060\003\001\001\377\060\071\006\004\147\052\007\000\004\061\060  
\057\060\055\002\001\000\060\011\006\005\053\016\003\002\032\005  
\000\060\007\006\005\147\052\003\000\000\004\024\105\260\302\307  
\012\126\174\356\133\170\014\225\371\030\123\301\246\034\330\020  
\060\015\006\011\052\206\110\206\367\015\001\001\005\005\000\003  
\202\002\001\000\011\263\203\123\131\001\076\225\111\271\361\201  
\272\371\166\040\043\265\047\140\164\324\152\231\064\136\154\000  
\123\331\237\362\246\261\044\007\104\152\052\306\245\216\170\022  
\350\107\331\130\033\023\052\136\171\233\237\012\052\147\246\045  
\077\006\151\126\163\303\212\146\110\373\051\201\127\164\006\312  
\234\352\050\350\070\147\046\053\361\325\265\077\145\223\370\066  
\135\216\215\215\100\040\207\031\352\357\047\300\075\264\071\017  
\045\173\150\120\164\125\234\014\131\175\132\075\101\224\045\122  
\010\340\107\054\025\061\031\325\277\007\125\306\273\022\265\227  
\364\137\203\205\272\161\301\331\154\201\021\166\012\012\260\277  
\202\227\367\352\075\372\372\354\055\251\050\224\073\126\335\322  
\121\056\256\300\275\010\025\214\167\122\064\226\326\233\254\323  
\035\216\141\017\065\173\233\256\071\151\013\142\140\100\040\066  
\217\257\373\066\356\055\010\112\035\270\277\233\134\370\352\245  
\033\240\163\246\330\370\156\340\063\004\137\150\252\047\207\355

```
\331\301\220\234\355\275\343\152\065\257\143\337\253\030\331\272
\346\351\112\352\120\212\017\141\223\036\342\055\031\342\060\224
\065\222\135\016\266\007\257\031\200\217\107\220\121\113\056\115
\335\205\342\322\012\122\012\027\232\374\032\260\120\002\345\001
\243\143\067\041\114\104\304\233\121\231\021\016\163\234\006\217
\124\056\247\050\136\104\071\207\126\055\067\275\205\104\224\341
\014\113\054\234\303\222\205\064\141\313\017\270\233\112\103\122
\376\064\072\175\270\351\051\334\166\251\310\060\370\024\161\200
\306\036\066\110\164\042\101\134\207\202\350\030\161\213\101\211
\104\347\176\130\133\250\270\215\023\351\247\154\303\107\355\263
\032\235\142\256\215\202\352\224\236\335\131\020\303\255\335\342
\115\343\061\325\307\354\350\362\260\376\222\036\026\012\032\374
\331\363\370\047\266\311\276\035\264\154\144\220\177\364\344\304
\133\327\067\256\102\016\335\244\032\157\174\210\124\305\026\156
\341\172\150\056\370\072\277\015\244\074\211\073\170\247\116\143
\203\004\041\010\147\215\362\202\111\320\133\375\261\315\017\203
\204\324\076\040\205\367\112\075\053\234\375\052\012\011\115\352
\201\370\021\234
```

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRUST\_AFTER

CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRUST\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "ePKI Root Certification Authority"

# Issuer: OU=ePKI Root Certification Authority,O="Chunghwa Telecom Co., Ltd.",C=TW

# Serial Number: 15:c8:bd:65:47:5c:af:b8:97:00:5e:e4:06:d2:bc:9d

# Subject: OU=ePKI Root Certification Authority,O="Chunghwa Telecom Co., Ltd.",C=TW

# Not Valid Before: Mon Dec 20 02:31:27 2004

# Not Valid After : Wed Dec 20 02:31:27 2034

# Fingerprint (SHA-256):

C0:A6:F4:DC:63:A2:4B:FD:CF:54:EF:2A:6A:08:2A:0A:72:DE:35:80:3E:2F:F5:FF:52:7A:E5:D8:72:06:DF:D5

# Fingerprint (SHA1): 67:65:0D:F1:7E:8E:7E:5B:82:40:A4:F4:56:4B:CF:E2:3D:69:C6:F0

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "ePKI Root Certification Authority"

CKA\_CERT\_SHA1\_HASH MULTILINE\_OCTAL

```
\147\145\015\361\176\216\176\133\202\100\244\364\126\113\317\342
\075\151\306\360
```

END

CKA\_CERT\_MD5\_HASH MULTILINE\_OCTAL

```
\033\056\000\312\046\006\220\075\255\376\157\025\150\323\153\263
```

END

CKA\_ISSUER

MULTILINE\_OCTAL

\060\136\061\013\060\011\006\003\125\004\006\023\002\124\127\061  
\043\060\041\006\003\125\004\012\014\032\103\150\165\156\147\150  
\167\141\040\124\145\154\145\143\157\155\040\103\157\056\054\040  
\114\164\144\056\061\052\060\050\006\003\125\004\013\014\041\145  
\120\113\111\040\122\157\157\164\040\103\145\162\164\151\146\151  
\143\141\164\151\157\156\040\101\165\164\150\157\162\151\164\171  
END

CKA\_SERIAL\_NUMBER MULTILINE\_OCTAL

\002\020\025\310\275\145\107\134\257\270\227\000\136\344\006\322  
\274\235

END

CKA\_TRUST\_SERVER\_AUTH CK\_TRUST CKT\_NSS\_TRUSTED\_DELEGATOR

CKA\_TRUST\_EMAIL\_PROTECTION CK\_TRUST CKT\_NSS\_TRUSTED\_DELEGATOR

CKA\_TRUST\_CODE\_SIGNING CK\_TRUST CKT\_NSS\_MUST\_VERIFY\_TRUST

CKA\_TRUST\_STEP\_UP\_APPROVED CK\_BBOOL CK\_FALSE

#

# Certificate "certSIGN ROOT CA"

#

# Issuer: OU=certSIGN ROOT CA,O=certSIGN,C=RO

# Serial Number:20:06:05:16:70:02

# Subject: OU=certSIGN ROOT CA,O=certSIGN,C=RO

# Not Valid Before: Tue Jul 04 17:20:04

2006

# Not Valid After : Fri Jul 04 17:20:04 2031

# Fingerprint (SHA-256):

EA:A9:62:C4:FA:4A:6B:AF:EB:E4:15:19:6D:35:1C:CD:88:8D:4F:53:F3:FA:8A:E6:D7:C4:66:A9:4E:60:42:BB

# Fingerprint (SHA1): FA:B7:EE:36:97:26:62:FB:2D:B0:2A:F6:BF:03:FD:E8:7C:4B:2F:9B

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_CERTIFICATE

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "certSIGN ROOT CA"

CKA\_CERTIFICATE\_TYPE CK\_CERTIFICATE\_TYPE CKC\_X\_509

CKA\_SUBJECT MULTILINE\_OCTAL

\060\073\061\013\060\011\006\003\125\004\006\023\002\122\117\061  
\021\060\017\006\003\125\004\012\023\010\143\145\162\164\123\111  
\107\116\061\031\060\027\006\003\125\004\013\023\020\143\145\162  
\164\123\111\107\116\040\122\117\117\124\040\103\101  
END

CKA\_ID UTF8 "0"

CKA\_ISSUER MULTILINE\_OCTAL

\060\073\061\013\060\011\006\003\125\004\006\023\002\122\117\061  
\021\060\017\006\003\125\004\012\023\010\143\145\162\164\123\111  
\107\116\061\031\060\027\006\003\125\004\013\023\020\143\145\162  
\164\123\111\107\116\040\122\117\117\124\040\103\101  
END

CKA\_SERIAL\_NUMBER

MULTILINE\_OCTAL

\002\006\040\006\005\026\160\002

END

CKA\_VALUE MULTILINE\_OCTAL

\060\202\003\070\060\202\002\040\240\003\002\001\002\002\006\040  
\006\005\026\160\002\060\015\006\011\052\206\110\206\367\015\001  
\001\005\005\000\060\073\061\013\060\011\006\003\125\004\006\023  
\002\122\117\061\021\060\017\006\003\125\004\012\023\010\143\145  
\162\164\123\111\107\116\061\031\060\027\006\003\125\004\013\023  
\020\143\145\162\164\123\111\107\116\040\122\117\117\124\040\103  
\101\060\036\027\015\060\066\060\067\060\064\061\067\062\060\060  
\064\132\027\015\063\061\060\067\060\064\061\067\062\060\060\064  
\132\060\073\061\013\060\011\006\003\125\004\006\023\002\122\117  
\061\021\060\017\006\003\125\004\012\023\010\143\145\162\164\123  
\111\107\116\061\031\060\027\006\003\125\004\013\023\020\143\145  
\162\164\123\111\107\116\040\122\117\117\124\040\103\101\060\202  
\001\042\060\015\006\011\052\206\110\206\367\015\001\001\001\005  
\000\003\202\001\017\000\060\202\001\012\002\202\001\001\000\267  
\063\271\176\310\045\112\216\265\333\264\050\033\252\127\220\350  
\321\042\323\144\272\323\223\350\324\254\206\141\100\152\140\127  
\150\124\204\115\274\152\124\002\005\377\337\233\232\052\256\135  
\007\217\112\303\050\177\357\373\053\372\171\361\307\255\360\020  
\123\044\220\213\146\311\250\210\253\257\132\243\000\351\276\272  
\106\356\133\163\173\054\027\202\201\136\142\054\241\002\145\263  
\275\305\053\000\176\304\374\003\063\127\015\355\342\372\316\135  
\105\326\070\315\065\266\262\301\320\234\201\112\252\344\262\001  
\134\035\217\137\231\304\261\255\333\210\041\353\220\010\202\200  
\363\060\243\103\346\220\202\256\125\050\111\355\133\327\251\020  
\070\016\376\217\114\133\233\106\352\101\365\260\010\164\303\320  
\210\063\266\174\327\164\337\334\204\321\103\016\165\071\241\045  
\100\050\352\170\313\016\054\056\071\235\214\213\156\026\034\057  
\046\202\020\342\343\145\224\012\004\300\136\367\135\133\370\020  
\342\320\272\172\113\373\336\067\000\000\032\133\050\343\322\234  
\163\076\062\207\230\241\311\121\057\327\336\254\063\263\117\002  
\003\001\000\001\243\102\060\100\060\017\006\003\125\035\023\001  
\001\377\004\005\060\003\001\001\377\060\016\006\003\125\035\017  
\001\001\377\004\004\003\002\001\306\060\035\006\003\125\035\016  
\004\026\004\024\340\214\233\333\045\111\263\361\174\206\326\262  
\102\207\013\320\153\240\331\344\060\015\006\011\052\206\110\206  
\367\015\001\001\005\005\000\003\202\001\001\000\076\322\034\211  
\056\065\374\370\165\335\346\177\145\210\364\162\114\311\054\327  
\062\116\363\335\031\171\107\275\216\073\133\223\017\120\111\044  
\023\153\024\006\162\357\011\323\241\241\343\100\204\311\347\030  
\062\164\074\110\156\017\237\113\324\367\036\323\223\206\144\124  
\227\143\162\120\325\125\317\372\040\223\002\242\233\303\043\223  
\116\026\125\166\240\160\171\155\315\041\037\317\057\055\274\031  
\343\210\061\370\131\032\201\011\310\227\246\164\307\140\304\133

```
\314\127\216\262\165\375\033\002\011\333\131\157\162\223\151\367
\061\101\326\210\070\277\207\262\275\026\171\371\252\344\276\210
\045\335\141\047\043\034\265\061\007\004\066\264\032\220\275\240
\164\161\120\211\155\274\024\343\017\206\256\361\253\076\307\240
\011\314\243\110\321\340\333\144\347\222\265\317\257\162\103\160
\213\371\303\204\074\023\252\176\222\233\127\123\223\372\160\302
\221\016\061\371\233\147\135\351\226\070\136\137\263\163\116\210
\025\147\336\236\166\020\142\040\276\125\151\225\103\000\071\115
\366\356\260\132\116\111\104\124\130\137\102\203
```

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRUST\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRUST\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "certSIGN ROOT CA"

# Issuer: OU=certSIGN ROOT CA,O=certSIGN,C=RO

# Serial Number:20:06:05:16:70:02

# Subject: OU=certSIGN ROOT CA,O=certSIGN,C=RO

# Not Valid Before: Tue Jul 04 17:20:04 2006

# Not Valid After : Fri Jul 04 17:20:04 2031

# Fingerprint (SHA-256):

EA:A9:62:C4:FA:4A:6B:AF:EB:E4:15:19:6D:35:1C:CD:88:8D:4F:53:F3:FA:8A:E6:D7:C4:66:A9:4E:60:42:BB

#

Fingerprint (SHA1): FA:B7:EE:36:97:26:62:FB:2D:B0:2A:F6:BF:03:FD:E8:7C:4B:2F:9B

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "certSIGN ROOT CA"

CKA\_CERT\_SHA1\_HASH MULTILINE\_OCTAL

```
\372\267\356\066\227\046\142\373\055\260\052\366\277\003\375\350
\174\113\057\233
```

END

CKA\_CERT\_MD5\_HASH MULTILINE\_OCTAL

```
\030\230\300\326\351\072\374\371\260\365\014\367\113\001\104\027
```

END

CKA\_ISSUER MULTILINE\_OCTAL

```
\060\073\061\013\060\011\006\003\125\004\006\023\002\122\117\061
\021\060\017\006\003\125\004\012\023\010\143\145\162\164\123\111
\107\116\061\031\060\027\006\003\125\004\013\023\020\143\145\162
\164\123\111\107\116\040\122\117\117\124\040\103\101
```

END

CKA\_SERIAL\_NUMBER MULTILINE\_OCTAL

```
\002\006\040\006\005\026\160\002
```

END

CKA\_TRUST\_SERVER\_AUTH CK\_TRUST CKT\_NSS\_TRUSTED\_DELEGATOR

CKA\_TRUST\_EMAIL\_PROTECTION CK\_TRUST CKT\_NSS\_TRUSTED\_DELEGATOR



CKA\_TRUST\_CODE\_SIGNING CK\_TRUST CKT\_NSS\_MUST\_VERIFY\_TRUST  
CKA\_TRUST\_STEP\_UP\_APPROVED  
CK\_BBOOL CK\_FALSE

#

# Certificate "NetLock Arany (Class Gold) Ftanúsítvány"

#

# Issuer: CN=NetLock Arany (Class Gold) F..tan..s..tv..ny,OU=Tan..s..tv..nykiad..k (Certification Services),O=NetLock Kft.,L=Budapest,C=HU

# Serial Number:49:41:2c:e4:00:10

# Subject: CN=NetLock Arany (Class Gold) F..tan..s..tv..ny,OU=Tan..s..tv..nykiad..k (Certification Services),O=NetLock Kft.,L=Budapest,C=HU

# Not Valid Before: Thu Dec 11 15:08:21 2008

# Not Valid After : Wed Dec 06 15:08:21 2028

# Fingerprint (SHA-256):

6C:61:DA:C3:A2:DE:F0:31:50:6B:E0:36:D2:A6:FE:40:19:94:FB:D1:3D:F9:C8:D4:66:59:92:74:C4:46:EC:98

# Fingerprint (SHA1): 06:08:3F:59:3F:15:A1:04:A0:69:A4:6B:A9:03:D0:06:B7:97:09:91

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_CERTIFICATE

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "NetLock Arany (Class Gold) Ftanúsítvány"

CKA\_CERTIFICATE\_TYPE CK\_CERTIFICATE\_TYPE CKC\_X\_509

CKA\_SUBJECT MULTILINE\_OCTAL

\060\201\247\061\013\060\011\006\003\125\004\006\023\002\110\125  
\061\021\060\017\006\003\125\004\007\014\010\102\165\144\141\160  
\145\163\164\061\025\060\023\006\003\125\004\012\014\014\116\145  
\164\114\157\143\153\040\113\146\164\056\061\067\060\065\006\003  
\125\004\013\014\056\124\141\156\303\272\163\303\255\164\166\303  
\241\156\171\153\151\141\144\303\263\153\040\050\103\145\162\164  
\151\146\151\143\141\164\151\157\156\040\123\145\162\166\151\143  
\145\163\051\061\065\060\063\006\003\125\004\003\014\054\116\145  
\164\114\157\143\153\040\101\162\141\156\171\040\050\103\154\141  
\163\163\040\107\157\154\144\051\040\106\305\221\164\141\156\303  
\272\163\303\255\164\166\303\241\156\171

END

CKA\_ID

UTF8 "0"

CKA\_ISSUER MULTILINE\_OCTAL

\060\201\247\061\013\060\011\006\003\125\004\006\023\002\110\125  
\061\021\060\017\006\003\125\004\007\014\010\102\165\144\141\160  
\145\163\164\061\025\060\023\006\003\125\004\012\014\014\116\145  
\164\114\157\143\153\040\113\146\164\056\061\067\060\065\006\003  
\125\004\013\014\056\124\141\156\303\272\163\303\255\164\166\303  
\241\156\171\153\151\141\144\303\263\153\040\050\103\145\162\164  
\151\146\151\143\141\164\151\157\156\040\123\145\162\166\151\143  
\145\163\051\061\065\060\063\006\003\125\004\003\014\054\116\145  
\164\114\157\143\153\040\101\162\141\156\171\040\050\103\154\141

\163\163\040\107\157\154\144\051\040\106\305\221\164\141\156\303  
\272\163\303\255\164\166\303\241\156\171  
END  
CKA\_SERIAL\_NUMBER  
MULTILINE\_OCTAL  
\002\006\111\101\054\344\000\020  
END  
CKA\_VALUE MULTILINE\_OCTAL  
\060\202\004\025\060\202\002\375\240\003\002\001\002\002\006\111  
\101\054\344\000\020\060\015\006\011\052\206\110\206\367\015\001  
\001\013\005\000\060\201\247\061\013\060\011\006\003\125\004\006  
\023\002\110\125\061\021\060\017\006\003\125\004\007\014\010\102  
\165\144\141\160\145\163\164\061\025\060\023\006\003\125\004\012  
\014\014\116\145\164\114\157\143\153\040\113\146\164\056\061\067  
\060\065\006\003\125\004\013\014\056\124\141\156\303\272\163\303  
\255\164\166\303\241\156\171\153\151\141\144\303\263\153\040\050  
\103\145\162\164\151\146\151\143\141\164\151\157\156\040\123\145  
\162\166\151\143\145\163\051\061\065\060\063\006\003\125\004\003  
\014\054\116\145\164\114\157\143\153\040\101\162\141\156\171\040  
\050\103\154\141\163\163\040\107\157\154\144\051\040\106\305\221  
\164\141\156\303\272\163\303\255\164\166\303\241\156\171\060\036  
\027\015\060\070\061\062\061\061\061\065\060\070\062\061\132\027  
\015\062\070\061\062\060\066\061\065\060\070\062\061\132\060\201  
\247\061\013\060\011\006\003\125\004\006\023\002\110\125\061\021  
\060\017\006\003\125\004\007\014\010\102\165\144\141\160\145\163  
\164\061\025\060\023\006\003\125\004\012\014\014\116\145\164\114  
\157\143\153\040\113\146\164\056\061\067\060\065\006\003\125\004  
\013\014\056\124\141\156\303\272\163\303\255\164\166\303\241\156  
\171\153\151\141\144\303\263\153\040\050\103\145\162\164\151\146  
\151\143\141\164\151\157\156\040\123\145\162\166\151\143\145\163  
\051\061\065\060\063\006\003\125\004\003\014\054\116\145\164\114  
\157\143\153\040\101\162\141\156\171\040\050\103\154\141\163\163  
\040\107\157\154\144\051\040\106\305\221\164\141\156\303\272\163  
\303\255\164\166\303\241\156\171\060\202\001\042\060\015\006\011  
\052\206\110\206\367\015\001\001\001\005\000\003\202\001\017\000  
\060\202\001\012\002\202\001\001\000\304\044\136\163\276\113\155  
\024\303\241\364\343\227\220\156\322\060\105\036\074\356\147\331  
\144\340\032\212\177\312\060\312\203\343\040\301\343\364\072\323  
\224\137\032\174\133\155\277\060\117\204\047\366\237\037\111\274  
\306\231\012\220\362\017\365\177\103\204\067\143\121\213\172\245  
\160\374\172\130\315\216\233\355\303\106\154\204\160\135\332\363  
\001\220\043\374\116\060\251\176\341\047\143\347\355\144\074\240  
\270\311\063\143\376\026\220\377\260\270\375\327\250\300\300\224  
\103\013\266\325\131\246\236\126\320\044\037\160\171\257\333\071  
\124\015\145\165\331\025\101\224\001\257\136\354\366\215\361\377  
\255\144\376\040\232\327\134\353\376\246\037\010\144\243\213\166  
\125\255\036\073\050\140\056\207\045\350\252\257\037\306\144\106  
\040\267\160\177\074\336\110\333\226\123\267\071\167\344\032\342

\307\026\204\166\227\133\057\273\031\025\205\370\151\205\365\231  
\247\251\362\064\247\251\266\246\003\374\157\206\075\124\174\166  
\004\233\153\371\100\135\000\064\307\056\231\165\235\345\210\003  
\252\115\370\003\322\102\166\300\033\002\003\000\250\213\243\105  
\060\103\060\022\006\003\125\035\023\001\001\377\004\010\060\006  
\001\001\377\002\001\004\060\016\006\003\125\035\017\001\001\377  
\004\004\003\002\001\006\060\035\006\003\125\035\016\004\026\004  
\024\314\372\147\223\360\266\270\320\245\300\036\363\123\375\214  
\123\337\203\327\226\060\015\006\011\052\206\110\206\367\015\001  
\001\013\005\000\003\202\001\001\000\253\177\356\034\026\251\234  
\074\121\000\240\300\021\010\005\247\231\346\157\001\210\124\141  
\156\361\271\030\255\112\255\376\201\100\043\224\057\373\165\174  
\057\050\113\142\044\201\202\013\365\141\361\034\156\270\141\070  
\353\201\372\142\241\073\132\142\323\224\145\304\341\346\155\202  
\370\057\045\160\262\041\046\301\162\121\037\214\054\303\204\220  
\303\132\217\272\317\364\247\145\245\353\230\321\373\005\262\106  
\165\025\043\152\157\205\143\060\200\360\325\236\037\051\034\302  
\154\260\120\131\135\220\133\073\250\015\060\317\277\175\177\316  
\361\235\203\275\311\106\156\040\246\371\141\121\272\041\057\173  
\276\245\025\143\241\324\225\207\361\236\271\363\211\363\075\205  
\270\270\333\276\265\271\051\371\332\067\005\000\111\224\003\204  
\104\347\277\103\061\317\165\213\045\321\364\246\144\365\222\366  
\253\005\353\075\351\245\013\066\142\332\314\006\137\066\213\266  
\136\061\270\052\373\136\366\161\337\104\046\236\304\346\015\221  
\264\056\165\225\200\121\152\113\060\246\260\142\241\223\361\233  
\330\316\304\143\165\077\131\107\261

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "NetLock Arany (Class Gold) Ftanúsítvány"

# Issuer:

CN=NetLock Arany (Class Gold) F.tan..s..tv..ny,OU=Tan..s..tv..nykiad..k (Certification Services),O=NetLock Kft.,L=Budapest,C=HU

# Serial Number:49:41:2c:e4:00:10

# Subject: CN=NetLock Arany (Class Gold) F.tan..s..tv..ny,OU=Tan..s..tv..nykiad..k (Certification Services),O=NetLock Kft.,L=Budapest,C=HU

# Not Valid Before: Thu Dec 11 15:08:21 2008

# Not Valid After : Wed Dec 06 15:08:21 2028

# Fingerprint (SHA-256):

6C:61:DA:C3:A2:DE:F0:31:50:6B:E0:36:D2:A6:FE:40:19:94:FB:D1:3D:F9:C8:D4:66:59:92:74:C4:46:EC:98

# Fingerprint (SHA1): 06:08:3F:59:3F:15:A1:04:A0:69:A4:6B:A9:03:D0:06:B7:97:09:91

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

```

CKA_LABEL UTF8 "NetLock Arany (Class Gold) Ftanúsítvány"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\006\010\077\131\077\025\241\004\240\151\244\153\251\003\320\006
\267\227\011\221
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\305\241\267\377\163\335\326\327\064\062\030\337\374\074\255\210
END
CKA_ISSUER
MULTILINE_OCTAL
\060\201\247\061\013\060\011\006\003\125\004\006\023\002\110\125
\061\021\060\017\006\003\125\004\007\014\010\102\165\144\141\160
\145\163\164\061\025\060\023\006\003\125\004\012\014\014\116\145
\164\114\157\143\153\040\113\146\164\056\061\067\060\065\006\003
\125\004\013\014\056\124\141\156\303\272\163\303\255\164\166\303
\241\156\171\153\151\141\144\303\263\153\040\050\103\145\162\164
\151\146\151\143\141\164\151\157\156\040\123\145\162\166\151\143
\145\163\051\061\065\060\063\006\003\125\004\003\014\054\116\145
\164\114\157\143\153\040\101\162\141\156\171\040\050\103\154\141
\163\163\040\107\157\154\144\051\040\106\305\221\164\141\156\303
\272\163\303\255\164\166\303\241\156\171
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\006\111\101\054\344\000\020
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED
CK_BBOOL CK_FALSE

#
# Certificate "Hongkong Post Root CA 1"
#
# Issuer: CN=Hongkong Post Root CA 1,O=Hongkong Post,C=HK
# Serial Number: 1000 (0x3e8)
# Subject: CN=Hongkong Post Root CA 1,O=Hongkong Post,C=HK
# Not Valid Before: Thu May 15 05:13:14 2003
# Not Valid After : Mon May 15 04:52:29 2023
# Fingerprint (SHA-256):
F9:E6:7D:33:6C:51:00:2A:C0:54:C6:32:02:2D:66:DD:A2:E7:E3:FF:F1:0A:D0:61:ED:31:D8:BB:B4:10:CF:B2
# Fingerprint (SHA1): D6:DA:A8:20:8D:09:D2:15:4D:24:B5:2F:CB:34:6E:B2:58:B2:8A:58
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Hongkong Post Root CA 1"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509

```

CKA\_SUBJECT MULTILINE\_OCTAL

\060\107\061\013\060\011\006\003\125\004\006\023\002\110\113\061  
\026\060\024\006\003\125\004\012\023\015\110\157\156\147\153\157  
\156\147\040\120\157\163\164\061\040\060\036\006\003\125\004\003  
\023\027\110\157\156\147\153\157\156\147\040\120\157\163\164\040  
\122\157\157\164\040\103\101\040\061

END

CKA\_ID

UTF8 "0"

CKA\_ISSUER MULTILINE\_OCTAL

\060\107\061\013\060\011\006\003\125\004\006\023\002\110\113\061  
\026\060\024\006\003\125\004\012\023\015\110\157\156\147\153\157  
\156\147\040\120\157\163\164\061\040\060\036\006\003\125\004\003  
\023\027\110\157\156\147\153\157\156\147\040\120\157\163\164\040  
\122\157\157\164\040\103\101\040\061

END

CKA\_SERIAL\_NUMBER MULTILINE\_OCTAL

\002\002\003\350

END

CKA\_VALUE MULTILINE\_OCTAL

\060\202\003\060\060\202\002\030\240\003\002\001\002\002\002\003  
\350\060\015\006\011\052\206\110\206\367\015\001\001\005\005\000  
\060\107\061\013\060\011\006\003\125\004\006\023\002\110\113\061  
\026\060\024\006\003\125\004\012\023\015\110\157\156\147\153\157  
\156\147\040\120\157\163\164\061\040\060\036\006\003\125\004\003  
\023\027\110\157\156\147\153\157\156\147\040\120\157\163\164\040  
\122\157\157\164\040\103\101\040\061\060\036\027\015\060\063\060  
\065\061\065\060\065\061\063\061\064\132\027\015\062\063\060\065  
\061\065\060\064\065\062\062\071\132\060\107\061\013\060\011\006  
\003\125\004\006\023\002\110\113\061\026\060\024\006\003\125\004  
\012\023\015\110\157\156\147\153\157\156\147\040\120\157\163\164  
\061\040\060\036\006\003\125\004\003\023\027\110\157\156\147\153  
\157\156\147\040\120\157\163\164\040\122\157\157\164\040\103\101  
\040\061\060\202\001\042\060\015\006\011\052\206\110\206\367\015  
\001\001\001\005\000\003\202\001\017\000\060\202\001\012\002\202  
\001\001\000\254\377\070\266\351\146\002\111\343\242\264\341\220  
\371\100\217\171\371\342\275\171\376\002\275\356\044\222\035\042  
\366\332\205\162\151\376\327\077\011\324\335\221\265\002\234\320  
\215\132\341\125\303\120\206\271\051\046\302\343\331\240\361\151  
\003\050\040\200\105\042\055\126\247\073\124\225\126\042\131\037  
\050\337\037\040\075\155\242\066\276\043\240\261\156\265\261\047  
\077\071\123\011\352\253\152\350\164\262\302\145\134\216\277\174  
\303\170\204\315\236\026\374\365\056\117\040\052\010\237\167\363  
\305\036\304\232\122\146\036\110\136\343\020\006\217\042\230\341  
\145\216\033\135\043\146\073\270\245\062\121\310\206\252\241\251  
\236\177\166\224\302\246\154\267\101\360\325\310\006\070\346\324  
\014\342\363\073\114\155\120\214\304\203\047\301\023\204\131\075  
\236\165\164\266\330\002\136\072\220\172\300\102\066\162\354\152

```
\115\334\357\304\000\337\023\030\127\137\046\170\310\326\012\171
\167\277\367\257\267\166\271\245\013\204\027\135\020\352\157\341
\253\225\021\137\155\074\243\134\115\203\133\362\263\031\212\200
\213\013\207\002\003\001\000\001\243\046\060\044\060\022\006\003
\125\035\023\001\001\377\004\010\060\006\001\001\377\002\001\003
\060\016\006\003\125\035\017\001\001\377\004\004\003\002\001\306
\060\015\006\011\052\206\110\206\367\015\001\001\005\005\000\003
\202\001\001\000\016\106\325\074\256\342\207\331\136\201\213\002
\230\101\010\214\114\274\332\333\356\047\033\202\347\152\105\354
\026\213\117\205\240\363\262\160\275\132\226\272\312\156\155\356
\106\213\156\347\052\056\226\263\031\063\353\264\237\250\262\067
\356\230\250\227\266\056\266\147\047\324\246\111\375\034\223\145
\166\236\102\057\334\042\154\232\117\362\132\025\071\261\161\327
\053\121\350\155\034\230\300\331\052\364\241\202\173\325\311\101
\242\043\001\164\070\125\213\017\271\056\147\242\040\004\067\332
\234\013\323\027\041\340\217\227\171\064\157\204\110\002\040\063
\033\346\064\104\237\221\160\364\200\136\204\103\302\051\322\154
\022\024\344\141\215\254\020\220\236\204\120\273\360\226\157\105
\237\212\363\312\154\117\372\021\072\025\025\106\303\315\037\203
\133\055\101\022\355\120\147\101\023\075\041\253\224\212\252\116
\174\301\261\373\247\326\265\047\057\227\253\156\340\035\342\321
\034\054\037\104\342\374\276\221\241\234\373\326\051\123\163\206
\237\123\330\103\016\135\326\143\202\161\035\200\164\312\366\342
\002\153\331\132
```

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "Hongkong Post Root CA

1"

# Issuer: CN=Hongkong Post Root CA 1,O=Hongkong Post,C=HK

# Serial Number: 1000 (0x3e8)

# Subject: CN=Hongkong Post Root CA 1,O=Hongkong Post,C=HK

# Not Valid Before: Thu May 15 05:13:14 2003

# Not Valid After : Mon May 15 04:52:29 2023

# Fingerprint (SHA-256):

F9:E6:7D:33:6C:51:00:2A:C0:54:C6:32:02:2D:66:DD:A2:E7:E3:FF:F1:0A:D0:61:ED:31:D8:BB:B4:10:CF:B2

# Fingerprint (SHA1): D6:DA:A8:20:8D:09:D2:15:4D:24:B5:2F:CB:34:6E:B2:58:B2:8A:58

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "Hongkong Post Root CA 1"

CKA\_CERT\_SHA1\_HASH MULTILINE\_OCTAL

```
\326\332\250\040\215\011\322\025\115\044\265\057\313\064\156\262
```

```
\130\262\212\130
```

```

END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\250\015\157\071\170\271\103\155\167\102\155\230\132\314\043\312
END
CKA_ISSUER MULTILINE_OCTAL
\060\107\061\013\060\011\006\003\125\004\006\023\002\110\113\061
\026\060\024\006\003\125\004\012\023\015\110\157\156\147\153\157
\156\147\040\120\157\163\164\061\040\060\036\006\003\125\004\003
\023\027\110\157\156\147\153\157\156\147\040\120\157\163\164\040
\122\157\157\164\040\103\101\040\061
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\002\003\350
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "SecureSign RootCA11"
#
# Issuer: CN=SecureSign RootCA11,O="Japan Certification Services, Inc.",C=JP
# Serial Number: 1 (0x1)
# Subject: CN=SecureSign RootCA11,O="Japan Certification Services, Inc.",C=JP
# Not Valid Before: Wed Apr 08 04:56:47 2009
# Not Valid After : Sun Apr 08 04:56:47 2029
# Fingerprint (SHA-256):
BF:0F:EE:FB:9E:3A:58:1A:D5:F9:E9:DB:75:89:98:57:43:D2:61:08:5C:4D:31:4F:6F:5D:72:59:AA:42:16:12
# Fingerprint (SHA1): 3B:C4:9F:48:F8:F3:73:A0:9C:1E:BD:F8:5B:B1:C3:65:C7:D8:11:B3
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN
CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "SecureSign RootCA11"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\130\061\013\060\011\006\003\125\004\006\023\002\112\120\061
\053\060\051\006\003\125\004\012\023\042\112\141\160\141\156\040
\103\145\162\164\151\146\151\143\141\164\151\157\156\040\123\145
\162\166\151\143\145\163\054\040\111\156\143\056\061\034\060\032
\006\003\125\004\003\023\023\123\145\143\165\162\145\123\151\147
\156\040\122\157\157\164\103\101\061\061
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL

```

\060\130\061\013\060\011\006\003\125\004\006\023\002\112\120\061  
\053\060\051\006\003\125\004\012\023\042\112\141\160\141\156\040  
\103\145\162\164\151\146\151\143\141\164\151\157\156\040\123\145  
\162\166\151\143\145\163\054\040\111\156\143\056\061\034\060\032  
\006\003\125\004\003\023\023\123\145\143\165\162\145\123\151\147  
\156\040\122\157\157\164\103\101\061\061

END

CKA\_SERIAL\_NUMBER

MULTILINE\_OCTAL

\002\001\001

END

CKA\_VALUE MULTILINE\_OCTAL

\060\202\003\155\060\202\002\125\240\003\002\001\002\002\001\001  
\060\015\006\011\052\206\110\206\367\015\001\001\005\005\000\060  
\130\061\013\060\011\006\003\125\004\006\023\002\112\120\061\053  
\060\051\006\003\125\004\012\023\042\112\141\160\141\156\040\103  
\145\162\164\151\146\151\143\141\164\151\157\156\040\123\145\162  
\166\151\143\145\163\054\040\111\156\143\056\061\034\060\032\006  
\003\125\004\003\023\023\123\145\143\165\162\145\123\151\147\156  
\040\122\157\157\164\103\101\061\061\060\036\027\015\060\071\060  
\064\060\070\060\064\065\066\064\067\132\027\015\062\071\060\064  
\060\070\060\064\065\066\064\067\132\060\130\061\013\060\011\006  
\003\125\004\006\023\002\112\120\061\053\060\051\006\003\125\004  
\012\023\042\112\141\160\141\156\040\103\145\162\164\151\146\151  
\143\141\164\151\157\156\040\123\145\162\166\151\143\145\163\054  
\040\111\156\143\056\061\034\060\032\006\003\125\004\003\023\023  
\123\145\143\165\162\145\123\151\147\156\040\122\157\157\164\103  
\101\061\061\060\202\001\042\060\015\006\011\052\206\110\206\367  
\015\001\001\001\005\000\003\202\001\017\000\060\202\001\012\002  
\202\001\001\000\375\167\252\245\034\220\005\073\313\114\233\063  
\213\132\024\105\244\347\220\026\321\337\127\322\041\020\244\027  
\375\337\254\326\037\247\344\333\174\367\354\337\270\003\332\224  
\130\375\135\162\174\214\077\137\001\147\164\025\226\343\002\074  
\207\333\256\313\001\216\302\363\146\306\205\105\364\002\306\072  
\265\142\262\257\372\234\277\244\346\324\200\060\230\363\015\266  
\223\217\251\324\330\066\362\260\374\212\312\054\241\025\063\225  
\061\332\300\033\362\356\142\231\206\143\077\277\335\223\052\203  
\250\166\271\023\037\267\316\116\102\205\217\042\347\056\032\362  
\225\011\262\005\265\104\116\167\241\040\275\251\362\116\012\175  
\120\255\365\005\015\105\117\106\161\375\050\076\123\373\004\330  
\055\327\145\035\112\033\372\317\073\260\061\232\065\156\310\213  
\006\323\000\221\362\224\010\145\114\261\064\006\000\172\211\342  
\360\307\003\131\317\325\326\350\247\062\263\346\230\100\206\305  
\315\047\022\213\314\173\316\267\021\074\142\140\007\043\076\053  
\100\156\224\200\011\155\266\263\157\167\157\065\010\120\373\002  
\207\305\076\211\002\003\001\000\001\243\102\060\100\060\035\006  
\003\125\035\016\004\026\004\024\133\370\115\117\262\245\206\324  
\072\322\361\143\232\240\276\011\366\127\267\336\060\016\006\003



```
\125\035\017\001\001\377\004\004\003\002\001\006\060\017\006\003
\125\035\023\001\001\377\004\005\060\003\001\001\377\060\015\006
\011\052\206\110\206\367\015\001\001\005\005\000\003\202\001\001
\000\240\241\070\026\146\056\247\126\037\041\234\006\372\035\355
\271\042\305\070\046\330\116\117\354\243\177\171\336\106\041\241
\207\167\217\007\010\232\262\244\305\257\017\062\230\013\174\146
\051\266\233\175\045\122\111\103\253\114\056\053\156\172\160\257
\026\016\343\002\154\373\102\346\030\235\105\330\125\310\350\073
\335\347\341\364\056\013\034\064\134\154\130\112\373\214\210\120
\137\225\034\277\355\253\042\265\145\263\205\272\236\017\270\255
\345\172\033\212\120\072\035\275\015\274\173\124\120\013\271\102
\257\125\240\030\201\255\145\231\357\276\344\234\277\304\205\253
\101\262\124\157\334\045\315\355\170\342\216\014\215\011\111\335
\143\173\132\151\226\002\041\250\275\122\131\351\175\065\313\310
\122\312\177\201\376\331\153\323\367\021\355\045\337\370\347\371
\244\372\162\227\204\123\015\245\320\062\030\121\166\131\024\154
\017\353\354\137\200\214\165\103\203\303\205\230\377\114\236\055
\015\344\167\203\223\116\265\226\007\213\050\023\233\214\031\215
\101\047\111\100\356\336\346\043\104\071\334\241\042\326\272\003
\362
```

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "SecureSign RootCA11"

# Issuer: CN=SecureSign RootCA11,O="Japan Certification Services, Inc.",C=JP

# Serial Number: 1 (0x1)

# Subject: CN=SecureSign RootCA11,O="Japan Certification Services, Inc.",C=JP

#

Not Valid Before: Wed Apr 08 04:56:47 2009

# Not Valid After : Sun Apr 08 04:56:47 2029

# Fingerprint (SHA-256):

BF:0F:EE:FB:9E:3A:58:1A:D5:F9:E9:DB:75:89:98:57:43:D2:61:08:5C:4D:31:4F:6F:5D:72:59:AA:42:16:12

# Fingerprint (SHA1): 3B:C4:9F:48:F8:F3:73:A0:9C:1E:BD:F8:5B:B1:C3:65:C7:D8:11:B3

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "SecureSign RootCA11"

CKA\_CERT\_SHA1\_HASH MULTILINE\_OCTAL

```
\073\304\237\110\370\363\163\240\234\036\275\370\133\261\303\145
```

```
\307\330\021\263
```

END

CKA\_CERT\_MD5\_HASH MULTILINE\_OCTAL

```
\267\122\164\342\222\264\200\223\362\165\344\314\327\362\352\046
```

END

```

CKA_ISSUER MULTILINE_OCTAL
\060\130\061\013\060\011\006\003\125\004\006\023\002\112\120\061
\053\060\051\006\003\125\004\012\023\042\112\141\160\141\156\040
\103\145\162\164\151\146\151\143\141\164\151\157\156\040\123\145
\162\166\151\143\145\163\054\040\111\156\143\056\061\034\060\032
\006\003\125\004\003\023\023\123\145\143\165\162\145\123\151\147
\156\040\122\157\157\164\103\101\061\061
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\001\001
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "Microsec e-Szigno Root CA 2009"
#
# Issuer: E=info@e-szigno.hu,CN=Microsec e-Szigno Root CA 2009,O=Microsec Ltd.,L=Budapest,C=HU
# Serial Number:00:c2:7e:43:04:4e:47:3f:19
# Subject: E=info@e-szigno.hu,CN=Microsec e-Szigno Root CA 2009,O=Microsec Ltd.,L=Budapest,C=HU
# Not Valid Before: Tue Jun 16 11:30:18 2009
# Not Valid After : Sun Dec 30 11:30:18 2029
# Fingerprint (SHA-256):
3C:5F:81:FE:A5:FA:B8:2C:64:BF:A2:EA:EC:AF:CD:E8:E0:77:FC:86:20:A7:CA:E5:37:16:3D:F3:6E:DB:F3:78
# Fingerprint (SHA1): 89:DF:74:FE:5C:F4:0F:4A:80:F9:E3:37:7D:54:DA:91:E1:01:31:8E
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE
CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Microsec e-Szigno Root CA 2009"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\201\202\061\013\060\011\006\003\125\004\006\023\002\110\125
\061\021\060\017\006\003\125\004\007\014\010\102\165\144\141\160
\145\163\164\061\026\060\024\006\003\125\004\012\014\015\115\151
\143\162\157\163\145\143\040\114\164\144\056\061\047\060\045\006
\003\125\004\003\014\036\115\151\143\162\157\163\145\143\040\145
\055\123\172\151\147\156\157\040\122\157\157\164\040\103\101\040
\062\060\060\071\061\037\060\035\006\011\052\206\110\206\367\015
\001\011\001\026\020\151\156\146\157\100\145\055\163\172\151\147
\156\157\056\150\165
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL

```

\060\201\202\061\013\060\011\006\003\125\004\006\023\002\110\125  
\061\021\060\017\006\003\125\004\007\014\010\102\165\144\141\160  
\145\163\164\061\026\060\024\006\003\125\004\012\014\015\115\151  
\143\162\157\163\145\143\040\114\164\144\056\061\047\060\045\006  
\003\125\004\003\014\036\115\151\143\162\157\163\145\143\040\145  
\055\123\172\151\147\156\157\040\122\157\157\164\040\103\101\040  
\062\060\060\071\061\037\060\035\006\011\052\206\110\206\367\015  
\001\011\001\026\020\151\156\146\157\100\145\055\163\172\151\147  
\156\157\056\150\165

END

CKA\_SERIAL\_NUMBER

MULTILINE\_OCTAL

\002\011\000\302\176\103\004\116\107\077\031

END

CKA\_VALUE MULTILINE\_OCTAL

\060\202\004\012\060\202\002\362\240\003\002\001\002\002\011\000  
\302\176\103\004\116\107\077\031\060\015\006\011\052\206\110\206  
\367\015\001\001\013\005\000\060\201\202\061\013\060\011\006\003  
\125\004\006\023\002\110\125\061\021\060\017\006\003\125\004\007  
\014\010\102\165\144\141\160\145\163\164\061\026\060\024\006\003  
\125\004\012\014\015\115\151\143\162\157\163\145\143\040\114\164  
\144\056\061\047\060\045\006\003\125\004\003\014\036\115\151\143  
\162\157\163\145\143\040\145\055\123\172\151\147\156\157\040\122  
\157\157\164\040\103\101\040\062\060\060\071\061\037\060\035\006  
\011\052\206\110\206\367\015\001\011\001\026\020\151\156\146\157  
\100\145\055\163\172\151\147\156\157\056\150\165\060\036\027\015  
\060\071\060\066\061\066\061\061\063\060\061\070\132\027\015\062  
\071\061\062\063\060\061\061\063\060\061\070\132\060\201\202\061  
\013\060\011\006\003\125\004\006\023\002\110\125\061\021\060\017  
\006\003\125\004\007\014\010\102\165\144\141\160\145\163\164\061  
\026\060\024\006\003\125\004\012\014\015\115\151\143\162\157\163  
\145\143\040\114\164\144\056\061\047\060\045\006\003\125\004\003  
\014\036\115\151\143\162\157\163\145\143\040\145\055\123\172\151  
\147\156\157\040\122\157\157\164\040\103\101\040\062\060\060\071  
\061\037\060\035\006\011\052\206\110\206\367\015\001\011\001\026  
\020\151\156\146\157\100\145\055\163\172\151\147\156\157\056\150  
\165\060\202\001\042\060\015\006\011\052\206\110\206\367\015\001  
\001\001\005\000\003\202\001\017\000\060\202\001\012\002\202\001  
\001\000\351\370\217\363\143\255\332\206\330\247\340\102\373\317  
\221\336\246\046\370\231\245\143\160\255\233\256\312\063\100\175  
\155\226\156\241\016\104\356\341\023\235\224\102\122\232\275\165  
\205\164\054\250\016\035\223\266\030\267\214\054\250\317\373\134  
\161\271\332\354\376\350\176\217\344\057\035\262\250\165\207\330  
\267\241\345\073\317\231\112\106\320\203\031\175\300\241\022\034  
\225\155\112\364\330\307\245\115\063\056\205\071\100\165\176\024  
\174\200\022\230\120\307\101\147\270\240\200\141\124\246\154\116  
\037\340\235\016\007\351\311\272\063\347\376\300\125\050\054\002  
\200\247\031\365\236\334\125\123\003\227\173\007\110\377\231\373

\067\212\044\304\131\314\120\020\143\216\252\251\032\260\204\032  
\206\371\137\273\261\120\156\244\321\012\314\325\161\176\037\247  
\033\174\365\123\156\042\137\313\053\346\324\174\135\256\326\302  
\306\114\345\005\001\331\355\127\374\301\043\171\374\372\310\044  
\203\225\363\265\152\121\001\320\167\326\351\022\241\371\032\203  
\373\202\033\271\260\227\364\166\006\063\103\111\240\377\013\265  
\372\265\002\003\001\000\001\243\201\200\060\176\060\017\006\003  
\125\035\023\001\001\377\004\005\060\003\001\001\377\060\016\006  
\003\125\035\017\001\001\377\004\004\003\002\001\006\060\035\006  
\003\125\035\016\004\026\004\024\313\017\306\337\102\103\314\075  
\313\265\110\043\241\032\172\246\052\273\064\150\060\037\006\003  
\125\035\043\004\030\060\026\200\024\313\017\306\337\102\103\314  
\075\313\265\110\043\241\032\172\246\052\273\064\150\060\033\006  
\003\125\035\021\004\024\060\022\201\020\151\156\146\157\100\145  
\055\163\172\151\147\156\157\056\150\165\060\015\006\011\052\206  
\110\206\367\015\001\001\013\005\000\003\202\001\001\000\311\321  
\016\136\056\325\314\263\174\076\313\374\075\377\015\050\225\223  
\004\310\277\332\315\171\270\103\220\360\244\276\357\362\357\041  
\230\274\324\324\135\006\366\356\102\354\060\154\240\252\251\312  
\361\257\212\372\077\013\163\152\076\352\056\100\176\037\256\124  
\141\171\353\056\010\067\327\043\363\214\237\276\035\261\341\244  
\165\333\240\342\124\024\261\272\034\051\244\030\366\022\272\242  
\024\024\343\061\065\310\100\377\267\340\005\166\127\301\034\131  
\362\370\277\344\355\045\142\134\204\360\176\176\037\263\276\371  
\267\041\021\314\003\001\126\160\247\020\222\036\033\064\201\036  
\255\234\032\303\004\074\355\002\141\326\036\006\363\137\072\207  
\362\053\361\105\207\345\075\254\321\307\127\204\275\153\256\334  
\330\371\266\033\142\160\013\075\066\311\102\362\062\327\172\141  
\346\322\333\075\317\310\251\311\233\334\333\130\104\327\157\070  
\257\177\170\323\243\255\032\165\272\034\301\066\174\217\036\155  
\034\303\165\106\256\065\005\246\366\134\075\041\356\126\360\311  
\202\042\055\172\124\253\160\303\175\042\145\202\160\226

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "Microsec e-Szigno Root CA 2009"

# Issuer: E=info@e-szigno.hu,CN=Microsec e-Szigno Root CA 2009,O=Microsec Ltd.,L=Budapest,C=HU

# Serial Number:00:c2:7e:43:04:4e:47:3f:19

# Subject: E=info@e-szigno.hu,CN=Microsec

e-Szigno Root CA 2009,O=Microsec Ltd.,L=Budapest,C=HU

# Not Valid Before: Tue Jun 16 11:30:18 2009

# Not Valid After : Sun Dec 30 11:30:18 2029

# Fingerprint (SHA-256):

3C:5F:81:FE:A5:FA:B8:2C:64:BF:A2:EA:EC:AF:CD:E8:E0:77:FC:86:20:A7:CA:E5:37:16:3D:F3:6E:DB:F3:78

# Fingerprint (SHA1): 89:DF:74:FE:5C:F4:0F:4A:80:F9:E3:37:7D:54:DA:91:E1:01:31:8E

```

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Microsec e-Szigno Root CA 2009"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\211\337\164\376\134\364\017\112\200\371\343\067\175\124\332\221
\341\001\061\216
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\370\111\364\003\274\104\055\203\276\110\151\175\051\144\374\261
END
CKA_ISSUER MULTILINE_OCTAL
\060\201\202\061\013\060\011\006\003\125\004\006\023\002\110\125
\061\021\060\017\006\003\125\004\007\014\010\102\165\144\141\160
\145\163\164\061\026\060\024\006\003\125\004\012\014\015\115\151
\143\162\157\163\145\143\040\114\164\144\056\061\047\060\045\006
\003\125\004\003\014\036\115\151\143\162\157\163\145\143\040\145
\055\123\172\151\147\156\157\040\122\157\157\164\040\103\101\040
\062\060\060\071\061\037\060\035\006\011\052\206\110\206\367\015
\001\011\001\026\020\151\156\146\157\100\145\055\163\172\151\147
\156\157\056\150\165
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\011\000\302\176\103\004\116\107\077\031
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "GlobalSign Root CA - R3"
#
# Issuer: CN=GlobalSign,O=GlobalSign,OU=GlobalSign Root CA - R3
# Serial Number:04:00:00:00:00:01:21:58:53:08:a2
# Subject: CN=GlobalSign,O=GlobalSign,OU=GlobalSign Root CA - R3
# Not Valid Before: Wed Mar 18 10:00:00 2009
# Not Valid After : Sun Mar 18 10:00:00 2029
# Fingerprint (SHA-256):
CB:B5:22:D7:B7:F1:27:AD:6A:01:13:86:5B:DF:1C:D4:10:2E:7D:07:59:AF:63:5A:7C:F4:72:0D:C9:63:C5:3B
#
Fingerprint (SHA1): D6:9B:56:11:48:F0:1C:77:C5:45:78:C1:09:26:DF:5B:85:69:76:AD
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE

```

```
CKA_LABEL UTF8 "GlobalSign Root CA - R3"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\114\061\040\060\036\006\003\125\004\013\023\027\107\154\157
\142\141\154\123\151\147\156\040\122\157\157\164\040\103\101\040
\055\040\122\063\061\023\060\021\006\003\125\004\012\023\012\107
\154\157\142\141\154\123\151\147\156\061\023\060\021\006\003\125
\004\003\023\012\107\154\157\142\141\154\123\151\147\156
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\114\061\040\060\036\006\003\125\004\013\023\027\107\154\157
\142\141\154\123\151\147\156\040\122\157\157\164\040\103\101\040
\055\040\122\063\061\023\060\021\006\003\125\004\012\023\012\107
\154\157\142\141\154\123\151\147\156\061\023\060\021\006\003\125
\004\003\023\012\107\154\157\142\141\154\123\151\147\156
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\013\004\000\000\000\000\001\041\130\123\010\242
END
CKA_VALUE MULTILINE_OCTAL
\060\202\003\137\060\202\002\107\240\003\002\001\002\002\013\004
\000\000\000\000\001\041\130\123\010\242\060\015\006\011\052\206
\110\206\367\015\001\001\013\005\000\060\114\061\040\060\036\006
\003\125\004\013\023\027\107\154\157\142\141\154\123\151\147\156
\040\122\157\157\164\040\103\101\040\055\040\122\063\061\023\060
\021\006\003\125\004\012\023\012\107\154\157\142\141\154\123\151
\147\156\061\023\060\021\006\003\125\004\003\023\012\107\154\157
\142\141\154\123\151\147\156\060\036\027\015\060\071\060\063\061
\070\061\060\060\060\060\060\132\027\015\062\071\060\063\061\070
\061\060\060\060\060\060\132\060\114\061\040\060\036\006\003\125
\004\013\023\027\107\154\157\142\141\154\123\151\147\156\040\122
\157\157\164\040\103\101\040\055\040\122\063\061\023\060\021\006
\003\125\004\012\023\012\107\154\157\142\141\154\123\151\147\156
\061\023\060\021\006\003\125\004\003\023\012\107\154\157\142\141
\154\123\151\147\156\060\202\001\042\060\015\006\011\052\206\110
\206\367\015\001\001\001\005\000\003\202\001\017\000\060\202\001
\012\002\202\001\001\000\314\045\166\220\171\006\170\042\026\365
\300\203\266\204\312\050\236\375\005\166\021\305\255\210\162\374
\106\002\103\307\262\212\235\004\137\044\313\056\113\341\140\202
\106\341\122\253\014\201\107\160\154\335\144\321\353\365\054\243
\017\202\075\014\053\256\227\327\266\024\206\020\171\273\073\023
\200\167\214\010\341\111\322\152\142\057\037\136\372\226\150\337
\211\047\225\070\237\006\327\076\311\313\046\131\015\163\336\260
\310\351\046\016\203\025\306\357\133\213\322\004\140\312\111\246
\050\366\151\073\366\313\310\050\221\345\235\212\141\127\067\254
\164\024\334\164\340\072\356\162\057\056\234\373\320\273\277\365
```

\075\000\341\006\063\350\202\053\256\123\246\072\026\163\214\335  
\101\016\040\072\300\264\247\241\351\262\117\220\056\062\140\351  
\127\313\271\004\222\150\150\345\070\046\140\165\262\237\167\377  
\221\024\357\256\040\111\374\255\100\025\110\321\002\061\141\031  
\136\270\227\357\255\167\267\144\232\172\277\137\301\023\357\233  
\142\373\015\154\340\124\151\026\251\003\332\156\351\203\223\161  
\166\306\151\205\202\027\002\003\001\000\001\243\102\060\100\060  
\016\006\003\125\035\017\001\001\377\004\004\003\002\001\006\060  
\017\006\003\125\035\023\001\001\377\004\005\060\003\001\001\377  
\060\035\006\003\125\035\016\004\026\004\024\217\360\113\177\250  
\056\105\044\256\115\120\372\143\232\213\336\342\335\033\274\060  
\015\006\011\052\206\110\206\367\015\001\001\013\005\000\003\202  
\001\001\000\113\100\333\300\120\252\376\310\014\357\367\226\124  
\105\111\273\226\000\011\101\254\263\023\206\206\050\007\063\312  
\153\346\164\271\272\000\055\256\244\012\323\365\361\361\017\212  
\277\163\147\112\203\307\104\173\170\340\257\156\154\157\003\051  
\216\063\071\105\303\216\344\271\127\154\252\374\022\226\354\123  
\306\055\344\044\154\271\224\143\373\334\123\150\147\126\076\203  
\270\317\065\041\303\311\150\376\316\332\302\123\252\314\220\212  
\351\360\135\106\214\225\335\172\130\050\032\057\035\336\315\000  
\067\101\217\355\104\155\327\123\050\227\176\363\147\004\036\025  
\327\212\226\264\323\336\114\047\244\114\033\163\163\166\364\027  
\231\302\037\172\016\343\055\010\255\012\034\054\377\074\253\125  
\016\017\221\176\066\353\303\127\111\276\341\056\055\174\140\213  
\303\101\121\023\043\235\316\367\062\153\224\001\250\231\347\054  
\063\037\072\073\045\322\206\100\316\073\054\206\170\311\141\057  
\024\272\356\333\125\157\337\204\356\005\011\115\275\050\330\162  
\316\323\142\120\145\036\353\222\227\203\061\331\263\265\312\107  
\130\077\137

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "GlobalSign Root CA - R3"

# Issuer: CN=GlobalSign,O=GlobalSign,OU=GlobalSign Root CA - R3

# Serial Number:04:00:00:00:00:01:21:58:53:08:a2

#

Subject: CN=GlobalSign,O=GlobalSign,OU=GlobalSign Root CA - R3

# Not Valid Before: Wed Mar 18 10:00:00 2009

# Not Valid After : Sun Mar 18 10:00:00 2029

# Fingerprint (SHA-256):

CB:B5:22:D7:B7:F1:27:AD:6A:01:13:86:5B:DF:1C:D4:10:2E:7D:07:59:AF:63:5A:7C:F4:72:0D:C9:63:C5:3B

# Fingerprint (SHA1): D6:9B:56:11:48:F0:1C:77:C5:45:78:C1:09:26:DF:5B:85:69:76:AD

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

```

CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "GlobalSign Root CA - R3"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\326\233\126\021\110\360\034\167\305\105\170\301\011\046\337\133
\205\151\166\255
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\305\337\270\111\312\005\023\125\356\055\272\032\303\076\260\050
END
CKA_ISSUER MULTILINE_OCTAL
\060\114\061\040\060\036\006\003\125\004\013\023\027\107\154\157
\142\141\154\123\151\147\156\040\122\157\157\164\040\103\101\040
\055\040\122\063\061\023\060\021\006\003\125\004\012\023\012\107
\154\157\142\141\154\123\151\147\156\061\023\060\021\006\003\125
\004\003\023\012\107\154\157\142\141\154\123\151\147\156
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\013\004\000\000\000\000\001\041\130\123\010\242
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "Autoridad de Certificacion Firmaprofesional CIF A62634068"
#
# Issuer: CN=Autoridad de Certificacion Firmaprofesional CIF A62634068,C=ES
# Serial Number:53:ec:3b:ee:fb:b2:48:5f
# Subject: CN=Autoridad de Certificacion Firmaprofesional CIF A62634068,C=ES
# Not Valid Before: Wed May 20 08:38:15 2009
# Not Valid After : Tue Dec 31 08:38:15 2030
# Fingerprint (SHA-256):
04:04:80:28:BF:1F:28:64:D4:8F:9A:D4:D8:32:94:36:6A:82:88:56:55:3F:3B:14:30:3F:90:14:7F:5D:40:EF
# Fingerprint (SHA1): AE:C5:FB:3F:C8:E1:BF:C4:E5:4F:03:07:5A:9A:E8:00:B7:F7:B6:FA
CKA_CLASS
CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Autoridad de Certificacion Firmaprofesional CIF A62634068"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\121\061\013\060\011\006\003\125\004\006\023\002\105\123\061
\102\060\100\006\003\125\004\003\014\071\101\165\164\157\162\151
\144\141\144\040\144\145\040\103\145\162\164\151\146\151\143\141
\143\151\157\156\040\106\151\162\155\141\160\162\157\146\145\163

```



\151\157\156\141\154\040\103\111\106\040\101\066\062\066\063\064  
\060\066\070

END

CKA\_ID UTF8 "0"

CKA\_ISSUER MULTILINE\_OCTAL

\060\121\061\013\060\011\006\003\125\004\006\023\002\105\123\061  
\102\060\100\006\003\125\004\003\014\071\101\165\164\157\162\151  
\144\141\144\040\144\145\040\103\145\162\164\151\146\151\143\141  
\143\151\157\156\040\106\151\162\155\141\160\162\157\146\145\163  
\151\157\156\141\154\040\103\111\106\040\101\066\062\066\063\064  
\060\066\070

END

CKA\_SERIAL\_NUMBER

MULTILINE\_OCTAL

\002\010\123\354\073\356\373\262\110\137

END

CKA\_VALUE MULTILINE\_OCTAL

\060\202\006\024\060\202\003\374\240\003\002\001\002\002\010\123  
\354\073\356\373\262\110\137\060\015\006\011\052\206\110\206\367  
\015\001\001\005\005\000\060\121\061\013\060\011\006\003\125\004  
\006\023\002\105\123\061\102\060\100\006\003\125\004\003\014\071  
\101\165\164\157\162\151\144\141\144\040\144\145\040\103\145\162  
\164\151\146\151\143\141\143\151\157\156\040\106\151\162\155\141  
\160\162\157\146\145\163\151\157\156\141\154\040\103\111\106\040  
\101\066\062\066\063\064\060\066\070\060\036\027\015\060\071\060  
\065\062\060\060\070\063\070\061\065\132\027\015\063\060\061\062  
\063\061\060\070\063\070\061\065\132\060\121\061\013\060\011\006  
\003\125\004\006\023\002\105\123\061\102\060\100\006\003\125\004  
\003\014\071\101\165\164\157\162\151\144\141\144\040\144\145\040  
\103\145\162\164\151\146\151\143\141\143\151\157\156\040\106\151  
\162\155\141\160\162\157\146\145\163\151\157\156\141\154\040\103  
\111\106\040\101\066\062\066\063\064\060\066\070\060\202\002\042  
\060\015\006\011\052\206\110\206\367\015\001\001\001\005\000\003  
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END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "Autoridad de Certificacion Firmaprofesional CIF A62634068"

# Issuer: CN=Autoridad de Certificacion Firmaprofesional CIF A62634068,C=ES

# Serial Number:53:ec:3b:ee:fb:b2:48:5f

# Subject: CN=Autoridad de Certificacion Firmaprofesional CIF A62634068,C=ES

# Not Valid Before: Wed May 20 08:38:15 2009

# Not Valid After : Tue Dec 31 08:38:15 2030

# Fingerprint (SHA-256):

04:04:80:28:BF:1F:28:64:D4:8F:9A:D4:D8:32:94:36:6A:82:88:56:55:3F:3B:14:30:3F:90:14:7F:5D:40:EF

#

Fingerprint (SHA1): AE:C5:FB:3F:C8:E1:BF:C4:E5:4F:03:07:5A:9A:E8:00:B7:F7:B6:FA

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "Autoridad de Certificacion Firmaprofesional CIF A62634068"

CKA\_CERT\_SHA1\_HASH MULTILINE\_OCTAL

\256\305\373\077\310\341\277\304\345\117\003\007\132\232\350\000

\267\367\266\372

END

CKA\_CERT\_MD5\_HASH MULTILINE\_OCTAL

\163\072\164\172\354\273\243\226\246\302\344\342\310\233\300\303

END

CKA\_ISSUER MULTILINE\_OCTAL

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\102\060\100\006\003\125\004\003\014\071\101\165\164\157\162\151
\144\141\144\040\144\145\040\103\145\162\164\151\146\151\143\141
\143\151\157\156\040\106\151\162\155\141\160\162\157\146\145\163
\151\157\156\141\154\040\103\111\106\040\101\066\062\066\063\064
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END

CKA\_SERIAL\_NUMBER MULTILINE\_OCTAL

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END

CKA\_TRUST\_SERVER\_AUTH

CK\_TRUST CKT\_NSS\_TRUSTED\_DELEGATOR

CKA\_TRUST\_EMAIL\_PROTECTION CK\_TRUST CKT\_NSS\_TRUSTED\_DELEGATOR

CKA\_TRUST\_CODE\_SIGNING CK\_TRUST CKT\_NSS\_MUST\_VERIFY\_TRUST

CKA\_TRUST\_STEP\_UP\_APPROVED CK\_BBOOL CK\_FALSE

#

# Certificate "Izenpe.com"

#

# Issuer: CN=Izenpe.com,O=IZENPE S.A.,C=ES

# Serial Number:00:b0:b7:5a:16:48:5f:bf:e1:cb:f5:8b:d7:19:e6:7d

# Subject: CN=Izenpe.com,O=IZENPE S.A.,C=ES

# Not Valid Before: Thu Dec 13 13:08:28 2007

# Not Valid After : Sun Dec 13 08:27:25 2037

# Fingerprint (SHA-256):

25:30:CC:8E:98:32:15:02:BA:D9:6F:9B:1F:BA:1B:09:9E:2D:29:9E:0F:45:48:BB:91:4F:36:3B:C0:D4:53:1F

# Fingerprint (SHA1): 2F:78:3D:25:52:18:A7:4A:65:39:71:B5:2C:A2:9C:45:15:6F:E9:19

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_CERTIFICATE

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "Izenpe.com"

CKA\_CERTIFICATE\_TYPE CK\_CERTIFICATE\_TYPE CKC\_X\_509

CKA\_SUBJECT MULTILINE\_OCTAL

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END

CKA\_ID

UTF8 "0"

CKA\_ISSUER MULTILINE\_OCTAL

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CKA\_SERIAL\_NUMBER MULTILINE\_OCTAL

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END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "Izenpe.com"

#

Issuer: CN=Izenpe.com,O=IZENPE S.A.,C=ES

# Serial Number:00:b0:b7:5a:16:48:5f:bf:e1:cb:f5:8b:d7:19:e6:7d

# Subject: CN=Izenpe.com,O=IZENPE S.A.,C=ES

# Not Valid Before: Thu Dec 13 13:08:28 2007

# Not Valid After : Sun Dec 13 08:27:25 2037

# Fingerprint (SHA-256):

25:30:CC:8E:98:32:15:02:BA:D9:6F:9B:1F:BA:1B:09:9E:2D:29:9E:0F:45:48:BB:91:4F:36:3B:C0:D4:53:1F

# Fingerprint (SHA1): 2F:78:3D:25:52:18:A7:4A:65:39:71:B5:2C:A2:9C:45:15:6F:E9:19

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "Izenpe.com"

CKA\_CERT\_SHA1\_HASH MULTILINE\_OCTAL

```
\057\170\075\045\122\030\247\112\145\071\161\265\054\242\234\105
\025\157\351\031
```

END

CKA\_CERT\_MD5\_HASH MULTILINE\_OCTAL

```
\246\260\315\205\200\332\134\120\064\243\071\220\057\125\147\163
```

END

CKA\_ISSUER MULTILINE\_OCTAL

```
\060\070\061\013\060\011\006\003\125\004\006\023\002\105\123\061
\024\060\022\006\003\125\004\012\014\013\111\132\105\116\120\105
\040\123\056\101\056\061\023\060\021\006\003\125\004\003\014\012
\111\172\145\156\160\145\056\143\157\155
```

END

CKA\_SERIAL\_NUMBER

MULTILINE\_OCTAL

```
\002\020\000\260\267\132\026\110\137\277\341\313\365\213\327\031
\346\175
```

END

CKA\_TRUST\_SERVER\_AUTH CK\_TRUST CKT\_NSS\_TRUSTED\_DELEGATOR

CKA\_TRUST\_EMAIL\_PROTECTION CK\_TRUST CKT\_NSS\_MUST\_VERIFY\_TRUST

CKA\_TRUST\_CODE\_SIGNING CK\_TRUST CKT\_NSS\_MUST\_VERIFY\_TRUST

CKA\_TRUST\_STEP\_UP\_APPROVED CK\_BBOOL CK\_FALSE

```

#
# Certificate "Chambers of Commerce Root - 2008"
#
# Issuer: CN=Chambers of Commerce Root - 2008,O=AC Camerfirma S.A.,serialNumber=A82743287,L=Madrid
(see current address at www.camerfirma.com/address),C=EU
# Serial Number:00:a3:da:42:7e:a4:b1:ae:da
# Subject: CN=Chambers of Commerce Root - 2008,O=AC Camerfirma S.A.,serialNumber=A82743287,L=Madrid
(see current address at www.camerfirma.com/address),C=EU
# Not Valid Before: Fri Aug 01 12:29:50 2008
# Not Valid After : Sat Jul 31 12:29:50 2038
# Fingerprint (SHA-256):
06:3E:4A:FA:C4:91:DF:D3:32:F3:08:9B:85:42:E9:46:17:D8:93:D7:FE:94:4E:10:A7:93:7E:E2:9D:96:93:C0
#
Fingerprint (SHA1): 78:6A:74:AC:76:AB:14:7F:9C:6A:30:50:BA:9E:A8:7E:FE:9A:CE:3C
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Chambers of Commerce Root - 2008"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\201\256\061\013\060\011\006\003\125\004\006\023\002\105\125
\061\103\060\101\006\003\125\004\007\023\072\115\141\144\162\151
\144\040\050\163\145\145\040\143\165\162\162\145\156\164\040\141
\144\144\162\145\163\163\040\141\164\040\167\167\167\056\143\141
\155\145\162\146\151\162\155\141\056\143\157\155\057\141\144\144
\162\145\163\163\051\061\022\060\020\006\003\125\004\005\023\011
\101\070\062\067\064\063\062\070\067\061\033\060\031\006\003\125
\004\012\023\022\101\103\040\103\141\155\145\162\146\151\162\155
\141\040\123\056\101\056\061\051\060\047\006\003\125\004\003\023
\040\103\150\141\155\142\145\162\163\040\157\146\040\103\157\155
\155\145\162\143\145\040\122\157\157\164\040\055\040\062\060\060
\070
END
CKA_ID
UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\201\256\061\013\060\011\006\003\125\004\006\023\002\105\125
\061\103\060\101\006\003\125\004\007\023\072\115\141\144\162\151
\144\040\050\163\145\145\040\143\165\162\162\145\156\164\040\141
\144\144\162\145\163\163\040\141\164\040\167\167\167\056\143\141
\155\145\162\146\151\162\155\141\056\143\157\155\057\141\144\144
\162\145\163\163\051\061\022\060\020\006\003\125\004\005\023\011
\101\070\062\067\064\063\062\070\067\061\033\060\031\006\003\125
\004\012\023\022\101\103\040\103\141\155\145\162\146\151\162\155
\141\040\123\056\101\056\061\051\060\047\006\003\125\004\003\023
\040\103\150\141\155\142\145\162\163\040\157\146\040\103\157\155
\155\145\162\143\145\040\122\157\157\164\040\055\040\062\060\060

```



\070  
END  
CKA\_SERIAL\_NUMBER MULTILINE\_OCTAL  
\002\011\000\243\332\102\176\244\261\256\332  
END  
CKA\_VALUE MULTILINE\_OCTAL  
\060\202\007\117\060\202\005\067\240\003\002\001\002\002\011\000  
\243\332\102\176\244\261\256\332\060\015\006\011\052\206\110\206  
\367\015\001\001\005\005\000\060\201\256\061\013\060\011\006\003  
\125\004\006\023\002\105\125\061\103\060\101\006\003\125\004\007  
\023\072\115\141\144\162\151\144\040\050\163\145\145\040\143\165  
\162\162\145\156\164\040\141\144\144\162\145\163\163\040\141\164  
\040\167\167\167\056\143\141\155\145\162\146\151\162\155\141\056  
\143\157\155\057\141\144\144\162\145\163\163\051\061\022\060\020  
\006\003\125\004\005\023\011\101\070\062\067\064\063\062\070\067  
\061\033\060\031\006\003\125\004\012\023\022\101\103\040\103\141  
\155\145\162\146\151\162\155\141\040\123\056\101\056\061\051\060  
\047\006\003\125\004\003\023\040\103\150\141\155\142\145\162\163  
\040\157\146\040\103\157\155\155\145\162\143\145\040\122\157\157  
\164\040\055\040\062\060\060\070\060\036\027\015\060\070\060\070  
\060\061\061\062\062\071\065\060\132\027\015\063\070\060\067\063  
\061\061\062\062\071\065\060\132\060\201\256\061\013\060\011\006  
\003\125\004\006\023\002\105\125\061\103\060\101\006\003\125\004  
\007\023\072\115\141\144\162\151\144\040\050\163\145\145\040\143  
\165\162\162\145\156\164\040\141\144\144\162\145\163\163\040\141  
\164\040\167\167\167\056\143\141\155\145\162\146\151\162\155\141  
\056\143\157\155\057\141\144\144\162\145\163\163\051\061\022\060  
\020\006\003\125\004\005\023\011\101\070\062\067\064\063\062\070  
\067\061\033\060\031\006\003\125\004\012\023\022\101\103\040\103  
\141\155\145\162\146\151\162\155\141\040\123\056\101\056\061\051  
\060\047\006\003\125\004\003\023\040\103\150\141\155\142\145\162  
\163\040\157\146\040\103\157\155\155\145\162\143\145\040\122\157  
\157\164\040\055\040\062\060\060\070\060\202\002\042\060\015\006  
\011\052\206\110\206\367\015\001\001\001\005\000\003\202\002\017  
\000\060\202\002\012\002\202\002\001\000\257\000\313\160\067\053  
\200\132\112\072\154\170\224\175\243\177\032\037\366\065\325\275  
\333\313\015\104\162\076\046\262\220\122\272\143\073\050\130\157  
\245\263\155\224\246\363\335\144\014\125\366\366\347\362\042\042  
\200\136\341\142\306\266\051\341\201\154\362\277\345\175\062\152  
\124\240\062\031\131\376\037\213\327\075\140\206\205\044\157\343  
\021\263\167\076\040\226\065\041\153\263\010\331\160\056\144\367  
\204\222\123\326\016\260\220\212\212\343\207\215\006\323\275\220  
\016\342\231\241\033\206\016\332\232\012\273\013\141\120\006\122  
\361\236\177\166\354\313\017\320\036\015\317\231\060\075\034\304  
\105\020\130\254\326\323\350\327\345\352\305\001\007\167\326\121  
\346\003\177\212\110\245\115\150\165\271\351\274\236\116\031\161  
\365\062\113\234\155\140\031\013\373\314\235\165\334\277\046\315  
\217\223\170\071\171\163\136\045\016\312\134\353\167\022\007\313

\144\101\107\162\223\253\120\303\353\011\166\144\064\322\071\267  
\166\021\011\015\166\105\304\251\256\075\152\257\265\175\145\057  
\224\130\020\354\134\174\257\176\342\266\030\331\320\233\116\132  
\111\337\251\146\013\314\074\306\170\174\247\234\035\343\316\216  
\123\276\005\336\140\017\153\345\032\333\077\343\341\041\311\051  
\301\361\353\007\234\122\033\001\104\121\074\173\045\327\304\345  
\122\124\135\045\007\312\026\040\270\255\344\101\356\172\010\376  
\231\157\203\246\221\002\260\154\066\125\152\347\175\365\226\346  
\312\201\326\227\361\224\203\351\355\260\261\153\022\151\036\254  
\373\135\251\305\230\351\264\133\130\172\276\075\242\104\072\143  
\131\324\013\045\336\033\117\275\345\001\236\315\322\051\325\237  
\027\031\012\157\277\014\220\323\011\137\331\343\212\065\314\171  
\132\115\031\067\222\267\304\301\255\257\364\171\044\232\262\001  
\013\261\257\134\226\363\200\062\373\134\075\230\361\240\077\112  
\336\276\257\224\056\331\125\232\027\156\140\235\143\154\270\143  
\311\256\201\134\030\065\340\220\273\276\074\117\067\042\271\176  
\353\317\236\167\041\246\075\070\201\373\110\332\061\075\053\343  
\211\365\320\265\275\176\340\120\304\022\211\263\043\232\020\061  
\205\333\256\157\357\070\063\030\166\021\002\003\001\000\001\243  
\202\001\154\060\202\001\150\060\022\006\003\125\035\023\001\001  
\377\004\010\060\006\001\001\377\002\001\014\060\035\006\003\125  
\035\016\004\026\004\024\371\044\254\017\262\265\370\171\300\372  
\140\210\033\304\331\115\002\236\027\031\060\201\343\006\003\125  
\035\043\004\201\333\060\201\330\200\024\371\044\254\017\262\265  
\370\171\300\372\140\210\033\304\331\115\002\236\027\031\241\201  
\264\244\201\261\060\201\256\061\013\060\011\006\003\125\004\006  
\023\002\105\125\061\103\060\101\006\003\125\004\007\023\072\115  
\141\144\162\151\144\040\050\163\145\145\040\143\165\162\162\145  
\156\164\040\141\144\144\162\145\163\163\040\141\164\040\167\167  
\167\056\143\141\155\145\162\146\151\162\155\141\056\143\157\155  
\057\141\144\144\162\145\163\163\051\061\022\060\020\006\003\125  
\004\005\023\011\101\070\062\067\064\063\062\070\067\061\033\060  
\031\006\003\125\004\012\023\022\101\103\040\103\141\155\145\162  
\146\151\162\155\141\040\123\056\101\056\061\051\060\047\006\003  
\125\004\003\023\040\103\150\141\155\142\145\162\163\040\157\146  
\040\103\157\155\155\145\162\143\145\040\122\157\157\164\040\055  
\040\062\060\060\070\202\011\000\243\332\102\176\244\261\256\332  
\060\016\006\003\125\035\017\001\001\377\004\004\003\002\001\006  
\060\075\006\003\125\035\040\004\066\060\064\060\062\006\004\125  
\035\040\000\060\052\060\050\006\010\053\006\001\005\005\007\002  
\001\026\034\150\164\164\160\072\057\057\160\157\154\151\143\171  
\056\143\141\155\145\162\146\151\162\155\141\056\143\157\155\060  
\015\006\011\052\206\110\206\367\015\001\001\005\005\000\003\202  
\002\001\000\220\022\257\042\065\302\243\071\360\056\336\351\265  
\351\170\174\110\276\077\175\105\222\136\351\332\261\031\374\026  
\074\237\264\133\146\236\152\347\303\271\135\210\350\017\255\317  
\043\017\336\045\072\136\314\117\245\301\265\055\254\044\322\130  
\007\336\242\317\151\204\140\063\350\020\015\023\251\043\320\205

\345\216\173\246\236\075\162\023\162\063\365\252\175\306\143\037  
\010\364\376\001\177\044\317\053\054\124\011\336\342\053\155\222  
\306\071\117\026\352\074\176\172\106\324\105\152\106\250\353\165  
\202\126\247\253\240\174\150\023\063\366\235\060\360\157\047\071  
\044\043\052\220\375\220\051\065\362\223\337\064\245\306\367\370  
\357\214\017\142\112\174\256\323\365\124\370\215\266\232\126\207  
\026\202\072\063\253\132\042\010\367\202\272\352\056\340\107\232  
\264\265\105\243\005\073\331\334\056\105\100\073\352\334\177\350  
\073\353\321\354\046\330\065\244\060\305\072\254\127\236\263\166  
\245\040\173\371\036\112\005\142\001\246\050\165\140\227\222\015  
\156\076\115\067\103\015\222\025\234\030\042\315\121\231\240\051  
\032\074\137\212\062\063\133\060\307\211\057\107\230\017\243\003  
\306\366\361\254\337\062\360\331\201\032\344\234\275\366\200\024  
\360\321\054\271\205\365\330\243\261\310\245\041\345\034\023\227  
\356\016\275\337\051\251\357\064\123\133\323\344\152\023\204\006  
\266\062\002\304\122\256\042\322\334\262\041\102\032\332\100\360  
\051\311\354\012\014\134\342\320\272\314\110\323\067\012\314\022  
\012\212\171\260\075\003\177\151\113\364\064\040\175\263\064\352  
\216\113\144\365\076\375\263\043\147\025\015\004\270\360\055\301  
\011\121\074\262\154\025\360\245\043\327\203\164\344\345\056\311  
\376\230\047\102\306\253\306\236\260\320\133\070\245\233\120\336  
\176\030\230\265\105\073\366\171\264\350\367\032\173\006\203\373  
\320\213\332\273\307\275\030\253\010\157\074\200\153\100\077\031  
\031\272\145\212\346\276\325\134\323\066\327\357\100\122\044\140  
\070\147\004\061\354\217\363\202\306\336\271\125\363\073\061\221  
\132\334\265\010\025\255\166\045\012\015\173\056\207\342\014\246  
\006\274\046\020\155\067\235\354\335\170\214\174\200\305\360\331  
\167\110\320

END

CKA\_NSS\_Mozilla\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "Chambers of Commerce Root - 2008"

# Issuer: CN=Chambers of Commerce Root - 2008,O=AC Camerfirma S.A.,serialNumber=A82743287,L=Madrid  
(see current address at [www.camerfirma.com/address](http://www.camerfirma.com/address)),C=EU

# Serial Number:00:a3:da:42:7e:a4:b1:ae:da

#

Subject: CN=Chambers of Commerce Root - 2008,O=AC Camerfirma S.A.,serialNumber=A82743287,L=Madrid  
(see current address at [www.camerfirma.com/address](http://www.camerfirma.com/address)),C=EU

# Not Valid Before: Fri Aug 01 12:29:50 2008

# Not Valid After : Sat Jul 31 12:29:50 2038

# Fingerprint (SHA-256):

06:3E:4A:FA:C4:91:DF:D3:32:F3:08:9B:85:42:E9:46:17:D8:93:D7:FE:94:4E:10:A7:93:7E:E2:9D:96:93:C0

# Fingerprint (SHA1): 78:6A:74:AC:76:AB:14:7F:9C:6A:30:50:BA:9E:A8:7E:FE:9A:CE:3C

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

```

CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Chambers of Commerce Root - 2008"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\170\152\164\254\166\253\024\177\234\152\060\120\272\236\250\176
\376\232\316\074
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\136\200\236\204\132\016\145\013\027\002\363\125\030\052\076\327
END
CKA_ISSUER MULTILINE_OCTAL
\060\201\256\061\013\060\011\006\003\125\004\006\023\002\105\125
\061\103\060\101\006\003\125\004\007\023\072\115\141\144\162\151
\144\040\050\163\145\145\040\143\165\162\162\145\156\164\040\141
\144\144\162\145\163\163\040\141\164\040\167\167\167\056\143\141
\155\145\162\146\151\162\155\141\056\143\157\155\057\141\144\144
\162\145\163\163\051\061\022\060\020\006\003\125\004\005\023\011
\101\070\062\067\064\063\062\070\067\061\033\060\031\006\003\125
\004\012\023\022\101\103\040\103\141\155\145\162\146\151\162\155
\141\040\123\056\101\056\061\051\060\047\006\003\125\004\003\023
\040\103\150\141\155\142\145\162\163\040\157\146\040\103\157\155
\155\145\162\143\145\040\122\157\157\164\040\055\040\062\060\060
\070
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\011\000\243\332\102\176\244\261\256\332
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "Global Chambersign Root - 2008"
#
# Issuer: CN=Global Chambersign
Root - 2008,O=AC Camerfirma S.A.,serialNumber=A82743287,L=Madrid (see current address at
www.camerfirma.com/address),C=EU
# Serial Number:00:c9:cd:d3:e9:d5:7d:23:ce
# Subject: CN=Global Chambersign Root - 2008,O=AC Camerfirma S.A.,serialNumber=A82743287,L=Madrid
(see current address at www.camerfirma.com/address),C=EU
# Not Valid Before: Fri Aug 01 12:31:40 2008
# Not Valid After : Sat Jul 31 12:31:40 2038
# Fingerprint (SHA-256):
13:63:35:43:93:34:A7:69:80:16:A0:D3:24:DE:72:28:4E:07:9D:7B:52:20:BB:8F:BD:74:78:16:EE:BE:BA:CA
# Fingerprint (SHA1): 4A:BD:EE:EC:95:0D:35:9C:89:AE:C7:52:A1:2C:5B:29:F6:D6:AA:0C
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE

```

```
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Global Chambersign Root - 2008"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\201\254\061\013\060\011\006\003\125\004\006\023\002\105\125
\061\103\060\101\006\003\125\004\007\023\072\115\141\144\162\151
\144\040\050\163\145\145\040\143\165\162\162\145\156\164\040\141
\144\144\162\145\163\163\040\141\164\040\167\167\167\056\143\141
\155\145\162\146\151\162\155\141\056\143\157\155\057\141\144\144
\162\145\163\163\051\061\022\060\020\006\003\125\004\005\023\011
\101\070\062\067\064\063\062\070\067\061\033\060\031\006\003\125
\004\012\023\022\101\103\040\103\141\155\145\162\146\151\162\155
\141\040\123\056\101\056\061\047\060\045\006\003\125\004\003\023
\036\107\154\157\142\141\154\040\103\150\141\155\142\145\162\163
\151\147\156\040\122\157\157\164\040\055\040\062\060\060\070
END
CKA_ID
UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\201\254\061\013\060\011\006\003\125\004\006\023\002\105\125
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\144\040\050\163\145\145\040\143\165\162\162\145\156\164\040\141
\144\144\162\145\163\163\040\141\164\040\167\167\167\056\143\141
\155\145\162\146\151\162\155\141\056\143\157\155\057\141\144\144
\162\145\163\163\051\061\022\060\020\006\003\125\004\005\023\011
\101\070\062\067\064\063\062\070\067\061\033\060\031\006\003\125
\004\012\023\022\101\103\040\103\141\155\145\162\146\151\162\155
\141\040\123\056\101\056\061\047\060\045\006\003\125\004\003\023
\036\107\154\157\142\141\154\040\103\150\141\155\142\145\162\163
\151\147\156\040\122\157\157\164\040\055\040\062\060\060\070
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CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\011\000\311\315\323\351\325\175\043\316
END
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\060\202\007\111\060\202\005\061\240\003\002\001\002\002\011\000
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\367\015\001\001\005\005\000\060\201\254\061\013\060\011\006\003
\125\004\006\023\002\105\125\061\103\060\101\006\003\125\004\007
\023\072\115\141\144\162\151\144\040\050\163\145\145\040\143\165
\162\162\145\156\164\040\141\144\144\162\145\163\163\040\141\164
\040\167\167\167\056\143\141\155\145\162\146\151\162\155\141\056
\143\157\155\057\141\144\144\162\145\163\163\051\061\022\060\020
\006\003\125\004\005\023\011\101\070\062\067\064\063\062\070\067
\061\033\060\031\006\003\125\004\012\023\022\101\103\040\103\141
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\155\145\162\146\151\162\155\141\040\123\056\101\056\061\047\060  
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\150\141\155\142\145\162\163\151\147\156\040\122\157\157\164\040  
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\062\063\061\064\060\132\060\201\254\061\013\060\011\006\003\125  
\004\006\023\002\105\125\061\103\060\101\006\003\125\004\007\023  
\072\115\141\144\162\151\144\040\050\163\145\145\040\143\165\162  
\162\145\156\164\040\141\144\144\162\145\163\163\040\141\164\040  
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\023\333\377\301\266\031\213\067\101\030\225\122\107\353\027\235  
\051\210\216\065\154\006\062\056\107\142\363\111\004\277\175\104  
\066\261\161\314\275\132\011\163\325\331\205\104\377\221\127\045  
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\033\275\072\265\313\255\243\314\104\247\015\256\041\025\077\271  
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\122\143\272\146\275\150\340\371\276\032\250\201\273\036\101\170  
\165\323\301\376\000\125\260\207\124\350\047\220\065\035\114\063  
\255\227\374\227\056\230\204\277\054\311\243\277\321\230\021\024  
\355\143\370\312\230\210\130\027\231\355\105\003\227\176\074\206  
\036\210\214\276\362\221\204\217\145\064\330\000\114\175\267\061  
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\326\371\016\216\131\361\375\033\063\265\051\073\027\073\101\266  
\041\335\324\300\075\245\237\237\037\103\120\311\273\274\154\172  
\227\230\356\315\214\037\373\234\121\256\213\160\275\047\237\161  
\300\153\254\175\220\146\350\327\135\072\015\260\325\302\215\325  
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\350\153\032\074\305\242\263\102\373\213\011\076\137\010\122\307  
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\314\053\113\223\051\017\002\003\001\000\001\243\202\001\152\060  
\202\001\146\060\022\006\003\125\035\023\001\001\377\004\010\060  
\006\001\001\377\002\001\014\060\035\006\003\125\035\016\004\026  
\004\024\271\011\312\234\036\333\323\154\072\153\256\355\124\361  
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\331\060\201\326\200\024\271\011\312\234\036\333\323\154\072\153  
\256\355\124\361\133\223\006\065\056\136\241\201\262\244\201\257  
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\144\144\162\145\163\163\040\141\164\040\167\167\167\056\143\141  
\155\145\162\146\151\162\155\141\056\143\157\155\057\141\144\144  
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\151\147\156\040\122\157\157\164\040\055\040\062\060\060\070\202  
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\160\336\222\050\331\005\224\106\377\220\127\251\361\057\337\032  
\015\153\372\174\016\034\111\044\171\047\330\106\252\157\051\131  
\122\210\160\022\352\335\075\365\233\123\124\157\341\140\242\250  
\011\271\354\353\131\174\306\065\361\334\030\351\361\147\345\257  
\272\105\340\011\336\312\104\017\302\027\016\167\221\105\172\063  
\137\137\226\054\150\213\301\107\217\230\233\075\300\354\313\365  
\325\202\222\204\065\321\276\066\070\126\162\061\133\107\055\252  
\027\244\143\121\353\012\001\255\177\354\165\236\313\241\037\361  
\177\022\261\271\344\144\177\147\326\043\052\364\270\071\135\230  
\350\041\247\341\275\075\102\032\164\232\160\257\150\154\120\135  
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\347\267\113\230\224\065\300\331\072\051\301\235\262\120\063\035  
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\063\102\351\105\012\174\155\362\206\171\057\305\202\031\175\011
\211\174\262\124\166\210\256\336\301\363\314\341\156\333\061\326
\223\256\231\240\357\045\152\163\230\211\133\072\056\023\210\036
\277\300\222\224\064\033\343\047\267\213\036\157\102\377\347\351
\067\233\120\035\055\242\371\002\356\313\130\130\072\161\274\150
\343\252\301\257\034\050\037\242\334\043\145\077\201\352\256\231
\323\330\060\317\023\015\117\025\311\204\274\247\110\055\370\060
\043\167\330\106\113\171\155\366\214\355\072\177\140\021\170\364
\351\233\256\325\124\300\164\200\321\013\102\237\301
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END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "Global Chambersign Root - 2008"

# Issuer: CN=Global Chambersign Root - 2008,O=AC Camerfirma S.A.,serialNumber=A82743287,L=Madrid (see current address at [www.camerfirma.com/address](http://www.camerfirma.com/address)),C=EU

# Serial Number:00:c9:cd:d3:e9:d5:7d:23:ce

# Subject: CN=Global Chambersign Root - 2008,O=AC Camerfirma S.A.,serialNumber=A82743287,L=Madrid (see current address at [www.camerfirma.com/address](http://www.camerfirma.com/address)),C=EU

# Not Valid Before: Fri Aug 01 12:31:40 2008

# Not Valid After : Sat Jul 31 12:31:40 2038

# Fingerprint (SHA-256):

13:63:35:43:93:34:A7:69:80:16:A0:D3:24:DE:72:28:4E:07:9D:7B:52:20:BB:8F:BD:74:78:16:EE:BE:BA:CA

# Fingerprint (SHA1): 4A:BD:EE:EC:95:0D:35:9C:89:AE:C7:52:A1:2C:5B:29:F6:D6:AA:0C

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL

CK\_FALSE

CKA\_LABEL UTF8 "Global Chambersign Root - 2008"

CKA\_CERT\_SHA1\_HASH MULTILINE\_OCTAL

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\112\275\356\354\225\015\065\234\211\256\307\122\241\054\133\051
\366\326\252\014
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END

CKA\_CERT\_MD5\_HASH MULTILINE\_OCTAL

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\236\200\377\170\001\014\056\301\066\275\376\226\220\156\010\363
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END

CKA\_ISSUER MULTILINE\_OCTAL

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\060\201\254\061\013\060\011\006\003\125\004\006\023\002\105\125
\061\103\060\101\006\003\125\004\007\023\072\115\141\144\162\151
\144\040\050\163\145\145\040\143\165\162\162\145\156\164\040\141
\144\144\162\145\163\163\040\141\164\040\167\167\167\056\143\141
\155\145\162\146\151\162\155\141\056\143\157\155\057\141\144\144
\162\145\163\163\051\061\022\060\020\006\003\125\004\005\023\011
```



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\101\070\062\067\064\063\062\070\067\061\033\060\031\006\003\125
\004\012\023\022\101\103\040\103\141\155\145\162\146\151\162\155
\141\040\123\056\101\056\061\047\060\045\006\003\125\004\003\023
\036\107\154\157\142\141\154\040\103\150\141\155\142\145\162\163
\151\147\156\040\122\157\157\164\040\055\040\062\060\060\070
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END

CKA\_SERIAL\_NUMBER

MULTILINE\_OCTAL

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\002\011\000\311\315\323\351\325\175\043\316
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END

CKA\_TRUST\_SERVER\_AUTH CK\_TRUST CKT\_NSS\_MUST\_VERIFY\_TRUST

CKA\_TRUST\_EMAIL\_PROTECTION CK\_TRUST CKT\_NSS\_TRUSTED\_DELEGATOR

CKA\_TRUST\_CODE\_SIGNING CK\_TRUST CKT\_NSS\_MUST\_VERIFY\_TRUST

CKA\_TRUST\_STEP\_UP\_APPROVED CK\_BBOOL CK\_FALSE

#

# Certificate "Go Daddy Root Certificate Authority - G2"

#

# Issuer: CN=Go Daddy Root Certificate Authority - G2,O="GoDaddy.com, Inc.",L=Scottsdale,ST=Arizona,C=US

# Serial Number: 0 (0x0)

# Subject: CN=Go Daddy Root Certificate Authority - G2,O="GoDaddy.com, Inc.",L=Scottsdale,ST=Arizona,C=US

# Not Valid Before: Tue Sep 01 00:00:00 2009

# Not Valid After : Thu Dec 31 23:59:59 2037

# Fingerprint (SHA-256):

45:14:0B:32:47:EB:9C:C8:C5:B4:F0:D7:B5:30:91:F7:32:92:08:9E:6E:5A:63:E2:74:9D:D3:AC:A9:19:8E:DA

# Fingerprint (SHA1): 47:BE:AB:C9:22:EA:E8:0E:78:78:34:62:A7:9F:45:C2:54:FD:E6:8B

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_CERTIFICATE

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE

CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "Go Daddy Root Certificate Authority - G2"

CKA\_CERTIFICATE\_TYPE CK\_CERTIFICATE\_TYPE CKC\_X\_509

CKA\_SUBJECT MULTILINE\_OCTAL

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\061\020\060\016\006\003\125\004\010\023\007\101\162\151\172\157
\156\141\061\023\060\021\006\003\125\004\007\023\012\123\143\157
\164\164\163\144\141\154\145\061\032\060\030\006\003\125\004\012
\023\021\107\157\104\141\144\144\171\056\143\157\155\054\040\111
\156\143\056\061\061\060\057\006\003\125\004\003\023\050\107\157
\040\104\141\144\144\171\040\122\157\157\164\040\103\145\162\164
\151\146\151\143\141\164\145\040\101\165\164\150\157\162\151\164
\171\040\055\040\107\062
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END

CKA\_ID UTF8 "0"

CKA\_ISSUER MULTILINE\_OCTAL

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\061\020\060\016\006\003\125\004\010\023\007\101\162\151\172\157  
\156\141\061\023\060\021\006\003\125\004\007\023\012\123\143\157  
\164\164\163\144\141\154\145\061\032\060\030\006\003\125\004\012  
\023\021\107\157\104\141\144\144\171\056\143\157\155\054\040\111  
\156\143\056\061\061\060\057\006\003\125\004\003\023\050\107\157  
\040\104\141\144\144\171\040\122\157\157\164\040\103\145\162\164  
\151\146\151\143\141\164\145\040\101\165\164\150\157\162\151\164  
\171\040\055\040\107\062

END

CKA\_SERIAL\_NUMBER

MULTILINE\_OCTAL

\002\001\000

END

CKA\_VALUE MULTILINE\_OCTAL

\060\202\003\305\060\202\002\255\240\003\002\001\002\002\001\000  
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\201\203\061\013\060\011\006\003\125\004\006\023\002\125\123\061  
\020\060\016\006\003\125\004\010\023\007\101\162\151\172\157\156  
\141\061\023\060\021\006\003\125\004\007\023\012\123\143\157\164  
\164\163\144\141\154\145\061\032\060\030\006\003\125\004\012\023  
\021\107\157\104\141\144\144\171\056\143\157\155\054\040\111\156  
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\104\141\144\144\171\040\122\157\157\164\040\103\145\162\164\151  
\146\151\143\141\164\145\040\101\165\164\150\157\162\151\164\171  
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\015\363\000\146\042\310\215\151\155\066\214\021\030\267\323\262  
\034\140\264\070\372\002\214\316\323\335\106\007\336\012\076\353  
\135\174\310\174\373\260\053\123\244\222\142\151\121\045\005\141  
\032\104\201\214\054\251\103\226\043\337\254\072\201\232\016\051

\305\034\251\351\135\036\266\236\236\060\012\071\316\361\210\200  
\373\113\135\314\062\354\205\142\103\045\064\002\126\047\001\221  
\264\073\160\052\077\156\261\350\234\210\001\175\237\324\371\333  
\123\155\140\235\277\054\347\130\253\270\137\106\374\316\304\033  
\003\074\011\353\111\061\134\151\106\263\340\107\002\003\001\000  
\001\243\102\060\100\060\017\006\003\125\035\023\001\001\377\004  
\005\060\003\001\001\377\060\016\006\003\125\035\017\001\001\377  
\004\004\003\002\001\006\060\035\006\003\125\035\016\004\026\004  
\024\072\232\205\007\020\147\050\266\357\366\275\005\101\156\040  
\301\224\332\017\336\060\015\006\011\052\206\110\206\367\015\001  
\001\013\005\000\003\202\001\001\000\231\333\135\171\325\371\227  
\131\147\003\141\361\176\073\006\061\165\055\241\040\216\117\145  
\207\264\367\246\234\274\330\351\057\320\333\132\356\317\164\214  
\163\264\070\102\332\005\173\370\002\165\270\375\245\261\327\256  
\366\327\336\023\313\123\020\176\212\106\321\227\372\267\056\053  
\021\253\220\260\047\200\371\350\237\132\351\067\237\253\344\337  
\154\263\205\027\235\075\331\044\117\171\221\065\326\137\004\353  
\200\203\253\232\002\055\265\020\364\330\220\307\004\163\100\355  
\162\045\240\251\237\354\236\253\150\022\231\127\306\217\022\072  
\011\244\275\104\375\006\025\067\301\233\344\062\243\355\070\350  
\330\144\363\054\176\024\374\002\352\237\315\377\007\150\027\333  
\042\220\070\055\172\215\321\124\361\151\343\137\063\312\172\075  
\173\012\343\312\177\137\071\345\342\165\272\305\166\030\063\316  
\054\360\057\114\255\367\261\347\316\117\250\304\233\112\124\006  
\305\177\175\325\010\017\342\034\376\176\027\270\254\136\366\324  
\026\262\103\011\014\115\366\247\153\264\231\204\145\312\172\210  
\342\342\104\276\134\367\352\034\365

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "Go Daddy Root Certificate Authority - G2"

# Issuer: CN=Go Daddy Root Certificate Authority - G2,O="GoDaddy.com, Inc.",L=Scottsdale,ST=Arizona,C=US

# Serial Number: 0 (0x0)

# Subject: CN=Go Daddy Root Certificate Authority - G2,O="GoDaddy.com, Inc.",L=Scottsdale,ST=Arizona,C=US

# Not Valid Before: Tue Sep 01 00:00:00 2009

# Not Valid After : Thu Dec 31 23:59:59 2037

# Fingerprint (SHA-256):

45:14:0B:32:47:EB:9C:C8:C5:B4:F0:D7:B5:30:91:F7:32:92:08:9E:6E:5A:63:E2:74:9D:D3:AC:A9:19:8E:DA

# Fingerprint

(SHA1): 47:BE:AB:C9:22:EA:E8:0E:78:78:34:62:A7:9F:45:C2:54:FD:E6:8B

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

```

CKA_LABEL UTF8 "Go Daddy Root Certificate Authority - G2"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\107\276\253\311\042\352\350\016\170\170\064\142\247\237\105\302
\124\375\346\213
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\200\072\274\042\301\346\373\215\233\073\047\112\062\033\232\001
END
CKA_ISSUER MULTILINE_OCTAL
\060\201\203\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\020\060\016\006\003\125\004\010\023\007\101\162\151\172\157
\156\141\061\023\060\021\006\003\125\004\007\023\012\123\143\157
\164\164\163\144\141\154\145\061\032\060\030\006\003\125\004\012
\023\021\107\157\104\141\144\144\171\056\143\157\155\054\040\111
\156\143\056\061\061\060\057\006\003\125\004\003\023\050\107\157
\040\104\141\144\144\171\040\122\157\157\164\040\103\145\162\164
\151\146\151\143\141\164\145\040\101\165\164\150\157\162\151\164
\171\040\055\040\107\062
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\001\000
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "Starfield Root Certificate Authority - G2"
#
# Issuer: CN=Starfield Root Certificate Authority - G2,O="Starfield Technologies,
Inc.",L=Scottsdale,ST=Arizona,C=US
# Serial Number: 0 (0x0)
# Subject: CN=Starfield Root Certificate Authority - G2,O="Starfield Technologies,
Inc.",L=Scottsdale,ST=Arizona,C=US
# Not Valid Before: Tue Sep 01 00:00:00 2009
# Not Valid After : Thu Dec 31 23:59:59 2037
# Fingerprint (SHA-256):
2C:E1:CB:0B:F9:D2:F9:E1:02:99:3F:BE:21:51:52:C3:B2:DD:0C:AB:DE:1C:68:E5:31:9B:83:91:54:DB:B7:F5
# Fingerprint (SHA1): B5:1C:06:7C:EE:2B:0C:3D:F8:55:AB:2D:92:F4:FE:39:D4:E7:0F:0E
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN
CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Starfield Root Certificate Authority - G2"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509

```

CKA\_SUBJECT MULTILINE\_OCTAL

\060\201\217\061\013\060\011\006\003\125\004\006\023\002\125\123  
\061\020\060\016\006\003\125\004\010\023\007\101\162\151\172\157  
\156\141\061\023\060\021\006\003\125\004\007\023\012\123\143\157  
\164\164\163\144\141\154\145\061\045\060\043\006\003\125\004\012  
\023\034\123\164\141\162\146\151\145\154\144\040\124\145\143\150  
\156\157\154\157\147\151\145\163\054\040\111\156\143\056\061\062  
\060\060\006\003\125\004\003\023\051\123\164\141\162\146\151\145  
\154\144\040\122\157\157\164\040\103\145\162\164\151\146\151\143  
\141\164\145\040\101\165\164\150\157\162\151\164\171\040\055\040  
\107\062

END

CKA\_ID UTF8 "0"

CKA\_ISSUER MULTILINE\_OCTAL

\060\201\217\061\013\060\011\006\003\125\004\006\023\002\125\123  
\061\020\060\016\006\003\125\004\010\023\007\101\162\151\172\157  
\156\141\061\023\060\021\006\003\125\004\007\023\012\123\143\157  
\164\164\163\144\141\154\145\061\045\060\043\006\003\125\004\012  
\023\034\123\164\141\162\146\151\145\154\144\040\124\145\143\150  
\156\157\154\157\147\151\145\163\054\040\111\156\143\056\061\062  
\060\060\006\003\125\004\003\023\051\123\164\141\162\146\151\145  
\154\144\040\122\157\157\164\040\103\145\162\164\151\146\151\143  
\141\164\145\040\101\165\164\150\157\162\151\164\171\040\055\040  
\107\062

END

CKA\_SERIAL\_NUMBER

MULTILINE\_OCTAL

\002\001\000

END

CKA\_VALUE MULTILINE\_OCTAL

\060\202\003\335\060\202\002\305\240\003\002\001\002\002\001\000  
\060\015\006\011\052\206\110\206\367\015\001\001\013\005\000\060  
\201\217\061\013\060\011\006\003\125\004\006\023\002\125\123\061  
\020\060\016\006\003\125\004\010\023\007\101\162\151\172\157\156  
\141\061\023\060\021\006\003\125\004\007\023\012\123\143\157\164  
\164\163\144\141\154\145\061\045\060\043\006\003\125\004\012\023  
\034\123\164\141\162\146\151\145\154\144\040\124\145\143\150\156  
\157\154\157\147\151\145\163\054\040\111\156\143\056\061\062\060  
\060\006\003\125\004\003\023\051\123\164\141\162\146\151\145\154  
\144\040\122\157\157\164\040\103\145\162\164\151\146\151\143\141  
\164\145\040\101\165\164\150\157\162\151\164\171\040\055\040\107  
\062\060\036\027\015\060\071\060\071\060\061\060\060\060\060\060  
\060\132\027\015\063\067\061\062\063\061\062\063\065\071\065\071  
\132\060\201\217\061\013\060\011\006\003\125\004\006\023\002\125  
\123\061\020\060\016\006\003\125\004\010\023\007\101\162\151\172  
\157\156\141\061\023\060\021\006\003\125\004\007\023\012\123\143  
\157\164\164\163\144\141\154\145\061\045\060\043\006\003\125\004  
\012\023\034\123\164\141\162\146\151\145\154\144\040\124\145\143

\150\156\157\154\157\147\151\145\163\054\040\111\156\143\056\061  
\062\060\060\006\003\125\004\003\023\051\123\164\141\162\146\151  
\145\154\144\040\122\157\157\164\040\103\145\162\164\151\146\151  
\143\141\164\145\040\101\165\164\150\157\162\151\164\171\040\055  
\040\107\062\060\202\001\042\060\015\006\011\052\206\110\206\367  
\015\001\001\001\005\000\003\202\001\017\000\060\202\001\012\002  
\202\001\001\000\275\355\301\003\374\366\217\374\002\261\157\133  
\237\110\331\235\171\342\242\267\003\141\126\030\303\107\266\327  
\312\075\065\056\211\103\367\241\151\233\336\212\032\375\023\040  
\234\264\111\167\062\051\126\375\271\354\214\335\042\372\162\334  
\047\141\227\356\366\132\204\354\156\031\271\211\054\334\204\133  
\325\164\373\153\137\305\211\245\020\122\211\106\125\364\270\165  
\034\346\177\344\124\256\113\370\125\162\127\002\031\370\027\161  
\131\353\036\050\007\164\305\235\110\276\154\264\364\244\260\363  
\144\067\171\222\300\354\106\136\177\341\155\123\114\142\257\315  
\037\013\143\273\072\235\373\374\171\000\230\141\164\317\046\202  
\100\143\363\262\162\152\031\015\231\312\324\016\165\314\067\373  
\213\211\301\131\361\142\177\137\263\137\145\060\370\247\267\115  
\166\132\036\166\136\064\300\350\226\126\231\212\263\360\177\244  
\315\275\334\062\061\174\221\317\340\137\021\370\153\252\111\134  
\321\231\224\321\242\343\143\133\011\166\265\126\142\341\113\164  
\035\226\324\046\324\010\004\131\320\230\016\016\346\336\374\303  
\354\037\220\361\002\003\001\000\001\243\102\060\100\060\017\006  
\003\125\035\023\001\001\377\004\005\060\003\001\001\377\060\016  
\006\003\125\035\017\001\001\377\004\004\003\002\001\006\060\035  
\006\003\125\035\016\004\026\004\024\174\014\062\037\247\331\060  
\177\304\175\150\243\142\250\241\316\253\007\133\047\060\015\006  
\011\052\206\110\206\367\015\001\001\013\005\000\003\202\001\001  
\000\021\131\372\045\117\003\157\224\231\073\232\037\202\205\071  
\324\166\005\224\136\341\050\223\155\142\135\011\302\240\250\324  
\260\165\070\361\064\152\235\344\237\212\206\046\121\346\054\321  
\306\055\156\225\040\112\222\001\354\270\212\147\173\061\342\147  
\056\214\225\003\046\056\103\235\112\061\366\016\265\014\273\267  
\342\067\177\042\272\000\243\016\173\122\373\153\273\073\304\323  
\171\121\116\315\220\364\147\007\031\310\074\106\172\015\001\175  
\305\130\347\155\346\205\060\027\232\044\304\020\340\004\367\340  
\362\177\324\252\012\377\102\035\067\355\224\345\144\131\022\040  
\167\070\323\062\076\070\201\165\226\163\372\150\217\261\313\316  
\037\305\354\372\234\176\317\176\261\361\007\055\266\374\277\312  
\244\277\320\227\005\112\274\352\030\050\002\220\275\124\170\011  
\041\161\323\321\175\035\331\026\260\251\141\075\320\012\000\042  
\374\307\173\313\011\144\105\013\073\100\201\367\175\174\062\365  
\230\312\130\216\175\052\356\220\131\163\144\371\066\164\136\045  
\241\365\146\005\056\177\071\025\251\052\373\120\213\216\205\151  
\364

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

```

CK_BBOOL CK_TRUE
CKA_NSS_SERVER_DISTRUST_AFTER CK_BBOOL CK_FALSE
CKA_NSS_EMAIL_DISTRUST_AFTER CK_BBOOL CK_FALSE

# Trust for "Starfield Root Certificate Authority - G2"
# Issuer: CN=Starfield Root Certificate Authority - G2,O="Starfield Technologies,
Inc.",L=Scottsdale,ST=Arizona,C=US
# Serial Number: 0 (0x0)
# Subject: CN=Starfield Root Certificate Authority - G2,O="Starfield Technologies,
Inc.",L=Scottsdale,ST=Arizona,C=US
#
Not Valid Before: Tue Sep 01 00:00:00 2009
# Not Valid After : Thu Dec 31 23:59:59 2037
# Fingerprint (SHA-256):
2C:E1:CB:0B:F9:D2:F9:E1:02:99:3F:BE:21:51:52:C3:B2:DD:0C:AB:DE:1C:68:E5:31:9B:83:91:54:DB:B7:F5
# Fingerprint (SHA1): B5:1C:06:7C:EE:2B:0C:3D:F8:55:AB:2D:92:F4:FE:39:D4:E7:0F:0E
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Starfield Root Certificate Authority - G2"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\265\034\006\174\356\053\014\075\370\125\253\055\222\364\376\071
\324\347\017\016
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\326\071\201\306\122\176\226\151\374\374\312\146\355\005\362\226
END
CKA_ISSUER MULTILINE_OCTAL
\060\201\217\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\020\060\016\006\003\125\004\010\023\007\101\162\151\172\157
\156\141\061\023\060\021\006\003\125\004\007\023\012\123\143\157
\164\164\163\144\141\154\145\061\045\060\043\006\003\125\004\012
\023\034\123\164\141\162\146\151\145\154\144\040\124\145\143\150
\156\157\154\157\147\151\145\163\054\040\111\156\143\056\061\062
\060\060\006\003\125\004\003\023\051\123\164\141\162\146\151\145
\154\144\040\122\157\157\164\040\103\145\162\164\151\146\151\143
\141\164\145\040\101\165\164\150\157\162\151\164\171\040\055\040
\107\062
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\001\000
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

```

```

#
# Certificate "Starfield Services Root Certificate Authority - G2"
#
# Issuer: CN=Starfield Services Root Certificate Authority - G2,O="Starfield Technologies,
Inc.",L=Scottsdale,ST=Arizona,C=US
# Serial Number: 0 (0x0)
# Subject: CN=Starfield Services Root Certificate Authority - G2,O="Starfield Technologies,
Inc.",L=Scottsdale,ST=Arizona,C=US
# Not Valid Before:
  Tue Sep 01 00:00:00 2009
# Not Valid After : Thu Dec 31 23:59:59 2037
# Fingerprint (SHA-256):
56:8D:69:05:A2:C8:87:08:A4:B3:02:51:90:ED:CF:ED:B1:97:4A:60:6A:13:C6:E5:29:0F:CB:2A:E6:3E:DA:B5
# Fingerprint (SHA1): 92:5A:8F:8D:2C:6D:04:E0:66:5F:59:6A:FF:22:D8:63:E8:25:6F:3F
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Starfield Services Root Certificate Authority - G2"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\201\230\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\020\060\016\006\003\125\004\010\023\007\101\162\151\172\157
\156\141\061\023\060\021\006\003\125\004\007\023\012\123\143\157
\164\164\163\144\141\154\145\061\045\060\043\006\003\125\004\012
\023\034\123\164\141\162\146\151\145\154\144\040\124\145\143\150
\156\157\154\157\147\151\145\163\054\040\111\156\143\056\061\073
\060\071\006\003\125\004\003\023\062\123\164\141\162\146\151\145
\154\144\040\123\145\162\166\151\143\145\163\040\122\157\157\164
\040\103\145\162\164\151\146\151\143\141\164\145\040\101\165\164
\150\157\162\151\164\171\040\055\040\107\062
END
CKA_ID
  UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\201\230\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\020\060\016\006\003\125\004\010\023\007\101\162\151\172\157
\156\141\061\023\060\021\006\003\125\004\007\023\012\123\143\157
\164\164\163\144\141\154\145\061\045\060\043\006\003\125\004\012
\023\034\123\164\141\162\146\151\145\154\144\040\124\145\143\150
\156\157\154\157\147\151\145\163\054\040\111\156\143\056\061\073
\060\071\006\003\125\004\003\023\062\123\164\141\162\146\151\145
\154\144\040\123\145\162\166\151\143\145\163\040\122\157\157\164
\040\103\145\162\164\151\146\151\143\141\164\145\040\101\165\164
\150\157\162\151\164\171\040\055\040\107\062
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL

```



\002\001\000

END

CKA\_VALUE MULTILINE\_OCTAL

\060\202\003\357\060\202\002\327\240\003\002\001\002\002\001\000  
\060\015\006\011\052\206\110\206\367\015\001\001\013\005\000\060  
\201\230\061\013\060\011\006\003\125\004\006\023\002\125\123\061  
\020\060\016\006\003\125\004\010\023\007\101\162\151\172\157\156  
\141\061\023\060\021\006\003\125\004\007\023\012\123\143\157\164  
\164\163\144\141\154\145\061\045\060\043\006\003\125\004\012\023  
\034\123\164\141\162\146\151\145\154\144\040\124\145\143\150\156  
\157\154\157\147\151\145\163\054\040\111\156\143\056\061\073\060  
\071\006\003\125\004\003\023\062\123\164\141\162\146\151\145\154  
\144\040\123\145\162\166\151\143\145\163\040\122\157\157\164\040  
\103\145\162\164\151\146\151\143\141\164\145\040\101\165\164\150  
\157\162\151\164\171\040\055\040\107\062\060\036\027\015\060\071  
\060\071\060\061\060\060\060\060\060\132\027\015\063\067\061  
\062\063\061\062\063\065\071\065\071\132\060\201\230\061\013\060  
\011\006\003\125\004\006\023\002\125\123\061\020\060\016\006\003  
\125\004\010\023\007\101\162\151\172\157\156\141\061\023\060\021  
\006\003\125\004\007\023\012\123\143\157\164\164\163\144\141\154  
\145\061\045\060\043\006\003\125\004\012\023\034\123\164\141\162  
\146\151\145\154\144\040\124\145\143\150\156\157\154\157\147\151  
\145\163\054\040\111\156\143\056\061\073\060\071\006\003\125\004  
\003\023\062\123\164\141\162\146\151\145\154\144\040\123\145\162  
\166\151\143\145\163\040\122\157\157\164\040\103\145\162\164\151  
\146\151\143\141\164\145\040\101\165\164\150\157\162\151\164\171  
\040\055\040\107\062\060\202\001\042\060\015\006\011\052\206\110  
\206\367\015\001\001\001\005\000\003\202\001\017\000\060\202\001  
\012\002\202\001\001\000\325\014\072\304\052\371\116\342\365\276  
\031\227\137\216\210\123\261\037\077\313\317\237\040\023\155\051  
\072\310\017\175\074\367\153\166\070\143\331\066\140\250\233\136  
\134\000\200\262\057\131\177\366\207\371\045\103\206\347\151\033  
\122\232\220\341\161\343\330\055\015\116\157\366\310\111\331\266  
\363\032\126\256\053\266\164\024\353\317\373\046\343\032\272\035  
\226\056\152\073\130\224\211\107\126\377\045\240\223\160\123\203  
\332\204\164\024\303\147\236\004\150\072\337\216\100\132\035\112  
\116\317\103\221\073\347\126\326\000\160\313\122\356\173\175\256  
\072\347\274\061\371\105\366\302\140\317\023\131\002\053\200\314  
\064\107\337\271\336\220\145\155\002\317\054\221\246\246\347\336  
\205\030\111\174\146\116\243\072\155\251\265\356\064\056\272\015  
\003\270\063\337\107\353\261\153\215\045\331\233\316\201\321\105  
\106\062\226\160\207\336\002\016\111\103\205\266\154\163\273\144  
\352\141\101\254\311\324\124\337\207\057\307\042\262\046\314\237  
\131\124\150\237\374\276\052\057\304\125\034\165\100\140\027\205  
\002\125\071\213\177\005\002\003\001\000\001\243\102\060\100\060  
\017\006\003\125\035\023\001\001\377\004\005\060\003\001\001\377  
\060\016\006\003\125\035\017\001\001\377\004\004\003\002\001\006  
\060\035\006\003\125\035\016\004\026\004\024\234\137\000\337\252

```
\001\327\060\053\070\210\242\270\155\112\234\362\021\221\203\060
\015\006\011\052\206\110\206\367\015\001\001\013\005\000\003\202
\001\001\000\113\066\246\204\167\151\335\073\031\237\147\043\010
\157\016\141\311\375\204\334\137\330\066\201\315\330\033\101\055
\237\140\335\307\032\150\331\321\156\206\341\210\043\317\023\336
\103\317\342\064\263\004\235\037\051\325\277\370\136\310\325\301
\275\356\222\157\062\164\362\221\202\057\275\202\102\172\255\052
\267\040\175\115\274\172\125\022\302\025\352\275\367\152\225\056
\154\164\237\317\034\264\362\305\001\243\205\320\162\076\255\163
\253\013\233\165\014\155\105\267\216\224\254\226\067\265\240\320
\217\025\107\016\343\350\203\335\217\375\357\101\001\167\314\047
\251\142\205\063\362\067\010\357\161\317\167\006\336\310\031\035
\210\100\317\175\106\035\377\036\307\341\316\377\043\333\306\372
\215\125\116\251\002\347\107\021\106\076\364\375\275\173\051\046
\273\251\141\142\067\050\266\055\052\366\020\206\144\311\160\247
\322\255\267\051\160\171\352\074\332\143\045\237\375\150\267\060
\354\160\373\165\212\267\155\140\147\262\036\310\271\351\330\250
\157\002\213\147\015\115\046\127\161\332\040\374\301\112\120\215
\261\050\272
```

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "Starfield Services Root Certificate Authority - G2"

# Issuer: CN=Starfield Services Root Certificate Authority - G2,O="Starfield Technologies,  
Inc.",L=Scottsdale,ST=Arizona,C=US

# Serial Number: 0 (0x0)

# Subject: CN=Starfield Services Root Certificate Authority - G2,O="Starfield Technologies,  
Inc.",L=Scottsdale,ST=Arizona,C=US

# Not Valid Before: Tue Sep 01 00:00:00 2009

# Not Valid After : Thu Dec 31 23:59:59 2037

# Fingerprint (SHA-256):

56:8D:69:05:A2:C8:87:08:A4:B3:02:51:90:ED:CF:ED:B1:97:4A:60:6A:13:C6:E5:29:0F:CB:2A:E6:3E:DA:B5

# Fingerprint (SHA1): 92:5A:8F:8D:2C:6D:04:E0:66:5F:59:6A:FF:22:D8:63:E8:25:6F:3F

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "Starfield Services Root  
Certificate Authority - G2"

CKA\_CERT\_SHA1\_HASH MULTILINE\_OCTAL

```
\222\132\217\215\054\155\004\340\146\137\131\152\377\042\330\143
\350\045\157\077
```

END

CKA\_CERT\_MD5\_HASH MULTILINE\_OCTAL

```
\027\065\164\257\173\141\034\353\364\371\074\342\356\100\371\242
```

END

CKA\_ISSUER MULTILINE\_OCTAL

\060\201\230\061\013\060\011\006\003\125\004\006\023\002\125\123  
\061\020\060\016\006\003\125\004\010\023\007\101\162\151\172\157  
\156\141\061\023\060\021\006\003\125\004\007\023\012\123\143\157  
\164\164\163\144\141\154\145\061\045\060\043\006\003\125\004\012  
\023\034\123\164\141\162\146\151\145\154\144\040\124\145\143\150  
\156\157\154\157\147\151\145\163\054\040\111\156\143\056\061\073  
\060\071\006\003\125\004\003\023\062\123\164\141\162\146\151\145  
\154\144\040\123\145\162\166\151\143\145\163\040\122\157\157\164  
\040\103\145\162\164\151\146\151\143\141\164\145\040\101\165\164  
\150\157\162\151\164\171\040\055\040\107\062

END

CKA\_SERIAL\_NUMBER MULTILINE\_OCTAL

\002\001\000

END

CKA\_TRUST\_SERVER\_AUTH CK\_TRUST CKT\_NSS\_TRUSTED\_DELEGATOR

CKA\_TRUST\_EMAIL\_PROTECTION

CK\_TRUST CKT\_NSS\_MUST\_VERIFY\_TRUST

CKA\_TRUST\_CODE\_SIGNING CK\_TRUST CKT\_NSS\_MUST\_VERIFY\_TRUST

CKA\_TRUST\_STEP\_UP\_APPROVED CK\_BBOOL CK\_FALSE

#

# Certificate "AffirmTrust Commercial"

#

# Issuer: CN=AffirmTrust Commercial,O=AffirmTrust,C=US

# Serial Number:77:77:06:27:26:a9:b1:7c

# Subject: CN=AffirmTrust Commercial,O=AffirmTrust,C=US

# Not Valid Before: Fri Jan 29 14:06:06 2010

# Not Valid After : Tue Dec 31 14:06:06 2030

# Fingerprint (SHA-256):

03:76:AB:1D:54:C5:F9:80:3C:E4:B2:E2:01:A0:EE:7E:EF:7B:57:B6:36:E8:A9:3C:9B:8D:48:60:C9:6F:5F:A7

# Fingerprint (SHA1): F9:B5:B6:32:45:5F:9C:BE:EC:57:5F:80:DC:E9:6E:2C:C7:B2:78:B7

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_CERTIFICATE

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "AffirmTrust Commercial"

CKA\_CERTIFICATE\_TYPE CK\_CERTIFICATE\_TYPE CKC\_X\_509

CKA\_SUBJECT MULTILINE\_OCTAL

\060\104\061\013\060\011\006\003\125\004\006\023\002\125\123\061  
\024\060\022\006\003\125\004\012\014\013\101\146\146\151\162\155  
\124\162\165\163\164\061\037\060\035\006\003\125\004\003\014\026  
\101\146\146\151\162\155\124\162\165\163\164\040\103\157\155\155  
\145\162\143\151\141\154

END

CKA\_ID

UTF8 "0"

CKA\_ISSUER MULTILINE\_OCTAL

\060\104\061\013\060\011\006\003\125\004\006\023\002\125\123\061  
\024\060\022\006\003\125\004\012\014\013\101\146\146\151\162\155  
\124\162\165\163\164\061\037\060\035\006\003\125\004\003\014\026  
\101\146\146\151\162\155\124\162\165\163\164\040\103\157\155\155  
\145\162\143\151\141\154

END

CKA\_SERIAL\_NUMBER MULTILINE\_OCTAL

\002\010\167\167\006\047\046\251\261\174

END

CKA\_VALUE MULTILINE\_OCTAL

\060\202\003\114\060\202\002\064\240\003\002\001\002\002\010\167  
\167\006\047\046\251\261\174\060\015\006\011\052\206\110\206\367  
\015\001\001\013\005\000\060\104\061\013\060\011\006\003\125\004  
\006\023\002\125\123\061\024\060\022\006\003\125\004\012\014\013  
\101\146\146\151\162\155\124\162\165\163\164\061\037\060\035\006  
\003\125\004\003\014\026\101\146\146\151\162\155\124\162\165\163  
\164\040\103\157\155\155\145\162\143\151\141\154\060\036\027\015  
\061\060\060\061\062\071\061\064\060\066\060\066\132\027\015\063  
\060\061\062\063\061\061\064\060\066\060\066\132\060\104\061\013  
\060\011\006\003\125\004\006\023\002\125\123\061\024\060\022\006  
\003\125\004\012\014\013\101\146\146\151\162\155\124\162\165\163  
\164\061\037\060\035\006\003\125\004\003\014\026\101\146\146\151  
\162\155\124\162\165\163\164\040\103\157\155\155\145\162\143\151  
\141\154\060\202\001\042\060\015\006\011\052\206\110\206\367\015  
\001\001\001\005\000\003\202\001\017\000\060\202\001\012\002\202  
\001\001\000\366\033\117\147\007\053\241\025\365\006\042\313\037  
\001\262\343\163\105\006\104\111\054\273\111\045\024\326\316\303  
\267\253\054\117\306\101\062\224\127\372\022\247\133\016\342\217  
\037\036\206\031\247\252\265\055\271\137\015\212\302\257\205\065  
\171\062\055\273\034\142\067\362\261\133\112\075\312\315\161\137  
\351\102\276\224\350\310\336\371\042\110\144\306\345\253\306\053  
\155\255\005\360\372\325\013\317\232\345\360\120\244\213\073\107  
\245\043\133\172\172\370\063\077\270\357\231\227\343\040\301\326  
\050\211\317\224\373\271\105\355\343\100\027\021\324\164\360\013  
\061\342\053\046\152\233\114\127\256\254\040\076\272\105\172\005  
\363\275\233\151\025\256\175\116\040\143\304\065\166\072\007\002  
\311\067\375\307\107\356\350\361\166\035\163\025\362\227\244\265  
\310\172\171\331\102\252\053\177\134\376\316\046\117\243\146\201  
\065\257\104\272\124\036\034\060\062\145\235\346\074\223\136\120  
\116\172\343\072\324\156\314\032\373\371\322\067\256\044\052\253  
\127\003\042\050\015\111\165\177\267\050\332\165\277\216\343\334  
\016\171\061\002\003\001\000\001\243\102\060\100\060\035\006\003  
\125\035\016\004\026\004\024\235\223\306\123\213\136\312\257\077  
\237\036\017\345\231\225\274\044\366\224\217\060\017\006\003\125  
\035\023\001\001\377\004\005\060\003\001\001\377\060\016\006\003  
\125\035\017\001\001\377\004\004\003\002\001\006\060\015\006\011

```
\052\206\110\206\367\015\001\001\013\005\000\003\202\001\001\000
\130\254\364\004\016\315\300\015\377\012\375\324\272\026\137\051
\275\173\150\231\130\111\322\264\035\067\115\177\047\175\106\006
\135\103\306\206\056\076\163\262\046\175\117\223\251\266\304\052
\232\253\041\227\024\261\336\214\323\253\211\025\330\153\044\324
\361\026\256\330\244\134\324\177\121\216\355\030\001\261\223\143
\275\274\370\141\200\232\236\261\316\102\160\342\251\175\006\045
\175\047\241\376\157\354\263\036\044\332\343\113\125\032\000\073
\065\264\073\331\327\135\060\375\201\023\211\362\302\006\053\355
\147\304\216\311\103\262\134\153\025\211\002\274\142\374\116\362
\265\063\252\262\157\323\012\242\120\343\366\073\350\056\104\302
\333\146\070\251\063\126\110\361\155\033\063\215\015\214\077\140
\067\235\323\312\155\176\064\176\015\237\162\166\213\033\237\162
\375\122\065\101\105\002\226\057\034\262\232\163\111\041\261\111
\107\105\107\264\357\152\064\021\311\115\232\314\131\267\326\002
\236\132\116\145\265\224\256\033\337\051\260\026\361\277\000\236
\007\072\027\144\265\004\265\043\041\231\012\225\073\227\174\357
END
```

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "AffirmTrust Commercial"

# Issuer: CN=AffirmTrust Commercial,O=AffirmTrust,C=US

# Serial Number:77:77:06:27:26:a9:b1:7c

# Subject: CN=AffirmTrust Commercial,O=AffirmTrust,C=US

# Not Valid Before: Fri Jan 29 14:06:06 2010

# Not Valid After : Tue Dec 31 14:06:06 2030

# Fingerprint (SHA-256):

03:76:AB:1D:54:C5:F9:80:3C:E4:B2:E2:01:A0:EE:7E:EF:7B:57:B6:36:E8:A9:3C:9B:8D:48:60:C9:6F:5F:A7

# Fingerprint (SHA1): F9:B5:B6:32:45:5F:9C:BE:EC:57:5F:80:DC:E9:6E:2C:C7:B2:78:B7

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "AffirmTrust Commercial"

CKA\_CERT\_SHA1\_HASH MULTILINE\_OCTAL

```
\371\265\266\062\105\137\234\276\354\127\137\200\334\351\156\054
\307\262\170\267
```

END

CKA\_CERT\_MD5\_HASH

MULTILINE\_OCTAL

```
\202\222\272\133\357\315\212\157\246\075\125\371\204\366\326\267
```

END

CKA\_ISSUER MULTILINE\_OCTAL

```
\060\104\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\024\060\022\006\003\125\004\012\014\013\101\146\146\151\162\155
```

```

\124\162\165\163\164\061\037\060\035\006\003\125\004\003\014\026
\101\146\146\151\162\155\124\162\165\163\164\040\103\157\155\155
\145\162\143\151\141\154
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\010\167\167\006\047\046\251\261\174
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "AffirmTrust Networking"
#
# Issuer: CN=AffirmTrust Networking,O=AffirmTrust,C=US
# Serial Number:7c:4f:04:39:1c:d4:99:2d
# Subject: CN=AffirmTrust Networking,O=AffirmTrust,C=US
# Not Valid Before: Fri Jan 29 14:08:24 2010
# Not Valid After : Tue Dec
31 14:08:24 2030
# Fingerprint (SHA-256):
0A:81:EC:5A:92:97:77:F1:45:90:4A:F3:8D:5D:50:9F:66:B5:E2:C5:8F:CD:B5:31:05:8B:0E:17:F3:F0:B4:1B
# Fingerprint (SHA1): 29:36:21:02:8B:20:ED:02:F5:66:C5:32:D1:D6:ED:90:9F:45:00:2F
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "AffirmTrust Networking"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\104\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\024\060\022\006\003\125\004\012\014\013\101\146\146\151\162\155
\124\162\165\163\164\061\037\060\035\006\003\125\004\003\014\026
\101\146\146\151\162\155\124\162\165\163\164\040\116\145\164\167
\157\162\153\151\156\147
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\104\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\024\060\022\006\003\125\004\012\014\013\101\146\146\151\162\155
\124\162\165\163\164\061\037\060\035\006\003\125\004\003\014\026
\101\146\146\151\162\155\124\162\165\163\164\040\116\145\164\167
\157\162\153\151\156\147
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\010\174\117\004\071\034\324\231\055

```

END

CKA\_VALUE MULTILINE\_OCTAL

\060\202\003\114\060\202\002\064\240\003\002\001\002\002\010\174  
\117\004\071\034\324\231\055\060\015\006\011\052\206\110\206\367  
\015\001\001\005\005\000\060\104\061\013\060\011\006\003\125\004  
\006\023\002\125\123\061\024\060\022\006\003\125\004\012\014\013  
\101\146\146\151\162\155\124\162\165\163\164\061\037\060\035\006  
\003\125\004\003\014\026\101\146\146\151\162\155\124\162\165\163  
\164\040\116\145\164\167\157\162\153\151\156\147\060\036\027\015  
\061\060\060\061\062\071\061\064\060\070\062\064\132\027\015\063  
\060\061\062\063\061\061\064\060\070\062\064\132\060\104\061\013  
\060\011\006\003\125\004\006\023\002\125\123\061\024\060\022\006  
\003\125\004\012\014\013\101\146\146\151\162\155\124\162\165\163  
\164\061\037\060\035\006\003\125\004\003\014\026\101\146\146\151  
\162\155\124\162\165\163\164\040\116\145\164\167\157\162\153\151  
\156\147\060\202\001\042\060\015\006\011\052\206\110\206\367\015  
\001\001\001\005\000\003\202\001\017\000\060\202\001\012\002\202  
\001\001\000\264\204\314\063\027\056\153\224\154\153\141\122\240  
\353\243\317\171\224\114\345\224\200\231\313\125\144\104\145\217  
\147\144\342\006\343\134\067\111\366\057\233\204\204\036\055\362  
\140\235\060\116\314\204\205\342\054\317\036\236\376\066\253\063  
\167\065\104\330\065\226\032\075\066\350\172\016\330\325\107\241  
\152\151\213\331\374\273\072\256\171\132\325\364\326\161\273\232  
\220\043\153\232\267\210\164\207\014\036\137\271\236\055\372\253  
\123\053\334\273\166\076\223\114\010\010\214\036\242\043\034\324  
\152\255\042\272\231\001\056\155\145\313\276\044\146\125\044\113  
\100\104\261\033\327\341\302\205\300\336\020\077\075\355\270\374  
\361\361\043\123\334\277\145\227\157\331\371\100\161\215\175\275  
\225\324\316\276\240\136\047\043\336\375\246\320\046\016\000\051  
\353\074\106\360\075\140\277\077\120\322\334\046\101\121\236\024  
\067\102\004\243\160\127\250\033\207\355\055\372\173\356\214\012  
\343\251\146\211\031\313\101\371\335\104\066\141\317\342\167\106  
\310\175\366\364\222\201\066\375\333\064\361\162\176\363\014\026  
\275\264\025\002\003\001\000\001\243\102\060\100\060\035\006\003  
\125\035\016\004\026\004\024\007\037\322\347\234\332\302\156\242  
\100\264\260\172\120\020\120\164\304\310\275\060\017\006\003\125  
\035\023\001\001\377\004\005\060\003\001\001\377\060\016\006\003  
\125\035\017\001\001\377\004\004\003\002\001\006\060\015\006\011  
\052\206\110\206\367\015\001\001\005\005\000\003\202\001\001\000  
\211\127\262\026\172\250\302\375\326\331\233\233\064\302\234\264  
\062\024\115\247\244\337\354\276\247\276\370\103\333\221\067\316  
\264\062\056\120\125\032\065\116\166\103\161\040\357\223\167\116  
\025\160\056\207\303\301\035\155\334\313\265\047\324\054\126\321  
\122\123\072\104\322\163\310\304\033\005\145\132\142\222\234\356  
\101\215\061\333\347\064\352\131\041\325\001\172\327\144\270\144  
\071\315\311\355\257\355\113\003\110\247\240\231\001\200\334\145  
\243\066\256\145\131\110\117\202\113\310\145\361\127\035\345\131  
\056\012\077\154\330\321\365\345\011\264\154\124\000\012\340\025

```
\115\207\165\155\267\130\226\132\335\155\322\000\240\364\233\110
\276\303\067\244\272\066\340\174\207\205\227\032\025\242\336\056
\242\133\275\257\030\371\220\120\315\160\131\370\047\147\107\313
\307\240\007\072\175\321\054\135\154\031\072\146\265\175\375\221
\157\202\261\276\010\223\333\024\107\361\242\067\307\105\236\074
\307\167\257\144\250\223\337\366\151\203\202\140\362\111\102\064
\355\132\000\124\205\034\026\066\222\014\134\372\246\255\277\333
END
```

```
CKA_NSS_MOZILLA_CA_POLICY
CK_BBOOL CK_TRUE
CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE
CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE
```

```
# Trust for "AffirmTrust Networking"
# Issuer: CN=AffirmTrust Networking,O=AffirmTrust,C=US
# Serial Number:7c:4f:04:39:1c:d4:99:2d
# Subject: CN=AffirmTrust Networking,O=AffirmTrust,C=US
# Not Valid Before: Fri Jan
29 14:08:24 2010
# Not Valid After : Tue Dec 31 14:08:24 2030
# Fingerprint (SHA-256):
0A:81:EC:5A:92:97:77:F1:45:90:4A:F3:8D:5D:50:9F:66:B5:E2:C5:8F:CD:B5:31:05:8B:0E:17:F3:F0:B4:1B
# Fingerprint (SHA1): 29:36:21:02:8B:20:ED:02:F5:66:C5:32:D1:D6:ED:90:9F:45:00:2F
```

```
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "AffirmTrust Networking"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\051\066\041\002\213\040\355\002\365\146\305\062\321\326\355\220
\237\105\000\057
END
```

```
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\102\145\312\276\001\232\232\114\251\214\101\111\315\300\325\177
END
```

```
CKA_ISSUER MULTILINE_OCTAL
\060\104\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\024\060\022\006\003\125\004\012\014\013\101\146\146\151\162\155
\124\162\165\163\164\061\037\060\035\006\003\125\004\003\014\026
\101\146\146\151\162\155\124\162\165\163\164\040\116\145\164\167
\157\162\153\151\156\147
END
```

```
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\010\174\117\004\071\034\324\231\055
END
```

```
CKA_TRUST_SERVER_AUTH
CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
```



CKA\_TRUST\_CODE\_SIGNING CK\_TRUST CKT\_NSS\_MUST\_VERIFY\_TRUST  
CKA\_TRUST\_STEP\_UP\_APPROVED CK\_BBOOL CK\_FALSE

#

# Certificate "AffirmTrust Premium"

#

# Issuer: CN=AffirmTrust Premium,O=AffirmTrust,C=US

# Serial Number:6d:8c:14:46:b1:a6:0a:ee

# Subject: CN=AffirmTrust Premium,O=AffirmTrust,C=US

# Not Valid Before: Fri Jan 29 14:10:36 2010

# Not Valid After : Mon Dec 31 14:10:36 2040

# Fingerprint (SHA-256):

70:A7:3F:7F:37:6B:60:07:42:48:90:45:34:B1:14:82:D5:BF:0E:69:8E:CC:49:8D:F5:25:77:EB:F2:E9:3B:9A

# Fingerprint (SHA1): D8:A6:33:2C:E0:03:6F:B1:85:F6:63:4F:7D:6A:06:65:26:32:28:27

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_CERTIFICATE

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "AffirmTrust Premium"

CKA\_CERTIFICATE\_TYPE CK\_CERTIFICATE\_TYPE CKC\_X\_509

CKA\_SUBJECT MULTILINE\_OCTAL

\060\101\061\013\060\011\006\003\125\004\006\023\002\125\123\061  
\024\060\022\006\003\125\004\012\014\013\101\146\146\151\162\155  
\124\162\165\163\164\061\034\060\032\006\003\125\004\003\014\023  
\101\146\146\151\162\155\124\162\165\163\164\040\120\162\145\155  
\151\165\155

END

CKA\_ID

UTF8 "0"

CKA\_ISSUER MULTILINE\_OCTAL

\060\101\061\013\060\011\006\003\125\004\006\023\002\125\123\061  
\024\060\022\006\003\125\004\012\014\013\101\146\146\151\162\155  
\124\162\165\163\164\061\034\060\032\006\003\125\004\003\014\023  
\101\146\146\151\162\155\124\162\165\163\164\040\120\162\145\155  
\151\165\155

END

CKA\_SERIAL\_NUMBER MULTILINE\_OCTAL

\002\010\155\214\024\106\261\246\012\356

END

CKA\_VALUE MULTILINE\_OCTAL

\060\202\005\106\060\202\003\056\240\003\002\001\002\002\010\155  
\214\024\106\261\246\012\356\060\015\006\011\052\206\110\206\367  
\015\001\001\014\005\000\060\101\061\013\060\011\006\003\125\004  
\006\023\002\125\123\061\024\060\022\006\003\125\004\012\014\013  
\101\146\146\151\162\155\124\162\165\163\164\061\034\060\032\006  
\003\125\004\003\014\023\101\146\146\151\162\155\124\162\165\163  
\164\040\120\162\145\155\151\165\155\060\036\027\015\061\060\060  
\061\062\071\061\064\061\060\063\066\132\027\015\064\060\061\062

\063\061\061\064\061\060\063\066\132\060\101\061\013\060\011\006  
\003\125\004\006\023\002\125\123\061\024\060\022\006\003\125\004  
\012\014\013\101\146\146\151\162\155\124\162\165\163\164\061\034  
\060\032\006\003\125\004\003\014\023\101\146\146\151\162\155\124  
\162\165\163\164\040\120\162\145\155\151\165\155\060\202\002\042  
\060\015\006\011\052\206\110\206\367\015\001\001\001\005\000\003  
\202\002\017\000\060\202\002\012\002\202\002\001\000\304\022\337  
\251\137\376\101\335\335\365\237\212\343\366\254\341\074\170\232  
\274\330\360\177\172\240\063\052\334\215\040\133\256\055\157\347  
\223\331\066\160\152\150\317\216\121\243\205\133\147\004\240\020  
\044\157\135\050\202\301\227\127\330\110\051\023\266\341\276\221  
\115\337\205\014\123\030\232\036\044\242\117\217\360\242\205\013  
\313\364\051\177\322\244\130\356\046\115\311\252\250\173\232\331  
\372\070\336\104\127\025\345\370\214\310\331\110\342\015\026\047  
\035\036\310\203\205\045\267\272\252\125\101\314\003\042\113\055  
\221\215\213\346\211\257\146\307\351\377\053\351\074\254\332\322  
\263\303\341\150\234\211\370\172\000\126\336\364\125\225\154\373  
\272\144\335\142\213\337\013\167\062\353\142\314\046\232\233\273  
\252\142\203\114\264\006\172\060\310\051\277\355\006\115\227\271  
\034\304\061\053\325\137\274\123\022\027\234\231\127\051\146\167  
\141\041\061\007\056\045\111\235\030\362\356\363\053\161\214\265  
\272\071\007\111\167\374\357\056\222\220\005\215\055\057\167\173  
\357\103\277\065\273\232\330\371\163\247\054\362\320\127\356\050  
\116\046\137\217\220\150\011\057\270\370\334\006\351\056\232\076  
\121\247\321\042\304\012\247\070\110\154\263\371\377\175\253\206  
\127\343\272\326\205\170\167\272\103\352\110\177\366\330\276\043  
\155\036\277\321\066\154\130\134\361\356\244\031\124\032\365\003  
\322\166\346\341\214\275\074\263\323\110\113\342\310\370\177\222  
\250\166\106\234\102\145\076\244\036\301\007\003\132\106\055\270  
\227\363\267\325\262\125\041\357\272\334\114\000\227\373\024\225  
\047\063\277\350\103\107\106\322\010\231\026\140\073\232\176\322  
\346\355\070\352\354\001\036\074\110\126\111\011\307\114\067\000  
\236\210\016\300\163\341\157\146\351\162\107\060\076\020\345\013  
\003\311\232\102\000\154\305\224\176\141\304\212\337\177\202\032  
\013\131\304\131\062\167\263\274\140\151\126\071\375\264\006\173  
\054\326\144\066\331\275\110\355\204\037\176\245\042\217\052\270  
\102\364\202\267\324\123\220\170\116\055\032\375\201\157\104\327  
\073\001\164\226\102\340\000\342\056\153\352\305\356\162\254\273  
\277\376\352\252\250\370\334\366\262\171\212\266\147\002\003\001  
\000\001\243\102\060\100\060\035\006\003\125\035\016\004\026\004  
\024\235\300\147\246\014\042\331\046\365\105\253\246\145\122\021  
\047\330\105\254\143\060\017\006\003\125\035\023\001\001\377\004  
\005\060\003\001\001\377\060\016\006\003\125\035\017\001\001\377  
\004\004\003\002\001\006\060\015\006\011\052\206\110\206\367\015  
\001\001\014\005\000\003\202\002\001\000\263\127\115\020\142\116  
\072\344\254\352\270\034\257\062\043\310\263\111\132\121\234\166  
\050\215\171\252\127\106\027\325\365\122\366\267\104\350\010\104  
\277\030\204\322\013\200\315\305\022\375\000\125\005\141\207\101

\334\265\044\236\074\304\330\310\373\160\236\057\170\226\203\040  
\066\336\174\017\151\023\210\245\165\066\230\010\246\306\337\254  
\316\343\130\326\267\076\336\272\363\353\064\100\330\242\201\365  
\170\077\057\325\245\374\331\242\324\136\004\016\027\255\376\101  
\360\345\262\162\372\104\202\063\102\350\055\130\367\126\214\142  
\077\272\102\260\234\014\134\176\056\145\046\134\123\117\000\262  
\170\176\241\015\231\055\215\270\035\216\242\304\260\375\140\320  
\060\244\216\310\004\142\251\304\355\065\336\172\227\355\016\070  
\136\222\057\223\160\245\251\234\157\247\175\023\035\176\306\010  
\110\261\136\147\353\121\010\045\351\346\045\153\122\051\221\234  
\322\071\163\010\127\336\231\006\264\133\235\020\006\341\302\000  
\250\270\034\112\002\012\024\320\301\101\312\373\214\065\041\175  
\202\070\362\251\124\221\031\065\223\224\155\152\072\305\262\320  
\273\211\206\223\350\233\311\017\072\247\172\270\241\360\170\106  
\372\374\067\057\345\212\204\363\337\376\004\331\241\150\240\057  
\044\342\011\225\006\325\225\312\341\044\226\353\174\366\223\005  
\273\355\163\351\055\321\165\071\327\347\044\333\330\116\137\103  
\217\236\320\024\071\277\125\160\110\231\127\061\264\234\356\112  
\230\003\226\060\037\140\006\356\033\043\376\201\140\043\032\107  
\142\205\245\314\031\064\200\157\263\254\032\343\237\360\173\110  
\255\325\001\331\147\266\251\162\223\352\055\146\265\262\270\344  
\075\074\262\357\114\214\352\353\007\277\253\065\232\125\206\274  
\030\246\265\250\136\264\203\154\153\151\100\323\237\334\361\303  
\151\153\271\341\155\011\364\361\252\120\166\012\172\175\172\027  
\241\125\226\102\231\061\011\335\140\021\215\005\060\176\346\216  
\106\321\235\024\332\307\027\344\005\226\214\304\044\265\033\317  
\024\007\262\100\370\243\236\101\206\274\004\320\153\226\310\052  
\200\064\375\277\357\006\243\335\130\305\205\075\076\217\376\236  
\051\340\266\270\011\150\031\034\030\103

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRUST\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRUST\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "AffirmTrust Premium"

# Issuer: CN=AffirmTrust Premium,O=AffirmTrust,C=US

# Serial Number:6d:8c:14:46:b1:a6:0a:ee

# Subject: CN=AffirmTrust Premium,O=AffirmTrust,C=US

# Not Valid Before: Fri Jan 29 14:10:36 2010

# Not Valid After : Mon Dec 31 14:10:36 2040

# Fingerprint (SHA-256):

70:A7:3F:7F:37:6B:60:07:42:48:90:45:34:B1:14:82:D5:BF:0E:69:8E:CC:49:8D:F5:25:77:EB:F2:E9:3B:9A

# Fingerprint (SHA1): D8:A6:33:2C:E0:03:6F:B1:85:F6:63:4F:7D:6A:06:65:26:32:28:27

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

```
CKA_LABEL UTF8 "AffirmTrust Premium"
CKA_CERT_SHA1_HASH
MULTILINE_OCTAL
\330\246\063\054\340\003\157\261\205\366\143\117\175\152\006\145
\046\062\050\047
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\304\135\016\110\266\254\050\060\116\012\274\371\070\026\207\127
END
CKA_ISSUER MULTILINE_OCTAL
\060\101\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\024\060\022\006\003\125\004\012\014\013\101\146\146\151\162\155
\124\162\165\163\164\061\034\060\032\006\003\125\004\003\014\023
\101\146\146\151\162\155\124\162\165\163\164\040\120\162\145\155
\151\165\155
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\010\155\214\024\106\261\246\012\356
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE
```

```
#
# Certificate "AffirmTrust Premium ECC"
#
# Issuer: CN=AffirmTrust Premium ECC,O=AffirmTrust,C=US
# Serial Number:74:97:25:8a:c7:3f:7a:54
# Subject: CN=AffirmTrust Premium ECC,O=AffirmTrust,C=US
#
Not Valid Before: Fri Jan 29 14:20:24 2010
# Not Valid After : Mon Dec 31 14:20:24 2040
# Fingerprint (SHA-256):
BD:71:FD:F6:DA:97:E4:CF:62:D1:64:7A:DD:25:81:B0:7D:79:AD:F8:39:7E:B4:EC:BA:9C:5E:84:88:82:14:23
# Fingerprint (SHA1): B8:23:6B:00:2F:1D:16:86:53:01:55:6C:11:A4:37:CA:EB:FF:C3:BB
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "AffirmTrust Premium ECC"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\105\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\024\060\022\006\003\125\004\012\014\013\101\146\146\151\162\155
\124\162\165\163\164\061\040\060\036\006\003\125\004\003\014\027
\101\146\146\151\162\155\124\162\165\163\164\040\120\162\145\155
\151\165\155\040\105\103\103
```

END

CKA\_ID UTF8 "0"

CKA\_ISSUER MULTILINE\_OCTAL

\060\105\061\013\060\011\006\003\125\004\006\023\002\125\123\061  
\024\060\022\006\003\125\004\012\014\013\101\146\146\151\162\155  
\124\162\165\163\164\061\040\060\036\006\003\125\004\003\014\027  
\101\146\146\151\162\155\124\162\165\163\164\040\120\162\145\155  
\151\165\155\040\105\103\103

END

CKA\_SERIAL\_NUMBER

MULTILINE\_OCTAL

\002\010\164\227\045\212\307\077\172\124

END

CKA\_VALUE MULTILINE\_OCTAL

\060\202\001\376\060\202\001\205\240\003\002\001\002\002\010\164  
\227\045\212\307\077\172\124\060\012\006\010\052\206\110\316\075  
\004\003\003\060\105\061\013\060\011\006\003\125\004\006\023\002  
\125\123\061\024\060\022\006\003\125\004\012\014\013\101\146\146  
\151\162\155\124\162\165\163\164\061\040\060\036\006\003\125\004  
\003\014\027\101\146\146\151\162\155\124\162\165\163\164\040\120  
\162\145\155\151\165\155\040\105\103\103\060\036\027\015\061\060  
\060\061\062\071\061\064\062\060\062\064\132\027\015\064\060\061  
\062\063\061\061\064\062\060\062\064\132\060\105\061\013\060\011  
\006\003\125\004\006\023\002\125\123\061\024\060\022\006\003\125  
\004\012\014\013\101\146\146\151\162\155\124\162\165\163\164\061  
\040\060\036\006\003\125\004\003\014\027\101\146\146\151\162\155  
\124\162\165\163\164\040\120\162\145\155\151\165\155\040\105\103  
\103\060\166\060\020\006\007\052\206\110\316\075\002\001\006\005  
\053\201\004\000\042\003\142\000\004\015\060\136\033\025\235\003  
\320\241\171\065\267\072\074\222\172\312\025\034\315\142\363\234  
\046\134\007\075\345\124\372\243\326\314\022\352\364\024\137\350  
\216\031\253\057\056\110\346\254\030\103\170\254\320\067\303\275  
\262\315\054\346\107\342\032\346\143\270\075\056\057\170\304\117  
\333\364\017\244\150\114\125\162\153\225\035\116\030\102\225\170  
\314\067\074\221\342\233\145\053\051\243\102\060\100\060\035\006  
\003\125\035\016\004\026\004\024\232\257\051\172\300\021\065\065  
\046\121\060\000\303\152\376\100\325\256\326\074\060\017\006\003  
\125\035\023\001\001\377\004\005\060\003\001\001\377\060\016\006  
\003\125\035\017\001\001\377\004\004\003\002\001\006\060\012\006  
\010\052\206\110\316\075\004\003\003\003\147\000\060\144\002\060  
\027\011\363\207\210\120\132\257\310\300\102\277\107\137\365\154  
\152\206\340\304\047\164\344\070\123\327\005\177\033\064\343\306  
\057\263\312\011\074\067\235\327\347\270\106\361\375\241\342\161  
\002\060\102\131\207\103\324\121\337\272\323\011\062\132\316\210  
\176\127\075\234\137\102\153\365\007\055\265\360\202\223\371\131  
\157\256\144\372\130\345\213\036\343\143\276\265\201\315\157\002  
\214\171

END

```

CKA_NSS_MOZILLA_CA_POLICY
CK_BBOOL CK_TRUE
CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE
CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

# Trust for "AffirmTrust Premium ECC"
# Issuer: CN=AffirmTrust Premium ECC,O=AffirmTrust,C=US
# Serial Number:74:97:25:8a:c7:3f:7a:54
# Subject: CN=AffirmTrust Premium ECC,O=AffirmTrust,C=US
# Not Valid Before: Fri Jan 29 14:20:24 2010
# Not Valid After : Mon Dec 31 14:20:24 2040
# Fingerprint (SHA-256):
BD:71:FD:F6:DA:97:E4:CF:62:D1:64:7A:DD:25:81:B0:7D:79:AD:F8:39:7E:B4:EC:BA:9C:5E:84:88:82:14:23
# Fingerprint (SHA1): B8:23:6B:00:2F:1D:16:86:53:01:55:6C:11:A4:37:CA:EB:FF:C3:BB
CKA_CLASS
CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "AffirmTrust Premium ECC"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\270\043\153\000\057\035\026\206\123\001\125\154\021\244\067\312
\353\377\303\273
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\144\260\011\125\317\261\325\231\342\276\023\253\246\135\352\115
END
CKA_ISSUER MULTILINE_OCTAL
\060\105\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\024\060\022\006\003\125\004\012\014\013\101\146\146\151\162\155
\124\162\165\163\164\061\040\060\036\006\003\125\004\003\014\027
\101\146\146\151\162\155\124\162\165\163\164\040\120\162\145\155
\151\165\155\040\105\103\103
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\010\164\227\045\212\307\077\172\124
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED
CK_BBOOL CK_FALSE

#
# Certificate "Certum Trusted Network CA"
#
# Issuer: CN=Certum Trusted Network CA,OU=Certum Certification Authority,O=Unizeto Technologies
S.A.,C=PL

```

```
# Serial Number: 279744 (0x444c0)
# Subject: CN=Certum Trusted Network CA,OU=Certum Certification Authority,O=Unizeto Technologies
S.A.,C=PL
# Not Valid Before: Wed Oct 22 12:07:37 2008
# Not Valid After : Mon Dec 31 12:07:37 2029
# Fingerprint (SHA-256):
5C:58:46:8D:55:F5:8E:49:7E:74:39:82:D2:B5:00:10:B6:D1:65:37:4A:CF:83:A7:D4:A3:2D:B7:68:C4:40:8E
# Fingerprint (SHA1): 07:E0:32:E0:20:B7:2C:3F:19:2F:06:28:A2:59:3A:19:A7:0F:06:9E
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Certum Trusted Network CA"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\176\061\013\060\011\006\003\125\004\006\023\002\120\114\061
\042\060\040\006\003\125\004\012\023\031\125\156\151\172\145\164
\157\040\124\145\143\150\156\157\154\157\147\151\145\163\040\123
\056\101\056\061\047\060\045\006\003\125\004\013\023\036\103\145
\162\164\165\155\040\103\145\162\164\151\146\151\143\141\164\151
\157\156\040\101\165\164\150\157\162\151\164\171\061\042\060\040
\006\003\125\004\003\023\031\103\145\162\164\165\155\040\124\162
\165\163\164\145\144\040\116\145\164\167\157\162\153\040\103\101
END
CKA_ID
UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\176\061\013\060\011\006\003\125\004\006\023\002\120\114\061
\042\060\040\006\003\125\004\012\023\031\125\156\151\172\145\164
\157\040\124\145\143\150\156\157\154\157\147\151\145\163\040\123
\056\101\056\061\047\060\045\006\003\125\004\013\023\036\103\145
\162\164\165\155\040\103\145\162\164\151\146\151\143\141\164\151
\157\156\040\101\165\164\150\157\162\151\164\171\061\042\060\040
\006\003\125\004\003\023\031\103\145\162\164\165\155\040\124\162
\165\163\164\145\144\040\116\145\164\167\157\162\153\040\103\101
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\003\004\104\300
END
CKA_VALUE
MULTILINE_OCTAL
\060\202\003\273\060\202\002\243\240\003\002\001\002\002\003\004
\104\300\060\015\006\011\052\206\110\206\367\015\001\001\005\005
\000\060\176\061\013\060\011\006\003\125\004\006\023\002\120\114
\061\042\060\040\006\003\125\004\012\023\031\125\156\151\172\145
\164\157\040\124\145\143\150\156\157\154\157\147\151\145\163\040
\123\056\101\056\061\047\060\045\006\003\125\004\013\023\036\103
\145\162\164\165\155\040\103\145\162\164\151\146\151\143\141\164
```

\151\157\156\040\101\165\164\150\157\162\151\164\171\061\042\060  
\040\006\003\125\004\003\023\031\103\145\162\164\165\155\040\124  
\162\165\163\164\145\144\040\116\145\164\167\157\162\153\040\103  
\101\060\036\027\015\060\070\061\060\062\062\061\062\060\067\063  
\067\132\027\015\062\071\061\062\063\061\061\062\060\067\063\067  
\132\060\176\061\013\060\011\006\003\125\004\006\023\002\120\114  
\061\042\060\040\006\003\125\004\012\023\031\125\156\151\172\145  
\164\157\040\124\145\143\150\156\157\154\157\147\151\145\163\040  
\123\056\101\056\061\047\060\045\006\003\125\004\013\023\036\103  
\145\162\164\165\155\040\103\145\162\164\151\146\151\143\141\164  
\151\157\156\040\101\165\164\150\157\162\151\164\171\061\042\060  
\040\006\003\125\004\003\023\031\103\145\162\164\165\155\040\124  
\162\165\163\164\145\144\040\116\145\164\167\157\162\153\040\103  
\101\060\202\001\042\060\015\006\011\052\206\110\206\367\015\001  
\001\001\005\000\003\202\001\017\000\060\202\001\012\002\202\001  
\001\000\343\373\175\243\162\272\302\360\311\024\207\365\153\001  
\116\341\156\100\007\272\155\047\135\177\367\133\055\263\132\307  
\121\137\253\244\062\246\141\207\266\156\017\206\322\060\002\227  
\370\327\151\127\241\030\071\135\152\144\171\306\001\131\254\074  
\061\112\070\174\322\004\322\113\050\350\040\137\073\007\242\314  
\115\163\333\363\256\117\307\126\325\132\247\226\211\372\363\253  
\150\324\043\206\131\047\317\011\047\274\254\156\162\203\034\060  
\162\337\340\242\351\322\341\164\165\031\275\052\236\173\025\124  
\004\033\327\103\071\255\125\050\305\342\032\273\364\300\344\256  
\070\111\063\314\166\205\237\071\105\322\244\236\362\022\214\121  
\370\174\344\055\177\365\254\137\353\026\237\261\055\321\272\314  
\221\102\167\114\045\311\220\070\157\333\360\314\373\216\036\227  
\131\076\325\140\116\346\005\050\355\111\171\023\113\272\110\333  
\057\371\162\323\071\312\376\037\330\064\162\365\264\100\317\061  
\001\303\354\336\021\055\027\135\037\270\120\321\136\031\247\151  
\336\007\063\050\312\120\225\371\247\124\313\124\206\120\105\251  
\371\111\002\003\001\000\001\243\102\060\100\060\017\006\003\125  
\035\023\001\001\377\004\005\060\003\001\001\377\060\035\006\003  
\125\035\016\004\026\004\024\010\166\315\313\007\377\044\366\305  
\315\355\273\220\274\342\204\067\106\165\367\060\016\006\003\125  
\035\017\001\001\377\004\004\003\002\001\006\060\015\006\011\052  
\206\110\206\367\015\001\001\005\005\000\003\202\001\001\000\246  
\250\255\042\316\001\075\246\243\377\142\320\110\235\213\136\162  
\260\170\104\343\334\034\257\011\375\043\110\372\275\052\304\271  
\125\004\265\020\243\215\047\336\013\202\143\320\356\336\014\067  
\171\101\133\042\262\260\232\101\134\246\160\340\324\320\167\313  
\043\323\000\340\154\126\057\341\151\015\015\331\252\277\041\201  
\120\331\006\245\250\377\225\067\320\252\376\342\263\365\231\055  
\105\204\212\345\102\011\327\164\002\057\367\211\330\231\351\274  
\047\324\107\215\272\015\106\034\167\317\024\244\034\271\244\061  
\304\234\050\164\003\064\377\063\031\046\245\351\015\164\267\076  
\227\306\166\350\047\226\243\146\335\341\256\362\101\133\312\230  
\126\203\163\160\344\206\032\322\061\101\272\057\276\055\023\132



```
\166\157\116\350\116\201\016\077\133\003\042\240\022\276\146\130
\021\112\313\003\304\264\052\052\055\226\027\340\071\124\274\110
\323\166\047\235\232\055\006\246\311\354\071\322\253\333\237\232
\013\047\002\065\051\261\100\225\347\371\350\234\125\210\031\106
\326\267\064\365\176\316\071\232\331\070\361\121\367\117\054
```

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRUST\_AFTER

CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRUST\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "Certum Trusted Network CA"

# Issuer: CN=Certum Trusted Network CA,OU=Certum Certification Authority,O=Unizeto Technologies  
S.A.,C=PL

# Serial Number: 279744 (0x444c0)

# Subject: CN=Certum Trusted Network CA,OU=Certum Certification Authority,O=Unizeto Technologies  
S.A.,C=PL

# Not Valid Before: Wed Oct 22 12:07:37 2008

# Not Valid After : Mon Dec 31 12:07:37 2029

# Fingerprint (SHA-256):

5C:58:46:8D:55:F5:8E:49:7E:74:39:82:D2:B5:00:10:B6:D1:65:37:4A:CF:83:A7:D4:A3:2D:B7:68:C4:40:8E

# Fingerprint (SHA1): 07:E0:32:E0:20:B7:2C:3F:19:2F:06:28:A2:59:3A:19:A7:0F:06:9E

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "Certum Trusted Network CA"

CKA\_CERT\_SHA1\_HASH MULTILINE\_OCTAL

```
\007\340\062\340\040\267\054\077\031\057\006\050\242\131\072\031
\247\017\006\236
```

END

CKA\_CERT\_MD5\_HASH MULTILINE\_OCTAL

```
\325\351\201\100\305\030\151\374\106\054\211\165\142\017\252\170
```

END

CKA\_ISSUER

MULTILINE\_OCTAL

```
\060\176\061\013\060\011\006\003\125\004\006\023\002\120\114\061
\042\060\040\006\003\125\004\012\023\031\125\156\151\172\145\164
\157\040\124\145\143\150\156\157\154\157\147\151\145\163\040\123
\056\101\056\061\047\060\045\006\003\125\004\013\023\036\103\145
\162\164\165\155\040\103\145\162\164\151\146\151\143\141\164\151
\157\156\040\101\165\164\150\157\162\151\164\171\061\042\060\040
\006\003\125\004\003\023\031\103\145\162\164\165\155\040\124\162
\165\163\164\145\144\040\116\145\164\167\157\162\153\040\103\101
```

END

CKA\_SERIAL\_NUMBER MULTILINE\_OCTAL

```
\002\003\004\104\300
```

```

END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "TWCA Root Certification Authority"
#
# Issuer: CN=TWCA Root Certification Authority,OU=Root
  CA,O=TAIWAN-CA,C=TW
# Serial Number: 1 (0x1)
# Subject: CN=TWCA Root Certification Authority,OU=Root CA,O=TAIWAN-CA,C=TW
# Not Valid Before: Thu Aug 28 07:24:33 2008
# Not Valid After : Tue Dec 31 15:59:59 2030
# Fingerprint (SHA-256):
BF:D8:8F:E1:10:1C:41:AE:3E:80:1B:F8:BE:56:35:0E:E9:BA:D1:A6:B9:BD:51:5E:DC:5C:6D:5B:87:11:AC:44
# Fingerprint (SHA1): CF:9E:87:6D:D3:EB:FC:42:26:97:A3:B5:A3:7A:A0:76:A9:06:23:48
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "TWCA Root Certification Authority"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\137\061\013\060\011\006\003\125\004\006\023\002\124\127\061
\022\060\020\006\003\125\004\012\014\011\124\101\111\127\101\116
\055\103\101\061\020\060\016\006\003\125\004\013\014\007\122\157
\157\164\040\103\101\061\052\060\050\006\003\125\004\003\014\041
\124\127\103\101\040\122\157\157\164\040\103\145\162\164\151\146
\151\143\141\164\151\157\156\040\101\165\164\150\157\162\151\164
\171
END
CKA_ID
  UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\137\061\013\060\011\006\003\125\004\006\023\002\124\127\061
\022\060\020\006\003\125\004\012\014\011\124\101\111\127\101\116
\055\103\101\061\020\060\016\006\003\125\004\013\014\007\122\157
\157\164\040\103\101\061\052\060\050\006\003\125\004\003\014\041
\124\127\103\101\040\122\157\157\164\040\103\145\162\164\151\146
\151\143\141\164\151\157\156\040\101\165\164\150\157\162\151\164
\171
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\001\001
END
CKA_VALUE MULTILINE_OCTAL

```

\060\202\003\173\060\202\002\143\240\003\002\001\002\002\001\001  
\060\015\006\011\052\206\110\206\367\015\001\001\005\005\000\060  
\137\061\013\060\011\006\003\125\004\006\023\002\124\127\061\022  
\060\020\006\003\125\004\012\014\011\124\101\111\127\101\116\055  
\103\101\061\020\060\016\006\003\125\004\013\014\007\122\157\157  
\164\040\103\101\061\052\060\050\006\003\125\004\003\014\041\124  
\127\103\101\040\122\157\157\164\040\103\145\162\164\151\146\151  
\143\141\164\151\157\156\040\101\165\164\150\157\162\151\164\171  
\060\036\027\015\060\070\060\070\062\070\060\067\062\064\063\063  
\132\027\015\063\060\061\062\063\061\061\065\065\071\065\071\132  
\060\137\061\013\060\011\006\003\125\004\006\023\002\124\127\061  
\022\060\020\006\003\125\004\012\014\011\124\101\111\127\101\116  
\055\103\101\061\020\060\016\006\003\125\004\013\014\007\122\157  
\157\164\040\103\101\061\052\060\050\006\003\125\004\003\014\041  
\124\127\103\101\040\122\157\157\164\040\103\145\162\164\151\146  
\151\143\141\164\151\157\156\040\101\165\164\150\157\162\151\164  
\171\060\202\001\042\060\015\006\011\052\206\110\206\367\015\001  
\001\001\005\000\003\202\001\017\000\060\202\001\012\002\202\001  
\001\000\260\176\162\270\244\003\224\346\247\336\011\070\221\112  
\021\100\207\247\174\131\144\024\173\265\021\020\335\376\277\325  
\300\273\126\342\205\045\364\065\162\017\370\123\320\101\341\104  
\001\302\264\034\303\061\102\026\107\205\063\042\166\262\012\157  
\017\345\045\120\117\205\206\276\277\230\056\020\147\036\276\021  
\005\206\005\220\304\131\320\174\170\020\260\200\134\267\341\307  
\053\165\313\174\237\256\265\321\235\043\067\143\247\334\102\242  
\055\222\004\033\120\301\173\270\076\033\311\126\004\213\057\122  
\233\255\251\126\351\301\377\255\251\130\207\060\266\201\367\227  
\105\374\031\127\073\053\157\344\107\364\231\105\376\035\361\370  
\227\243\210\035\067\034\134\217\340\166\045\232\120\370\240\124  
\377\104\220\166\043\322\062\306\303\253\006\277\374\373\277\363  
\255\175\222\142\002\133\051\323\065\243\223\232\103\144\140\135  
\262\372\062\377\073\004\257\115\100\152\371\307\343\357\043\375  
\153\313\345\017\213\070\015\356\012\374\376\017\230\237\060\061  
\335\154\122\145\371\213\201\276\042\341\034\130\003\272\221\033  
\211\007\002\003\001\000\001\243\102\060\100\060\016\006\003\125  
\035\017\001\001\377\004\004\003\002\001\006\060\017\006\003\125  
\035\023\001\001\377\004\005\060\003\001\001\377\060\035\006\003  
\125\035\016\004\026\004\024\152\070\133\046\215\336\213\132\362  
\117\172\124\203\031\030\343\010\065\246\272\060\015\006\011\052  
\206\110\206\367\015\001\001\005\005\000\003\202\001\001\000\074  
\325\167\075\332\337\211\272\207\014\010\124\152\040\120\222\276  
\260\101\075\271\046\144\203\012\057\350\100\300\227\050\047\202  
\060\112\311\223\377\152\347\246\000\177\211\102\232\326\021\345  
\123\316\057\314\362\332\005\304\376\342\120\304\072\206\175\314  
\332\176\020\011\073\222\065\052\123\262\376\353\053\005\331\154  
\135\346\320\357\323\152\146\236\025\050\205\172\350\202\000\254  
\036\247\011\151\126\102\323\150\121\030\276\124\232\277\104\101  
\272\111\276\040\272\151\134\356\270\167\315\316\154\037\255\203

```
\226\030\175\016\265\024\071\204\361\050\351\055\243\236\173\036
\172\162\132\203\263\171\157\357\264\374\320\012\245\130\117\106
\337\373\155\171\131\362\204\042\122\256\017\314\373\174\073\347
\152\312\107\141\303\172\370\323\222\004\037\270\040\204\341\066
\124\026\307\100\336\073\212\163\334\337\306\011\114\337\354\332
\377\324\123\102\241\311\362\142\035\042\203\074\227\305\371\031
\142\047\254\145\042\327\323\074\306\345\216\262\123\314\111\316
\274\060\376\173\016\063\220\373\355\322\024\221\037\007\257
```

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "TWCA Root Certification Authority"

# Issuer: CN=TWCA Root Certification Authority,OU=Root CA,O=TAIWAN-CA,C=TW

# Serial Number: 1 (0x1)

# Subject: CN=TWCA Root Certification Authority,OU=Root CA,O=TAIWAN-CA,C=TW

# Not Valid Before: Thu Aug 28 07:24:33 2008

# Not Valid After : Tue Dec 31 15:59:59 2030

# Fingerprint (SHA-256):

BF:D8:8F:E1:10:1C:41:AE:3E:80:1B:F8:BE:56:35:0E:E9:BA:D1:A6:B9:BD:51:5E:DC:5C:6D:5B:87:11:AC:44

# Fingerprint (SHA1): CF:9E:87:6D:D3:EB:FC:42:26:97:A3:B5:A3:7A:A0:76:A9:06:23:48

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE

CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "TWCA Root Certification Authority"

CKA\_CERT\_SHA1\_HASH MULTILINE\_OCTAL

```
\317\236\207\155\323\353\374\102\046\227\243\265\243\172\240\166
\251\006\043\110
```

END

CKA\_CERT\_MD5\_HASH MULTILINE\_OCTAL

```
\252\010\217\366\371\173\267\362\261\247\036\233\352\352\275\171
```

END

CKA\_ISSUER MULTILINE\_OCTAL

```
\060\137\061\013\060\011\006\003\125\004\006\023\002\124\127\061
\022\060\020\006\003\125\004\012\014\011\124\101\111\127\101\116
\055\103\101\061\020\060\016\006\003\125\004\013\014\007\122\157
\157\164\040\103\101\061\052\060\050\006\003\125\004\003\014\041
\124\127\103\101\040\122\157\157\164\040\103\145\162\164\151\146
\151\143\141\164\151\157\156\040\101\165\164\150\157\162\151\164
\171
```

END

CKA\_SERIAL\_NUMBER MULTILINE\_OCTAL

```
\002\001\001
```

END

CKA\_TRUST\_SERVER\_AUTH CK\_TRUST CKT\_NSS\_TRUSTED\_DELEGATOR  
CKA\_TRUST\_EMAIL\_PROTECTION CK\_TRUST CKT\_NSS\_TRUSTED\_DELEGATOR  
CKA\_TRUST\_CODE\_SIGNING CK\_TRUST CKT\_NSS\_MUST\_VERIFY\_TRUST  
CKA\_TRUST\_STEP\_UP\_APPROVED CK\_BBOOL CK\_FALSE

#  
#

Certificate "Explicitly Distrust DigiNotar Root CA"

#

# Issuer: E=info@diginotar.nl,CN=DigiNotar Root CA,O=DigiNotar,C=NL

# Serial Number:0f:ff:ff:ff:ff:ff:ff:ff:ff:ff:ff:ff:ff:ff:ff

# Subject: E=info@diginotar.nl,CN=DigiNotar Root CA,O=DigiNotar,C=NL

# Not Valid Before: Fri Jul 27 17:19:37 2007

# Not Valid After : Mon Mar 31 18:19:22 2025

# Fingerprint (MD5): 0A:A4:D5:CC:BA:B4:FB:A3:59:E3:E6:01:DD:53:D9:4E

# Fingerprint (SHA1): C1:77:CB:4B:E0:B4:26:8E:F5:C7:CF:45:99:22:B9:B0:CE:BA:21:2F

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_CERTIFICATE

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "Explicitly Distrust DigiNotar Root CA"

CKA\_CERTIFICATE\_TYPE CK\_CERTIFICATE\_TYPE CKC\_X\_509

CKA\_SUBJECT MULTILINE\_OCTAL

\060\137\061\013\060\011\006\003\125\004\006\023\002\116\114\061  
\022\060\020\006\003\125\004\012\023\011\104\151\147\151\116\157  
\164\141\162\061\032\060\030\006\003\125\004\003\023\021\104\151  
\147\151\116\157\164\141\162\040\122\157\157\164\040\103\101\061  
\040\060\036\006\011\052\206\110\206\367\015\001\011\001\026\021  
\151\156\146\157\100\144\151\147\151\156\157\164\141\162\056\156  
\154

END

CKA\_ID

UTF8 "0"

CKA\_ISSUER MULTILINE\_OCTAL

\060\137\061\013\060\011\006\003\125\004\006\023\002\116\114\061  
\022\060\020\006\003\125\004\012\023\011\104\151\147\151\116\157  
\164\141\162\061\032\060\030\006\003\125\004\003\023\021\104\151  
\147\151\116\157\164\141\162\040\122\157\157\164\040\103\101\061  
\040\060\036\006\011\052\206\110\206\367\015\001\011\001\026\021  
\151\156\146\157\100\144\151\147\151\156\157\164\141\162\056\156  
\154

END

CKA\_SERIAL\_NUMBER MULTILINE\_OCTAL

\002\020\017\377\377\377\377\377\377\377\377\377\377\377\377  
\377\377

END

CKA\_VALUE MULTILINE\_OCTAL

\060\202\005\212\060\202\003\162\240\003\002\001\002\002\020\017

\377\377\377\377\377\377\377\377\377\377\377\377\377\377\377\377\060  
\015\006\011\052\206\110\206\367\015\001\001\005\005\000\060\137  
\061\013\060\011\006\003\125\004\006\023\002\116\114\061\022\060  
\020\006\003\125\004\012\023\011\104\151\147\151\116\157\164\141  
\162\061\032\060\030\006\003\125\004\003\023\021\104\151\147\151  
\116\157\164\141\162\040\122\157\157\164\040\103\101\061\040\060  
\036\006\011\052\206\110\206\367\015\001\011\001\026\021\151\156  
\146\157\100\144\151\147\151\156\157\164\141\162\056\156\154\060  
\036\027\015\060\067\060\067\062\067\061\067\061\071\063\067\132  
\027\015\062\065\060\063\063\061\061\070\061\071\062\062\132\060  
\137\061\013\060\011\006\003\125\004\006\023\002\116\114\061\022  
\060\020\006\003\125\004\012\023\011\104\151\147\151\116\157\164  
\141\162\061\032\060\030\006\003\125\004\003\023\021\104\151\147  
\151\116\157\164\141\162\040\122\157\157\164\040\103\101\061\040  
\060\036\006\011\052\206\110\206\367\015\001\011\001\026\021\151  
\156\146\157\100\144\151\147\151\156\157\164\141\162\056\156\154  
\060\202\002\042\060\015\006\011\052\206\110\206\367\015\001\001  
\001\005\000\003\202\002\017\000\060\202\002\012\002\202\002\001  
\000\254\260\130\301\000\275\330\041\010\013\053\232\376\156\126  
\060\005\237\033\167\220\020\101\134\303\015\207\021\167\216\201  
\361\312\174\351\214\152\355\070\164\065\273\332\337\371\273\300  
\011\067\264\226\163\201\175\063\032\230\071\367\223\157\225\177  
\075\271\261\165\207\272\121\110\350\213\160\076\225\004\305\330  
\266\303\026\331\210\260\261\207\035\160\332\206\264\017\024\213  
\172\317\020\321\164\066\242\022\173\167\206\112\171\346\173\337  
\002\021\150\245\116\206\256\064\130\233\044\023\170\126\042\045  
\036\001\213\113\121\161\373\202\314\131\226\151\210\132\150\123  
\305\271\015\002\067\313\113\274\146\112\220\176\052\013\005\007  
\355\026\137\125\220\165\330\106\311\033\203\342\010\276\361\043  
\314\231\035\326\052\017\203\040\025\130\047\202\056\372\342\042  
\302\111\261\271\001\201\152\235\155\235\100\167\150\166\116\041  
\052\155\204\100\205\116\166\231\174\202\363\363\267\002\131\324  
\046\001\033\216\337\255\123\006\321\256\030\335\342\262\072\313  
\327\210\070\216\254\133\051\271\031\323\230\371\030\003\317\110  
\202\206\146\013\033\151\017\311\353\070\210\172\046\032\005\114  
\222\327\044\324\226\362\254\122\055\243\107\325\122\366\077\376  
\316\204\006\160\246\252\076\242\362\266\126\064\030\127\242\344  
\201\155\347\312\360\152\323\307\221\153\002\203\101\174\025\357  
\153\232\144\136\343\320\074\345\261\353\173\135\206\373\313\346  
\167\111\315\243\145\334\367\271\234\270\344\013\137\223\317\314  
\060\032\062\034\316\034\143\225\245\371\352\341\164\213\236\351  
\053\251\060\173\240\030\037\016\030\013\345\133\251\323\321\154  
\036\007\147\217\221\113\251\212\274\322\146\252\223\001\210\262  
\221\372\061\134\325\246\301\122\010\011\315\012\143\242\323\042  
\246\350\241\331\071\006\227\365\156\215\002\220\214\024\173\077  
\200\315\033\234\272\304\130\162\043\257\266\126\237\306\172\102  
\063\051\007\077\202\311\346\037\005\015\315\114\050\066\213\323  
\310\076\034\306\210\357\136\356\211\144\351\035\353\332\211\176

\062\246\151\321\335\314\210\237\321\320\311\146\041\334\006\147  
\305\224\172\232\155\142\114\175\314\340\144\200\262\236\107\216  
\243\002\003\001\000\001\243\102\060\100\060\017\006\003\125\035  
\023\001\001\377\004\005\060\003\001\001\377\060\016\006\003\125  
\035\017\001\001\377\004\004\003\002\001\006\060\035\006\003\125  
\035\016\004\026\004\024\210\150\277\340\216\065\304\073\070\153  
\142\367\050\073\204\201\310\014\327\115\060\015\006\011\052\206  
\110\206\367\015\001\001\005\005\000\003\202\002\001\000\073\002  
\215\313\074\060\350\156\240\255\362\163\263\137\236\045\023\004  
\005\323\366\343\213\273\013\171\316\123\336\344\226\305\321\257  
\163\274\325\303\320\100\125\174\100\177\315\033\137\011\325\362  
\174\237\150\035\273\135\316\172\071\302\214\326\230\173\305\203  
\125\250\325\175\100\312\340\036\367\211\136\143\135\241\023\302  
\135\212\266\212\174\000\363\043\303\355\205\137\161\166\360\150  
\143\252\105\041\071\110\141\170\066\334\361\103\223\324\045\307  
\362\200\145\341\123\002\165\121\374\172\072\357\067\253\204\050  
\127\014\330\324\324\231\126\154\343\242\376\131\204\264\061\350  
\063\370\144\224\224\121\227\253\071\305\113\355\332\335\200\013  
\157\174\051\015\304\216\212\162\015\347\123\024\262\140\101\075  
\204\221\061\150\075\047\104\333\345\336\364\372\143\105\310\114  
\076\230\365\077\101\272\116\313\067\015\272\146\230\361\335\313  
\237\134\367\124\066\202\153\054\274\023\141\227\102\370\170\273  
\314\310\242\237\312\360\150\275\153\035\262\337\215\157\007\235  
\332\216\147\307\107\036\312\271\277\052\102\221\267\143\123\146  
\361\102\243\341\364\132\115\130\153\265\344\244\063\255\134\160  
\035\334\340\362\353\163\024\221\232\003\301\352\000\145\274\007  
\374\317\022\021\042\054\256\240\275\072\340\242\052\330\131\351  
\051\323\030\065\244\254\021\137\031\265\265\033\377\042\112\134  
\306\172\344\027\357\040\251\247\364\077\255\212\247\232\004\045  
\235\016\312\067\346\120\375\214\102\051\004\232\354\271\317\113  
\162\275\342\010\066\257\043\057\142\345\312\001\323\160\333\174  
\202\043\054\026\061\014\306\066\007\220\172\261\037\147\130\304  
\073\130\131\211\260\214\214\120\263\330\206\313\150\243\304\012  
\347\151\113\040\316\301\036\126\113\225\251\043\150\330\060\330  
\303\353\260\125\121\315\345\375\053\270\365\273\021\237\123\124  
\366\064\031\214\171\011\066\312\141\027\045\027\013\202\230\163  
\014\167\164\303\325\015\307\250\022\114\307\247\124\161\107\056  
\054\032\175\311\343\053\073\110\336\047\204\247\143\066\263\175  
\217\240\144\071\044\015\075\173\207\257\146\134\164\033\113\163  
\262\345\214\360\206\231\270\345\305\337\204\301\267\353

END

#

Trust for Certificate "Explicitly Distrust DigiNotar Root CA"

# Issuer: E=info@diginotar.nl,CN=DigiNotar Root CA,O=DigiNotar,C=NL

# Serial Number:0f:ff:ff:ff:ff:ff:ff:ff:ff:ff:ff:ff:ff:ff:ff

# Subject: E=info@diginotar.nl,CN=DigiNotar Root CA,O=DigiNotar,C=NL

# Not Valid Before: Fri Jul 27 17:19:37 2007

```
# Not Valid After : Mon Mar 31 18:19:22 2025
# Fingerprint (MD5): 0A:A4:D5:CC:BA:B4:FB:A3:59:E3:E6:01:DD:53:D9:4E
# Fingerprint (SHA1): C1:77:CB:4B:E0:B4:26:8E:F5:C7:CF:45:99:22:B9:B0:CE:BA:21:2F
CKA_CLASS
CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Explicitly Distrust DigiNotar Root CA"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\301\167\313\113\340\264\046\216\365\307\317\105\231\042\271\260
\316\272\041\057
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\012\244\325\314\272\264\373\243\131\343\346\001\335\123\331\116
END
CKA_ISSUER MULTILINE_OCTAL
\060\137\061\013\060\011\006\003\125\004\006\023\002\116\114\061
\022\060\020\006\003\125\004\012\023\011\104\151\147\151\116\157
\164\141\162\061\032\060\030\006\003\125\004\003\023\021\104\151
\147\151\116\157\164\141\162\040\122\157\157\164\040\103\101\061
\040\060\036\006\011\052\206\110\206\367\015\001\011\001\026\021
\151\156\146\157\100\144\151\147\151\156\157\164\141\162\056\156
\154
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\020\017\377\377\377\377\377\377\377\377\377\377\377\377\377
\377\377
END
CKA_TRUST_SERVER_AUTH CK_TRUST
CKT_NSS_NOT_TRUSTED
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_NOT_TRUSTED
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_NOT_TRUSTED
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "Security Communication RootCA2"
#
# Issuer: OU=Security Communication RootCA2,O="SECOM Trust Systems CO.,LTD.",C=JP
# Serial Number: 0 (0x0)
# Subject: OU=Security Communication RootCA2,O="SECOM Trust Systems CO.,LTD.",C=JP
# Not Valid Before: Fri May 29 05:00:39 2009
# Not Valid After : Tue May 29 05:00:39 2029
# Fingerprint (SHA-256):
51:3B:2C:EC:B8:10:D4:CD:E5:DD:85:39:1A:DF:C6:C2:DD:60:D8:7B:B7:36:D2:B5:21:48:4A:A4:7A:0E:BE:F6
# Fingerprint (SHA1): 5F:3B:8C:F2:F8:10:B3:7D:78:B4:CE:EC:19:19:C3:73:34:B9:C7:74
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
```



```
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Security Communication RootCA2"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\135\061\013\060\011\006\003\125\004\006\023\002\112\120\061
\045\060\043\006\003\125\004\012\023\034\123\105\103\117\115\040
\124\162\165\163\164\040\123\171\163\164\145\155\163\040\103\117
\056\054\114\124\104\056\061\047\060\045\006\003\125\004\013\023
\036\123\145\143\165\162\151\164\171\040\103\157\155\155\165\156
\151\143\141\164\151\157\156\040\122\157\157\164\103\101\062
END
CKA_ID
UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\135\061\013\060\011\006\003\125\004\006\023\002\112\120\061
\045\060\043\006\003\125\004\012\023\034\123\105\103\117\115\040
\124\162\165\163\164\040\123\171\163\164\145\155\163\040\103\117
\056\054\114\124\104\056\061\047\060\045\006\003\125\004\013\023
\036\123\145\143\165\162\151\164\171\040\103\157\155\155\165\156
\151\143\141\164\151\157\156\040\122\157\157\164\103\101\062
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\001\000
END
CKA_VALUE MULTILINE_OCTAL
\060\202\003\167\060\202\002\137\240\003\002\001\002\002\001\000
\060\015\006\011\052\206\110\206\367\015\001\001\013\005\000\060
\135\061\013\060\011\006\003\125\004\006\023\002\112\120\061\045
\060\043\006\003\125\004\012\023\034\123\105\103\117\115\040\124
\162\165\163\164\040\123\171\163\164\145\155\163\040\103\117\056
\054\114\124\104\056\061\047\060\045\006\003\125\004\013\023\036
\123\145\143\165\162\151\164\171\040\103\157\155\155\165\156\151
\143\141\164\151\157\156\040\122\157\157\164\103\101\062\060\036
\027\015\060\071\060\065\062\071\060\065\060\060\063\071\132\027
\015\062\071\060\065\062\071\060\065\060\060\063\071\132\060\135
\061\013\060\011\006\003\125\004\006\023\002\112\120\061\045\060
\043\006\003\125\004\012\023\034\123\105\103\117\115\040\124\162
\165\163\164\040\123\171\163\164\145\155\163\040\103\117\056\054
\114\124\104\056\061\047\060\045\006\003\125\004\013\023\036\123
\145\143\165\162\151\164\171\040\103\157\155\155\165\156\151\143
\141\164\151\157\156\040\122\157\157\164\103\101\062\060\202\001
\042\060\015\006\011\052\206\110\206\367\015\001\001\001\005\000
\003\202\001\017\000\060\202\001\012\002\202\001\001\000\320\025
\071\122\261\122\263\272\305\131\202\304\135\122\256\072\103\145
\200\113\307\362\226\274\333\066\227\326\246\144\214\250\136\360
\343\012\034\367\337\227\075\113\256\366\135\354\041\265\101\253
\315\271\176\166\237\276\371\076\066\064\240\073\301\366\061\021
```

\105\164\223\075\127\200\305\371\211\231\312\345\253\152\324\265  
\332\101\220\020\301\326\326\102\211\302\277\364\070\022\225\114  
\124\005\367\066\344\105\203\173\024\145\326\334\014\115\321\336  
\176\014\253\073\304\025\276\072\126\246\132\157\166\151\122\251  
\172\271\310\353\152\232\135\122\320\055\012\153\065\026\011\020  
\204\320\152\312\072\006\000\067\107\344\176\127\117\077\213\353  
\147\270\210\252\305\276\123\125\262\221\304\175\271\260\205\031  
\006\170\056\333\141\032\372\205\365\112\221\241\347\026\325\216  
\242\071\337\224\270\160\037\050\077\213\374\100\136\143\203\074  
\203\052\032\231\153\317\336\131\152\073\374\157\026\327\037\375  
\112\020\353\116\202\026\072\254\047\014\123\361\255\325\044\260  
\153\003\120\301\055\074\026\335\104\064\047\032\165\373\002\003  
\001\000\001\243\102\060\100\060\035\006\003\125\035\016\004\026  
\004\024\012\205\251\167\145\005\230\174\100\201\370\017\227\054  
\070\361\012\354\074\317\060\016\006\003\125\035\017\001\001\377  
\004\004\003\002\001\006\060\017\006\003\125\035\023\001\001\377  
\004\005\060\003\001\001\377\060\015\006\011\052\206\110\206\367  
\015\001\001\013\005\000\003\202\001\001\000\114\072\243\104\254  
\271\105\261\307\223\176\310\013\012\102\337\144\352\034\356\131  
\154\010\272\211\137\152\312\112\225\236\172\217\007\305\332\105  
\162\202\161\016\072\322\314\157\247\264\241\043\273\366\044\237  
\313\027\376\214\246\316\302\322\333\314\215\374\161\374\003\051  
\301\154\135\063\137\144\266\145\073\211\157\030\166\170\365\334  
\242\110\037\031\077\216\223\353\361\372\027\356\315\116\343\004  
\022\125\326\345\344\335\373\076\005\174\342\035\136\306\247\274  
\227\117\150\072\365\351\056\012\103\266\257\127\134\142\150\174  
\267\375\243\212\204\240\254\142\276\053\011\207\064\360\152\001  
\273\233\051\126\074\376\000\067\317\043\154\361\116\252\266\164  
\106\022\154\221\356\064\325\354\232\221\347\104\276\220\061\162  
\325\111\002\366\002\345\364\037\353\174\331\226\125\251\377\354  
\212\371\231\107\377\065\132\002\252\004\313\212\133\207\161\051  
\221\275\244\264\172\015\275\232\365\127\043\000\007\041\027\077  
\112\071\321\005\111\013\247\266\067\201\245\135\214\252\063\136  
\201\050\174\247\175\047\353\000\256\215\067

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "Security Communication RootCA2"

# Issuer: OU=Security Communication RootCA2,O="SECOM Trust Systems CO.,LTD.",C=JP

# Serial Number: 0 (0x0)

# Subject: OU=Security Communication RootCA2,O="SECOM Trust Systems CO.,LTD.",C=JP

# Not Valid Before: Fri May 29 05:00:39 2009

# Not Valid After : Tue May 29 05:00:39 2029

# Fingerprint (SHA-256):

51:3B:2C:EC:B8:10:D4:CD:E5:DD:85:39:1A:DF:C6:C2:DD:60:D8:7B:B7:36:D2:B5:21:48:4A:A4:7A:0E:BE:F6

```

#
Fingerprint (SHA1): 5F:3B:8C:F2:F8:10:B3:7D:78:B4:CE:EC:19:19:C3:73:34:B9:C7:74
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Security Communication RootCA2"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\137\073\214\362\370\020\263\175\170\264\316\354\031\031\303\163
\064\271\307\164
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\154\071\175\244\016\125\131\262\077\326\101\261\022\120\336\103
END
CKA_ISSUER MULTILINE_OCTAL
\060\135\061\013\060\011\006\003\125\004\006\023\002\112\120\061
\045\060\043\006\003\125\004\012\023\034\123\105\103\117\115\040
\124\162\165\163\164\040\123\171\163\164\145\155\163\040\103\117
\056\054\114\124\104\056\061\047\060\045\006\003\125\004\013\023
\036\123\145\143\165\162\151\164\171\040\103\157\155\155\165\156
\151\143\141\164\151\157\156\040\122\157\157\164\103\101\062
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\001\000
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

```

```

#
# Certificate "Actalis Authentication Root CA"
#
# Issuer: CN=Actalis Authentication Root CA,O=Actalis S.p.A./03358520967,L=Milan,C=IT
# Serial Number:57:0a:11:97:42:c4:e3:cc
# Subject: CN=Actalis Authentication Root CA,O=Actalis S.p.A./03358520967,L=Milan,C=IT
# Not Valid Before: Thu Sep 22 11:22:02 2011
# Not Valid After : Sun Sep 22 11:22:02 2030
# Fingerprint (SHA-256):
55:92:60:84:EC:96:3A:64:B9:6E:2A:BE:01:CE:0B:A8:6A:64:FB:FE:BC:C7:AA:B5:AF:C1:55:B3:7F:D7:60:66
# Fingerprint (SHA1): F3:73:B3:87:06:5A:28:84:8A:F2:F3:4A:CE:19:2B:DD:C7:8E:9C:AC
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Actalis Authentication Root CA"
CKA_CERTIFICATE_TYPE

```

CK\_CERTIFICATE\_TYPE CKC\_X\_509

CKA\_SUBJECT MULTILINE\_OCTAL

\060\153\061\013\060\011\006\003\125\004\006\023\002\111\124\061  
\016\060\014\006\003\125\004\007\014\005\115\151\154\141\156\061  
\043\060\041\006\003\125\004\012\014\032\101\143\164\141\154\151  
\163\040\123\056\160\056\101\056\057\060\063\063\065\070\065\062  
\060\071\066\067\061\047\060\045\006\003\125\004\003\014\036\101  
\143\164\141\154\151\163\040\101\165\164\150\145\156\164\151\143  
\141\164\151\157\156\040\122\157\157\164\040\103\101

END

CKA\_ID UTF8 "0"

CKA\_ISSUER MULTILINE\_OCTAL

\060\153\061\013\060\011\006\003\125\004\006\023\002\111\124\061  
\016\060\014\006\003\125\004\007\014\005\115\151\154\141\156\061  
\043\060\041\006\003\125\004\012\014\032\101\143\164\141\154\151  
\163\040\123\056\160\056\101\056\057\060\063\063\065\070\065\062  
\060\071\066\067\061\047\060\045\006\003\125\004\003\014\036\101  
\143\164\141\154\151\163\040\101\165\164\150\145\156\164\151\143  
\141\164\151\157\156\040\122\157\157\164\040\103\101

END

CKA\_SERIAL\_NUMBER

MULTILINE\_OCTAL

\002\010\127\012\021\227\102\304\343\314

END

CKA\_VALUE MULTILINE\_OCTAL

\060\202\005\273\060\202\003\243\240\003\002\001\002\002\010\127  
\012\021\227\102\304\343\314\060\015\006\011\052\206\110\206\367  
\015\001\001\013\005\000\060\153\061\013\060\011\006\003\125\004  
\006\023\002\111\124\061\016\060\014\006\003\125\004\007\014\005  
\115\151\154\141\156\061\043\060\041\006\003\125\004\012\014\032  
\101\143\164\141\154\151\163\040\123\056\160\056\101\056\057\060  
\063\063\065\070\065\062\060\071\066\067\061\047\060\045\006\003  
\125\004\003\014\036\101\143\164\141\154\151\163\040\101\165\164  
\150\145\156\164\151\143\141\164\151\157\156\040\122\157\157\164  
\040\103\101\060\036\027\015\061\061\060\071\062\062\061\061\062  
\062\060\062\132\027\015\063\060\060\071\062\062\061\061\062\062  
\060\062\132\060\153\061\013\060\011\006\003\125\004\006\023\002  
\111\124\061\016\060\014\006\003\125\004\007\014\005\115\151\154  
\141\156\061\043\060\041\006\003\125\004\012\014\032\101\143\164  
\141\154\151\163\040\123\056\160\056\101\056\057\060\063\063\065  
\070\065\062\060\071\066\067\061\047\060\045\006\003\125\004\003  
\014\036\101\143\164\141\154\151\163\040\101\165\164\150\145\156  
\164\151\143\141\164\151\157\156\040\122\157\157\164\040\103\101  
\060\202\002\042\060\015\006\011\052\206\110\206\367\015\001\001  
\001\005\000\003\202\002\017\000\060\202\002\012\002\202\002\001  
\000\247\306\304\245\051\244\054\357\345\030\305\260\120\243\157  
\121\073\237\012\132\311\302\110\070\012\302\034\240\030\177\221  
\265\207\271\100\077\335\035\150\037\010\203\325\055\036\210\240

\370\217\126\217\155\231\002\222\220\026\325\137\010\154\211\327  
\341\254\274\040\302\261\340\203\121\212\151\115\000\226\132\157  
\057\300\104\176\243\016\344\221\315\130\356\334\373\307\036\105  
\107\335\047\271\010\001\237\246\041\035\365\101\055\057\114\375  
\050\255\340\212\255\042\264\126\145\216\206\124\217\223\103\051  
\336\071\106\170\243\060\043\272\315\360\175\023\127\300\135\322  
\203\153\110\114\304\253\237\200\132\133\072\275\311\247\042\077  
\200\047\063\133\016\267\212\014\135\007\067\010\313\154\322\172  
\107\042\104\065\305\314\314\056\216\335\052\355\267\175\146\015  
\137\141\121\042\125\033\343\106\343\343\075\320\065\142\232\333  
\257\024\310\133\241\314\211\033\341\060\046\374\240\233\037\201  
\247\107\037\004\353\243\071\222\006\237\231\323\277\323\352\117  
\120\234\031\376\226\207\036\074\145\366\243\030\044\203\206\020  
\347\124\076\250\072\166\044\117\201\041\305\343\017\002\370\223  
\224\107\040\273\376\324\016\323\150\271\335\304\172\204\202\343  
\123\124\171\335\333\234\322\362\007\233\056\266\274\076\355\205  
\155\357\045\021\362\227\032\102\141\367\112\227\350\213\261\020  
\007\372\145\201\262\242\071\317\367\074\377\030\373\306\361\132  
\213\131\342\002\254\173\222\320\116\024\117\131\105\366\014\136  
\050\137\260\350\077\105\317\317\257\233\157\373\204\323\167\132  
\225\157\254\224\204\236\356\274\300\112\217\112\223\370\104\041  
\342\061\105\141\120\116\020\330\343\065\174\114\031\264\336\005  
\277\243\006\237\310\265\315\344\037\327\027\006\015\172\225\164  
\125\015\150\032\374\020\033\142\144\235\155\340\225\240\303\224  
\007\127\015\024\346\275\005\373\270\237\346\337\213\342\306\347  
\176\226\366\123\305\200\064\120\050\130\360\022\120\161\027\060  
\272\346\170\143\274\364\262\255\233\053\262\376\341\071\214\136  
\272\013\040\224\336\173\203\270\377\343\126\215\267\021\351\073  
\214\362\261\301\135\235\244\013\114\053\331\262\030\365\265\237  
\113\002\003\001\000\001\243\143\060\141\060\035\006\003\125\035  
\016\004\026\004\024\122\330\210\072\310\237\170\146\355\211\363  
\173\070\160\224\311\002\002\066\320\060\017\006\003\125\035\023  
\001\001\377\004\005\060\003\001\001\377\060\037\006\003\125\035  
\043\004\030\060\026\200\024\122\330\210\072\310\237\170\146\355  
\211\363\173\070\160\224\311\002\002\066\320\060\016\006\003\125  
\035\017\001\001\377\004\004\003\002\001\006\060\015\006\011\052  
\206\110\206\367\015\001\001\013\005\000\003\202\002\001\000\013  
\173\162\207\300\140\246\111\114\210\130\346\035\210\367\024\144  
\110\246\330\130\012\016\117\023\065\337\065\035\324\355\006\061  
\310\201\076\152\325\335\073\032\062\356\220\075\021\322\056\364  
\216\303\143\056\043\146\260\147\276\157\266\300\023\071\140\252  
\242\064\045\223\165\122\336\247\235\255\016\207\211\122\161\152  
\026\074\031\035\203\370\232\051\145\276\364\077\232\331\360\363  
\132\207\041\161\200\115\313\340\070\233\077\273\372\340\060\115  
\317\206\323\145\020\031\030\321\227\002\261\053\162\102\150\254  
\240\275\116\132\332\030\277\153\230\201\320\375\232\276\136\025  
\110\315\021\025\271\300\051\134\264\350\210\367\076\066\256\267  
\142\375\036\142\336\160\170\020\034\110\133\332\274\244\070\272

```
\147\355\125\076\136\127\337\324\003\100\114\201\244\322\117\143
\247\011\102\011\024\374\000\251\302\200\163\117\056\300\100\331
\021\173\110\352\172\002\300\323\353\050\001\046\130\164\301\300
\163\042\155\223\225\375\071\175\273\052\343\366\202\343\054\227
\137\116\037\221\224\372\376\054\243\330\166\032\270\115\262\070
\117\233\372\035\110\140\171\046\342\363\375\251\320\232\350\160
\217\111\172\326\345\275\012\016\333\055\363\215\277\353\343\244
\175\313\307\225\161\350\332\243\174\305\302\370\164\222\004\033
\206\254\244\042\123\100\266\254\376\114\166\317\373\224\062\300
\065\237\166\077\156\345\220\156\240\246\046\242\270\054\276\321
\053\205\375\247\150\310\272\001\053\261\154\164\035\270\163\225
\347\356\267\307\045\360\000\114\000\262\176\266\013\213\034\363
\300\120\236\045\271\340\010\336\066\146\377\067\245\321\273\124
\144\054\311\047\265\113\222\176\145\377\323\055\341\271\116\274
\177\244\101\041\220\101\167\246\071\037\352\236\343\237\320\146
\157\005\354\252\166\176\277\153\026\240\353\265\307\374\222\124
\057\053\021\047\045\067\170\114\121\152\260\363\314\130\135\024
\361\152\110\025\377\302\007\266\261\215\017\216\134\120\106\263
\075\277\001\230\117\262\131\124\107\076\064\173\170\155\126\223
\056\163\352\146\050\170\315\035\024\277\240\217\057\056\270\056
\216\362\024\212\314\351\265\174\373\154\235\014\245\341\226
```

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "Actalis Authentication Root CA"

# Issuer: CN=Actalis Authentication Root CA,O=Actalis S.p.A./03358520967,L=Milan,C=IT

# Serial Number:57:0a:11:97:42:c4:e3:cc

# Subject: CN=Actalis Authentication Root CA,O=Actalis S.p.A./03358520967,L=Milan,C=IT

# Not Valid Before: Thu Sep 22 11:22:02 2011

# Not Valid After : Sun Sep 22 11:22:02 2030

# Fingerprint (SHA-256):

55:92:60:84:EC:96:3A:64:B9:6E:2A:BE:01:CE:0B:A8:6A:64:FB:FE:BC:C7:AA:B5:AF:C1:55:B3:7F:D7:60:66

# Fingerprint (SHA1): F3:73:B3:87:06:5A:28:84:8A:F2:F3:4A:CE:19:2B:DD:C7:8E:9C:AC

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "Actalis Authentication Root CA"

CKA\_CERT\_SHA1\_HASH MULTILINE\_OCTAL

```
\363\163\263\207\006\132\050\204\212\362\363\112\316\031\053\335
```

```
\307\216\234\254
```

END

CKA\_CERT\_MD5\_HASH

MULTILINE\_OCTAL

```
\151\301\015\117\007\243\033\303\376\126\075\004\274\021\366\246
```

```

END
CKA_ISSUER MULTILINE_OCTAL
\060\153\061\013\060\011\006\003\125\004\006\023\002\111\124\061
\016\060\014\006\003\125\004\007\014\005\115\151\154\141\156\061
\043\060\041\006\003\125\004\012\014\032\101\143\164\141\154\151
\163\040\123\056\160\056\101\056\057\060\063\063\065\070\065\062
\060\071\066\067\061\047\060\045\006\003\125\004\003\014\036\101
\143\164\141\154\151\163\040\101\165\164\150\145\156\164\151\143
\141\164\151\157\156\040\122\157\157\164\040\103\101
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\010\127\012\021\227\102\304\343\314
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "Buypass Class 2 Root
  CA"
#
# Issuer: CN=Buypass Class 2 Root CA,O=Buypass AS-983163327,C=NO
# Serial Number: 2 (0x2)
# Subject: CN=Buypass Class 2 Root CA,O=Buypass AS-983163327,C=NO
# Not Valid Before: Tue Oct 26 08:38:03 2010
# Not Valid After : Fri Oct 26 08:38:03 2040
# Fingerprint (SHA-256):
9A:11:40:25:19:7C:5B:B9:5D:94:E6:3D:55:CD:43:79:08:47:B6:46:B2:3C:DF:11:AD:A4:A0:0E:FF:15:FB:48
# Fingerprint (SHA1): 49:0A:75:74:DE:87:0A:47:FE:58:EE:F6:C7:6B:EB:C6:0B:12:40:99
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Buypass Class 2 Root CA"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\116\061\013\060\011\006\003\125\004\006\023\002\116\117\061
\035\060\033\006\003\125\004\012\014\024\102\165\171\160\141\163
\163\040\101\123\055\071\070\063\061\066\063\063\062\067\061\040
\060\036\006\003\125\004\003\014\027\102\165\171\160\141\163\163
\040\103\154\141\163\163\040\062\040\122\157\157\164\040\103\101
END
CKA_ID
UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\116\061\013\060\011\006\003\125\004\006\023\002\116\117\061
\035\060\033\006\003\125\004\012\014\024\102\165\171\160\141\163

```

\163\040\101\123\055\071\070\063\061\066\063\063\062\067\061\040  
\060\036\006\003\125\004\003\014\027\102\165\171\160\141\163\163  
\040\103\154\141\163\163\040\062\040\122\157\157\164\040\103\101  
END

CKA\_SERIAL\_NUMBER MULTILINE\_OCTAL

\002\001\002

END

CKA\_VALUE MULTILINE\_OCTAL

\060\202\005\131\060\202\003\101\240\003\002\001\002\002\001\002  
\060\015\006\011\052\206\110\206\367\015\001\001\013\005\000\060  
\116\061\013\060\011\006\003\125\004\006\023\002\116\117\061\035  
\060\033\006\003\125\004\012\014\024\102\165\171\160\141\163\163  
\040\101\123\055\071\070\063\061\066\063\063\062\067\061\040\060  
\036\006\003\125\004\003\014\027\102\165\171\160\141\163\163\040  
\103\154\141\163\163\040\062\040\122\157\157\164\040\103\101\060  
\036\027\015\061\060\061\060\062\066\060\070\063\070\060\063\132  
\027\015\064\060\061\060\062\066\060\070\063\070\060\063\132\060  
\116\061\013\060\011\006\003\125\004\006\023\002\116\117\061\035  
\060\033\006\003\125\004\012\014\024\102\165\171\160\141\163\163  
\040\101\123\055\071\070\063\061\066\063\063\062\067\061\040\060  
\036\006\003\125\004\003\014\027\102\165\171\160\141\163\163\040  
\103\154\141\163\163\040\062\040\122\157\157\164\040\103\101\060  
\202\002\042\060\015\006\011\052\206\110\206\367\015\001\001\001  
\005\000\003\202\002\017\000\060\202\002\012\002\202\002\001\000  
\327\307\136\367\301\007\324\167\373\103\041\364\364\365\151\344  
\356\062\001\333\243\206\037\344\131\015\272\347\165\203\122\353  
\352\034\141\025\110\273\035\007\312\214\256\260\334\226\235\352  
\303\140\222\206\202\050\163\234\126\006\377\113\144\360\014\052  
\067\111\265\345\317\014\174\356\361\112\273\163\060\145\363\325  
\057\203\266\176\343\347\365\236\253\140\371\323\361\235\222\164  
\212\344\034\226\254\133\200\351\265\364\061\207\243\121\374\307  
\176\241\157\216\123\167\324\227\301\125\063\222\076\030\057\165  
\324\255\206\111\313\225\257\124\006\154\330\006\023\215\133\377  
\341\046\031\131\300\044\272\201\161\171\220\104\120\150\044\224  
\137\270\263\021\361\051\101\141\243\101\313\043\066\325\301\361  
\062\120\020\116\177\364\206\223\354\204\323\216\274\113\277\134  
\001\116\007\075\334\024\212\224\012\244\352\163\373\013\121\350  
\023\007\030\372\016\361\053\321\124\025\175\074\341\367\264\031  
\102\147\142\136\167\340\242\125\354\266\331\151\027\325\072\257  
\104\355\112\305\236\344\172\047\174\345\165\327\252\313\045\347  
\337\153\012\333\017\115\223\116\250\240\315\173\056\362\131\001  
\152\267\015\270\007\201\176\213\070\033\070\346\012\127\231\075  
\356\041\350\243\365\014\026\335\213\354\064\216\234\052\034\000  
\025\027\215\150\203\322\160\237\030\010\315\021\150\325\311\153  
\122\315\304\106\217\334\265\363\330\127\163\036\351\224\071\004  
\277\323\336\070\336\264\123\354\151\034\242\176\304\217\344\033  
\160\255\362\242\371\373\367\026\144\146\151\237\111\121\242\342  
\025\030\147\006\112\177\325\154\265\115\263\063\340\141\353\135



\276\351\230\017\062\327\035\113\074\056\132\001\122\221\011\362  
\337\352\215\330\006\100\143\252\021\344\376\303\067\236\024\122  
\077\364\342\314\362\141\223\321\375\147\153\327\122\256\277\150  
\253\100\103\240\127\065\123\170\360\123\370\141\102\007\144\306  
\327\157\233\114\070\015\143\254\142\257\066\213\242\163\012\015  
\365\041\275\164\252\115\352\162\003\111\333\307\137\035\142\143  
\307\375\335\221\354\063\356\365\155\264\156\060\150\336\310\326  
\046\260\165\136\173\264\007\040\230\241\166\062\270\115\154\117  
\002\003\001\000\001\243\102\060\100\060\017\006\003\125\035\023  
\001\001\377\004\005\060\003\001\001\377\060\035\006\003\125\035  
\016\004\026\004\024\311\200\167\340\142\222\202\365\106\234\363  
\272\367\114\303\336\270\243\255\071\060\016\006\003\125\035\017  
\001\001\377\004\004\003\002\001\006\060\015\006\011\052\206\110  
\206\367\015\001\001\013\005\000\003\202\002\001\000\123\137\041  
\365\272\260\072\122\071\054\222\260\154\000\311\357\316\040\357  
\006\362\226\236\351\244\164\177\172\026\374\267\365\266\373\025  
\033\077\253\246\300\162\135\020\261\161\356\274\117\343\255\254  
\003\155\056\161\056\257\304\343\255\243\275\014\021\247\264\377  
\112\262\173\020\020\037\247\127\101\262\300\256\364\054\131\326  
\107\020\210\363\041\121\051\060\312\140\206\257\106\253\035\355  
\072\133\260\224\336\104\343\101\010\242\301\354\035\326\375\117  
\266\326\107\320\024\013\312\346\312\265\173\167\176\101\037\136  
\203\307\266\214\071\226\260\077\226\201\101\157\140\220\342\350  
\371\373\042\161\331\175\263\075\106\277\264\204\257\220\034\017  
\217\022\152\257\357\356\036\172\256\002\112\212\027\053\166\376  
\254\124\211\044\054\117\077\266\262\247\116\214\250\221\227\373  
\051\306\173\134\055\271\313\146\266\267\250\133\022\121\205\265  
\011\176\142\170\160\376\251\152\140\266\035\016\171\014\375\312  
\352\044\200\162\303\227\077\362\167\253\103\042\012\307\353\266  
\014\204\202\054\200\153\101\212\010\300\353\245\153\337\231\022  
\313\212\325\136\200\014\221\340\046\010\066\110\305\372\070\021  
\065\377\045\203\055\362\172\277\332\375\216\376\245\313\105\054  
\037\304\210\123\256\167\016\331\232\166\305\216\054\035\243\272  
\325\354\062\256\300\252\254\367\321\172\115\353\324\007\342\110  
\367\042\216\260\244\237\152\316\216\262\262\140\364\243\042\320  
\043\353\224\132\172\151\335\017\277\100\127\254\153\131\120\331  
\243\231\341\156\376\215\001\171\047\043\025\336\222\235\173\011  
\115\132\347\113\110\060\132\030\346\012\155\346\217\340\322\273  
\346\337\174\156\041\202\301\150\071\115\264\230\130\146\142\314  
\112\220\136\303\372\047\004\261\171\025\164\231\314\276\255\040  
\336\046\140\034\353\126\121\246\243\352\344\243\077\247\377\141  
\334\361\132\115\154\062\043\103\356\254\250\356\356\112\022\011  
\074\135\161\302\276\171\372\302\207\150\035\013\375\134\151\314  
\006\320\232\175\124\231\052\311\071\032\031\257\113\052\103\363  
\143\135\132\130\342\057\343\035\344\251\326\320\012\320\236\277  
\327\201\011\361\311\307\046\015\254\230\026\126\240

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

```

CK_BBOOL CK_TRUE
CKA_NSS_SERVER_DISTRUST_AFTER CK_BBOOL CK_FALSE
CKA_NSS_EMAIL_DISTRUST_AFTER CK_BBOOL CK_FALSE

# Trust for "Buypass Class 2 Root CA"
# Issuer: CN=Buypass Class 2 Root CA,O=Buypass AS-983163327,C=NO
# Serial Number: 2 (0x2)
# Subject: CN=Buypass Class 2 Root CA,O=Buypass AS-983163327,C=NO
# Not Valid Before: Tue Oct 26 08:38:03 2010
# Not Valid After : Fri Oct 26 08:38:03 2040
# Fingerprint (SHA-256):
9A:11:40:25:19:7C:5B:B9:5D:94:E6:3D:55:CD:43:79:08:47:B6:46:B2:3C:DF:11:AD:A4:A0:0E:FF:15:FB:48
# Fingerprint (SHA1): 49:0A:75:74:DE:87:0A:47:FE:58:EE:F6:C7:6B:EB:C6:0B:12:40:99
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Buypass Class 2 Root CA"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\111\012\165\164\336\207\012\107\376\130\356\366\307\153\353\306
\013\022\100\231
END
CKA_CERT_MD5_HASH
MULTILINE_OCTAL
\106\247\322\376\105\373\144\132\250\131\220\233\170\104\233\051
END
CKA_ISSUER MULTILINE_OCTAL
\060\116\061\013\060\011\006\003\125\004\006\023\002\116\117\061
\035\060\033\006\003\125\004\012\014\024\102\165\171\160\141\163
\163\040\101\123\055\071\070\063\061\066\063\063\062\067\061\040
\060\036\006\003\125\004\003\014\027\102\165\171\160\141\163\163
\040\103\154\141\163\163\040\062\040\122\157\157\164\040\103\101
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\001\002
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "Buypass Class 3 Root CA"
#
# Issuer: CN=Buypass Class 3 Root CA,O=Buypass AS-983163327,C=NO
# Serial Number: 2 (0x2)
# Subject: CN=Buypass Class 3 Root CA,O=Buypass AS-983163327,C=NO
# Not Valid Before: Tue Oct 26 08:28:58 2010

```

```
# Not Valid After : Fri Oct 26 08:28:58
2040
# Fingerprint (SHA-256):
ED:F7:EB:BC:A2:7A:2A:38:4D:38:7B:7D:40:10:C6:66:E2:ED:B4:84:3E:4C:29:B4:AE:1D:5B:93:32:E6:B2:4D
# Fingerprint (SHA1): DA:FA:F7:FA:66:84:EC:06:8F:14:50:BD:C7:C2:81:A5:BC:A9:64:57
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Bypass Class 3 Root CA"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\116\061\013\060\011\006\003\125\004\006\023\002\116\117\061
\035\060\033\006\003\125\004\012\014\024\102\165\171\160\141\163
\163\040\101\123\055\071\070\063\061\066\063\063\062\067\061\040
\060\036\006\003\125\004\003\014\027\102\165\171\160\141\163\163
\040\103\154\141\163\163\040\063\040\122\157\157\164\040\103\101
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\116\061\013\060\011\006\003\125\004\006\023\002\116\117\061
\035\060\033\006\003\125\004\012\014\024\102\165\171\160\141\163
\163\040\101\123\055\071\070\063\061\066\063\063\062\067\061\040
\060\036\006\003\125\004\003\014\027\102\165\171\160\141\163\163
\040\103\154\141\163\163\040\063\040\122\157\157\164\040\103\101
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\001\002
END
CKA_VALUE MULTILINE_OCTAL
\060\202\005\131\060\202\003\101\240\003\002\001\002\002\001\002
\060\015\006\011\052\206\110\206\367\015\001\001\013\005\000\060
\116\061\013\060\011\006\003\125\004\006\023\002\116\117\061\035
\060\033\006\003\125\004\012\014\024\102\165\171\160\141\163\163
\040\101\123\055\071\070\063\061\066\063\063\062\067\061\040\060
\036\006\003\125\004\003\014\027\102\165\171\160\141\163\163\040
\103\154\141\163\163\040\063\040\122\157\157\164\040\103\101\060
\036\027\015\061\060\061\060\062\066\060\070\062\070\065\070\132
\027\015\064\060\061\060\062\066\060\070\062\070\065\070\132\060
\116\061\013\060\011\006\003\125\004\006\023\002\116\117\061\035
\060\033\006\003\125\004\012\014\024\102\165\171\160\141\163\163
\040\101\123\055\071\070\063\061\066\063\063\062\067\061\040\060
\036\006\003\125\004\003\014\027\102\165\171\160\141\163\163\040
\103\154\141\163\163\040\063\040\122\157\157\164\040\103\101\060
\202\002\042\060\015\006\011\052\206\110\206\367\015\001\001\001
\005\000\003\202\002\017\000\060\202\002\012\002\202\002\001\000
\245\332\012\225\026\120\343\225\362\136\235\166\061\006\062\172
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\233\361\020\166\270\000\232\265\122\066\315\044\107\260\237\030  
\144\274\232\366\372\325\171\330\220\142\114\042\057\336\070\075  
\326\340\250\351\034\054\333\170\021\351\216\150\121\025\162\307  
\363\063\207\344\240\135\013\134\340\127\007\052\060\365\315\304  
\067\167\050\115\030\221\346\277\325\122\375\161\055\160\076\347  
\306\304\212\343\360\050\013\364\166\230\241\213\207\125\262\072  
\023\374\267\076\047\067\216\042\343\250\117\052\357\140\273\075  
\267\071\303\016\001\107\231\135\022\117\333\103\372\127\241\355  
\371\235\276\021\107\046\133\023\230\253\135\026\212\260\067\034  
\127\235\105\377\210\226\066\277\273\312\007\173\157\207\143\327  
\320\062\152\326\135\154\014\361\263\156\071\342\153\061\056\071  
\000\047\024\336\070\300\354\031\146\206\022\350\235\162\026\023  
\144\122\307\251\067\034\375\202\060\355\204\030\035\364\256\134  
\377\160\023\000\353\261\365\063\172\113\326\125\370\005\215\113  
\151\260\365\263\050\066\134\024\304\121\163\115\153\013\361\064  
\007\333\027\071\327\334\050\173\153\365\237\363\056\301\117\027  
\052\020\363\314\312\350\353\375\153\253\056\232\237\055\202\156  
\004\324\122\001\223\055\075\206\374\176\374\337\357\102\035\246  
\153\357\271\040\306\367\275\240\247\225\375\247\346\211\044\330  
\314\214\064\154\342\043\057\331\022\032\041\271\125\221\157\013  
\221\171\031\014\255\100\210\013\160\342\172\322\016\330\150\110  
\273\202\023\071\020\130\351\330\052\007\306\022\333\130\333\322  
\073\125\020\107\005\025\147\142\176\030\143\246\106\077\011\016  
\124\062\136\277\015\142\172\047\357\200\350\333\331\113\006\132  
\067\132\045\320\010\022\167\324\157\011\120\227\075\310\035\303  
\337\214\105\060\126\306\323\144\253\146\363\300\136\226\234\303  
\304\357\303\174\153\213\072\171\177\263\111\317\075\342\211\237  
\240\060\113\205\271\234\224\044\171\217\175\153\251\105\150\017  
\053\320\361\332\034\313\151\270\312\111\142\155\310\320\143\142  
\335\140\017\130\252\217\241\274\005\245\146\242\317\033\166\262  
\204\144\261\114\071\122\300\060\272\360\214\113\002\260\266\267  
\002\003\001\000\001\243\102\060\100\060\017\006\003\125\035\023  
\001\001\377\004\005\060\003\001\001\377\060\035\006\003\125\035  
\016\004\026\004\024\107\270\315\377\345\157\356\370\262\354\057  
\116\016\371\045\260\216\074\153\303\060\016\006\003\125\035\017  
\001\001\377\004\004\003\002\001\006\060\015\006\011\052\206\110  
\206\367\015\001\001\013\005\000\003\202\002\001\000\000\040\043  
\101\065\004\220\302\100\142\140\357\342\065\114\327\077\254\342  
\064\220\270\241\157\166\372\026\026\244\110\067\054\351\220\302  
\362\074\370\012\237\330\201\345\273\133\332\045\054\244\247\125  
\161\044\062\366\310\013\362\274\152\370\223\254\262\007\302\137  
\237\333\314\310\212\252\276\152\157\341\111\020\314\061\327\200  
\273\273\310\330\242\016\144\127\352\242\365\302\251\061\025\322  
\040\152\354\374\042\001\050\317\206\270\200\036\251\314\021\245  
\074\362\026\263\107\235\374\322\200\041\304\313\320\107\160\101  
\241\312\203\031\010\054\155\362\135\167\234\212\024\023\324\066  
\034\222\360\345\006\067\334\246\346\220\233\070\217\134\153\033  
\106\206\103\102\137\076\001\007\123\124\135\145\175\367\212\163

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\241\232\124\132\037\051\103\024\047\302\205\017\265\210\173\032
\073\224\267\035\140\247\265\234\347\051\151\127\132\233\223\172
\103\060\033\003\327\142\310\100\246\252\374\144\344\112\327\221
\123\001\250\040\210\156\234\137\104\271\313\140\201\064\354\157
\323\175\332\110\137\353\264\220\274\055\251\034\013\254\034\325
\242\150\040\200\004\326\374\261\217\057\273\112\061\015\112\206
\034\353\342\066\051\046\365\332\330\304\362\165\141\317\176\256
\166\143\112\172\100\145\223\207\370\036\200\214\206\345\206\326
\217\016\374\123\054\140\350\026\141\032\242\076\103\173\315\071
\140\124\152\365\362\211\046\001\150\203\110\242\063\350\311\004
\221\262\021\064\021\076\352\320\103\031\037\003\223\220\014\377
\121\075\127\364\101\156\341\313\240\276\353\311\143\315\155\314
\344\370\066\252\150\235\355\275\135\227\160\104\015\266\016\065
\334\341\014\135\273\240\121\224\313\176\026\353\021\057\243\222
\105\310\114\161\331\274\311\231\122\127\106\057\120\317\275\065
\151\364\075\025\316\006\245\054\017\076\366\201\272\224\273\303
\273\277\145\170\322\206\171\377\111\073\032\203\014\360\336\170
\354\310\362\115\114\032\336\202\051\370\301\132\332\355\356\346
\047\136\350\105\320\235\034\121\250\150\253\104\343\320\213\152
\343\370\073\273\334\115\327\144\362\121\276\346\252\253\132\351
\061\356\006\274\163\277\023\142\012\237\307\271\227
```

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "Buypass Class 3 Root CA"

#

Issuer: CN=Buypass Class 3 Root CA,O=Buypass AS-983163327,C=NO

# Serial Number: 2 (0x2)

# Subject: CN=Buypass Class 3 Root CA,O=Buypass AS-983163327,C=NO

# Not Valid Before: Tue Oct 26 08:28:58 2010

# Not Valid After : Fri Oct 26 08:28:58 2040

# Fingerprint (SHA-256):

ED:F7:EB:BC:A2:7A:2A:38:4D:38:7B:7D:40:10:C6:66:E2:ED:B4:84:3E:4C:29:B4:AE:1D:5B:93:32:E6:B2:4D

# Fingerprint (SHA1): DA:FA:F7:FA:66:84:EC:06:8F:14:50:BD:C7:C2:81:A5:BC:A9:64:57

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "Buypass Class 3 Root CA"

CKA\_CERT\_SHA1\_HASH MULTILINE\_OCTAL

```
\332\372\367\372\146\204\354\006\217\024\120\275\307\302\201\245
\274\251\144\127
```

END

CKA\_CERT\_MD5\_HASH MULTILINE\_OCTAL

```
\075\073\030\236\054\144\132\350\325\210\316\016\371\067\302\354
```

```

END
CKA_ISSUER MULTILINE_OCTAL
\060\116\061\013\060\011\006\003\125\004\006\023\002\116\117\061
\035\060\033\006\003\125\004\012\014\024\102\165\171\160\141\163
\163\040\101\123\055\071\070\063\061\066\063\063\062\067\061\040
\060\036\006\003\125\004\003\014\027\102\165\171\160\141\163\163
\040\103\154\141\163\163\040\063\040\122\157\157\164\040\103\101
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\001\002
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "T-TeleSec GlobalRoot Class 3"
#
# Issuer: CN=T-TeleSec GlobalRoot Class 3,OU=T-Systems Trust Center,O=T-Systems Enterprise Services
GmbH,C=DE
# Serial Number: 1 (0x1)
# Subject: CN=T-TeleSec GlobalRoot Class 3,OU=T-Systems Trust Center,O=T-Systems Enterprise Services
GmbH,C=DE
# Not Valid Before: Wed Oct 01 10:29:56 2008
# Not Valid After : Sat Oct 01 23:59:59 2033
# Fingerprint (SHA-256):
FD:73:DA:D3:1C:64:4F:F1:B4:3B:EF:0C:CD:DA:96:71:0B:9C:D9:87:5E:CA:7E:31:70:7A:F3:E9:6D:52:2B:BD
# Fingerprint (SHA1):
55:A6:72:3E:CB:F2:EC:CD:C3:23:74:70:19:9D:2A:BE:11:E3:81:D1
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "T-TeleSec GlobalRoot Class 3"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\201\202\061\013\060\011\006\003\125\004\006\023\002\104\105
\061\053\060\051\006\003\125\004\012\014\042\124\055\123\171\163
\164\145\155\163\040\105\156\164\145\162\160\162\151\163\145\040
\123\145\162\166\151\143\145\163\040\107\155\142\110\061\037\060
\035\006\003\125\004\013\014\026\124\055\123\171\163\164\145\155
\163\040\124\162\165\163\164\040\103\145\156\164\145\162\061\045
\060\043\006\003\125\004\003\014\034\124\055\124\145\154\145\123
\145\143\040\107\154\157\142\141\154\122\157\157\164\040\103\154
\141\163\163\040\063
END

```

CKA\_ID UTF8 "0"

CKA\_ISSUER MULTILINE\_OCTAL

\060\201\202\061\013\060\011\006\003\125\004\006\023\002\104\105  
\061\053\060\051\006\003\125\004\012\014\042\124\055\123\171\163  
\164\145\155\163\040\105\156\164\145\162\160\162\151\163\145\040  
\123\145\162\166\151\143\145\163\040\107\155\142\110\061\037\060  
\035\006\003\125\004\013\014\026\124\055\123\171\163\164\145\155  
\163\040\124\162\165\163\164\040\103\145\156\164\145\162\061\045  
\060\043\006\003\125\004\003\014\034\124\055\124\145\154\145\123  
\145\143\040\107\154\157\142\141\154\122\157\157\164\040\103\154  
\141\163\163\040\063

END

CKA\_SERIAL\_NUMBER

MULTILINE\_OCTAL

\002\001\001

END

CKA\_VALUE MULTILINE\_OCTAL

\060\202\003\303\060\202\002\253\240\003\002\001\002\002\001\001  
\060\015\006\011\052\206\110\206\367\015\001\001\013\005\000\060  
\201\202\061\013\060\011\006\003\125\004\006\023\002\104\105\061  
\053\060\051\006\003\125\004\012\014\042\124\055\123\171\163\164  
\145\155\163\040\105\156\164\145\162\160\162\151\163\145\040\123  
\145\162\166\151\143\145\163\040\107\155\142\110\061\037\060\035  
\006\003\125\004\013\014\026\124\055\123\171\163\164\145\155\163  
\040\124\162\165\163\164\040\103\145\156\164\145\162\061\045\060  
\043\006\003\125\004\003\014\034\124\055\124\145\154\145\123\145  
\143\040\107\154\157\142\141\154\122\157\157\164\040\103\154\141  
\163\163\040\063\060\036\027\015\060\070\061\060\060\061\061\060  
\062\071\065\066\132\027\015\063\063\061\060\060\061\062\063\065  
\071\065\071\132\060\201\202\061\013\060\011\006\003\125\004\006  
\023\002\104\105\061\053\060\051\006\003\125\004\012\014\042\124  
\055\123\171\163\164\145\155\163\040\105\156\164\145\162\160\162  
\151\163\145\040\123\145\162\166\151\143\145\163\040\107\155\142  
\110\061\037\060\035\006\003\125\004\013\014\026\124\055\123\171  
\163\164\145\155\163\040\124\162\165\163\164\040\103\145\156\164  
\145\162\061\045\060\043\006\003\125\004\003\014\034\124\055\124  
\145\154\145\123\145\143\040\107\154\157\142\141\154\122\157\157  
\164\040\103\154\141\163\163\040\063\060\202\001\042\060\015\006  
\011\052\206\110\206\367\015\001\001\001\005\000\003\202\001\017  
\000\060\202\001\012\002\202\001\001\000\275\165\223\360\142\042  
\157\044\256\340\172\166\254\175\275\331\044\325\270\267\374\315  
\360\102\340\353\170\210\126\136\233\232\124\035\115\014\212\366  
\323\317\160\364\122\265\330\223\004\343\106\206\161\101\112\053  
\360\052\054\125\003\326\110\303\340\071\070\355\362\134\074\077  
\104\274\223\075\141\253\116\315\015\276\360\040\047\130\016\104  
\177\004\032\207\245\327\226\024\066\220\320\111\173\241\165\373  
\032\153\163\261\370\316\251\011\054\362\123\325\303\024\104\270  
\206\245\366\213\053\071\332\243\063\124\331\372\162\032\367\042

\025\034\210\221\153\177\146\345\303\152\200\260\044\363\337\206  
\105\210\375\031\177\165\207\037\037\261\033\012\163\044\133\271  
\145\340\054\124\310\140\323\146\027\077\341\314\124\063\163\221  
\002\072\246\177\173\166\071\242\037\226\266\070\256\265\310\223  
\164\035\236\271\264\345\140\235\057\126\321\340\353\136\133\114  
\022\160\014\154\104\040\253\021\330\364\031\366\322\234\122\067  
\347\372\266\302\061\073\112\324\024\231\255\307\032\365\135\137  
\372\007\270\174\015\037\326\203\036\263\002\003\001\000\001\243  
\102\060\100\060\017\006\003\125\035\023\001\001\377\004\005\060  
\003\001\001\377\060\016\006\003\125\035\017\001\001\377\004\004  
\003\002\001\006\060\035\006\003\125\035\016\004\026\004\024\265  
\003\367\166\073\141\202\152\022\252\030\123\353\003\041\224\277  
\376\316\312\060\015\006\011\052\206\110\206\367\015\001\001\013  
\005\000\003\202\001\001\000\126\075\357\224\325\275\332\163\262  
\130\276\256\220\255\230\047\227\376\001\261\260\122\000\270\115  
\344\033\041\164\033\176\300\356\136\151\052\045\257\134\326\035  
\332\322\171\311\363\227\051\340\206\207\336\004\131\017\361\131  
\324\144\205\113\231\257\045\004\036\311\106\251\227\336\202\262  
\033\160\237\234\366\257\161\061\335\173\005\245\054\323\271\312  
\107\366\312\362\366\347\255\271\110\077\274\026\267\301\155\364  
\352\011\257\354\363\265\347\005\236\246\036\212\123\121\326\223  
\201\314\164\223\366\271\332\246\045\005\164\171\132\176\100\076  
\202\113\046\021\060\156\341\077\101\307\107\000\065\325\365\323  
\367\124\076\201\075\332\111\152\232\263\357\020\075\346\353\157  
\321\310\042\107\313\314\317\001\061\222\331\030\343\042\276\011  
\036\032\076\132\262\344\153\014\124\172\175\103\116\270\211\245  
\173\327\242\075\226\206\314\362\046\064\055\152\222\235\232\032  
\320\060\342\135\116\004\260\137\213\040\176\167\301\075\225\202  
\321\106\232\073\074\170\270\157\241\320\015\144\242\170\036\051  
\116\223\303\244\124\024\133

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "T-TeleSec GlobalRoot Class 3"

# Issuer: CN=T-TeleSec GlobalRoot Class 3,OU=T-Systems Trust Center,O=T-Systems Enterprise Services GmbH,C=DE

# Serial Number: 1 (0x1)

# Subject: CN=T-TeleSec GlobalRoot Class 3,OU=T-Systems Trust Center,O=T-Systems Enterprise Services GmbH,C=DE

# Not Valid Before: Wed Oct 01 10:29:56 2008

# Not Valid After : Sat Oct 01 23:59:59 2033

# Fingerprint (SHA-256):

FD:73:DA:D3:1C:64:4F:F1:B4:3B:EF:0C:CD:DA:96:71:0B:9C:D9:87:5E:CA:7E:31:70:7A:F3:E9:6D:52:2B:BD

# Fingerprint (SHA1): 55:A6:72:3E:CB:F2:EC:CD:C3:23:74:70:19:9D:2A:BE:11:E3:81:D1

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST



```

CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "T-TeleSec GlobalRoot Class 3"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\125\246\162\076\313\362\354\315\303\043\164\160\031\235\052\276
\021\343\201\321
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\312\373\100\250\116\071\222\212\035\376\216\057\304\047\352\357
END
CKA_ISSUER MULTILINE_OCTAL
\060\201\202\061\013\060\011\006\003\125\004\006\023\002\104\105
\061\053\060\051\006\003\125\004\012\014\042\124\055\123\171\163
\164\145\155\163\040\105\156\164\145\162\160\162\151\163\145\040
\123\145\162\166\151\143\145\163\040\107\155\142\110\061\037\060
\035\006\003\125\004\013\014\026\124\055\123\171\163\164\145\155
\163\040\124\162\165\163\164\040\103\145\156\164\145\162\061\045
\060\043\006\003\125\004\003\014\034\124\055\124\145\154\145\123
\145\143\040\107\154\157\142\141\154\122\157\157\164\040\103\154
\141\163\163\040\063
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\001\001
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "D-TRUST Root Class 3 CA 2 2009"
#
# Issuer: CN=D-TRUST Root Class 3 CA 2 2009,O=D-Trust GmbH,C=DE
# Serial Number: 623603 (0x983f3)
# Subject: CN=D-TRUST Root Class 3 CA 2 2009,O=D-Trust GmbH,C=DE
# Not Valid Before: Thu Nov 05 08:35:58 2009
# Not Valid After : Mon Nov 05 08:35:58 2029
# Fingerprint (SHA-256):
49:E7:A4:42:AC:F0:EA:62:87:05:00:54:B5:25:64:B6:50:E4:F4:9E:42:E3:48:D6:AA:38:E0:39:E9:57:B1:C1
# Fingerprint (SHA1): 58:E8:AB:B0:36:15:33:FB:80:F7:9B:1B:6D:29:D3:FF:8D:5F:00:F0
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL
CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "D-TRUST Root Class 3 CA 2 2009"

```

CKA\_CERTIFICATE\_TYPE CK\_CERTIFICATE\_TYPE CKC\_X\_509

CKA\_SUBJECT MULTILINE\_OCTAL

\060\115\061\013\060\011\006\003\125\004\006\023\002\104\105\061  
\025\060\023\006\003\125\004\012\014\014\104\055\124\162\165\163  
\164\040\107\155\142\110\061\047\060\045\006\003\125\004\003\014  
\036\104\055\124\122\125\123\124\040\122\157\157\164\040\103\154  
\141\163\163\040\063\040\103\101\040\062\040\062\060\060\071

END

CKA\_ID UTF8 "0"

CKA\_ISSUER MULTILINE\_OCTAL

\060\115\061\013\060\011\006\003\125\004\006\023\002\104\105\061  
\025\060\023\006\003\125\004\012\014\014\104\055\124\162\165\163  
\164\040\107\155\142\110\061\047\060\045\006\003\125\004\003\014  
\036\104\055\124\122\125\123\124\040\122\157\157\164\040\103\154  
\141\163\163\040\063\040\103\101\040\062\040\062\060\060\071

END

CKA\_SERIAL\_NUMBER MULTILINE\_OCTAL

\002\003\011\203\363

END

CKA\_VALUE MULTILINE\_OCTAL

\060\202\004\063\060\202\003\033\240\003\002\001\002\002\003\011  
\203\363\060\015\006\011\052\206\110\206\367\015\001\001\013\005  
\000\060\115\061\013\060\011\006\003\125\004\006\023\002\104\105  
\061\025\060\023\006\003\125\004\012\014\014\104\055\124\162\165  
\163\164\040\107\155\142\110\061\047\060\045\006\003\125\004\003  
\014\036\104\055\124\122\125\123\124\040\122\157\157\164\040\103  
\154\141\163\163\040\063\040\103\101\040\062\040\062\060\060\071  
\060\036\027\015\060\071\061\061\060\065\060\070\063\065\065\070  
\132\027\015\062\071\061\061\060\065\060\070\063\065\065\070\132  
\060\115\061\013\060\011\006\003\125\004\006\023\002\104\105\061  
\025\060\023\006\003\125\004\012\014\014\104\055\124\162\165\163  
\164\040\107\155\142\110\061\047\060\045\006\003\125\004\003\014  
\036\104\055\124\122\125\123\124\040\122\157\157\164\040\103\154  
\141\163\163\040\063\040\103\101\040\062\040\062\060\060\071\060  
\202\001\042\060\015\006\011\052\206\110\206\367\015\001\001\001  
\005\000\003\202\001\017\000\060\202\001\012\002\202\001\001\000  
\323\262\112\317\172\107\357\165\233\043\372\072\057\326\120\105  
\211\065\072\306\153\333\376\333\000\150\250\340\003\021\035\067  
\120\010\237\115\112\150\224\065\263\123\321\224\143\247\040\126  
\257\336\121\170\354\052\075\363\110\110\120\076\012\337\106\125  
\213\047\155\303\020\115\015\221\122\103\330\207\340\135\116\066  
\265\041\312\137\071\100\004\137\133\176\314\243\306\053\251\100  
\036\331\066\204\326\110\363\222\036\064\106\040\044\301\244\121  
\216\112\032\357\120\077\151\135\031\177\105\303\307\001\217\121  
\311\043\350\162\256\264\274\126\011\177\022\313\034\261\257\051  
\220\012\311\125\314\017\323\264\032\355\107\065\132\112\355\234  
\163\004\041\320\252\275\014\023\265\000\312\046\154\304\153\014  
\224\132\225\224\332\120\232\361\377\245\053\146\061\244\311\070

\240\337\035\037\270\011\056\363\247\350\147\122\253\225\037\340  
\106\076\330\244\303\312\132\305\061\200\350\110\232\237\224\151  
\376\031\335\330\163\174\201\312\226\336\216\355\263\062\005\145  
\204\064\346\346\375\127\020\265\137\166\277\057\260\020\015\305  
\002\003\001\000\001\243\202\001\032\060\202\001\026\060\017\006  
\003\125\035\023\001\001\377\004\005\060\003\001\001\377\060\035  
\006\003\125\035\016\004\026\004\024\375\332\024\304\237\060\336  
\041\275\036\102\071\374\253\143\043\111\340\361\204\060\016\006  
\003\125\035\017\001\001\377\004\004\003\002\001\006\060\201\323  
\006\003\125\035\037\004\201\313\060\201\310\060\201\200\240\176  
\240\174\206\172\154\144\141\160\072\057\057\144\151\162\145\143  
\164\157\162\171\056\144\055\164\162\165\163\164\056\156\145\164  
\057\103\116\075\104\055\124\122\125\123\124\045\062\060\122\157  
\157\164\045\062\060\103\154\141\163\163\045\062\060\063\045\062  
\060\103\101\045\062\060\062\045\062\060\062\060\060\071\054\117  
\075\104\055\124\162\165\163\164\045\062\060\107\155\142\110\054  
\103\075\104\105\077\143\145\162\164\151\146\151\143\141\164\145  
\162\145\166\157\143\141\164\151\157\156\154\151\163\164\060\103  
\240\101\240\077\206\075\150\164\164\160\072\057\057\167\167\167  
\056\144\055\164\162\165\163\164\056\156\145\164\057\143\162\154  
\057\144\055\164\162\165\163\164\137\162\157\157\164\137\143\154  
\141\163\163\137\063\137\143\141\137\062\137\062\060\060\071\056  
\143\162\154\060\015\006\011\052\206\110\206\367\015\001\001\013  
\005\000\003\202\001\001\000\177\227\333\060\310\337\244\234\175  
\041\172\200\160\316\024\022\151\210\024\225\140\104\001\254\262  
\351\060\117\233\120\302\146\330\176\215\060\265\160\061\351\342  
\151\307\363\160\333\040\025\206\320\015\360\276\254\001\165\204  
\316\176\237\115\277\267\140\073\234\363\312\035\342\136\150\330  
\243\235\227\345\100\140\322\066\041\376\320\264\270\027\332\164  
\243\177\324\337\260\230\002\254\157\153\153\054\045\044\162\241  
\145\356\045\132\345\346\062\347\362\337\253\111\372\363\220\151  
\043\333\004\331\347\134\130\374\145\324\227\276\314\374\056\012  
\314\045\052\065\004\370\140\221\025\165\075\101\377\043\037\031  
\310\154\353\202\123\004\246\344\114\042\115\215\214\272\316\133  
\163\354\144\124\120\155\321\234\125\373\151\303\066\303\214\274  
\074\205\246\153\012\046\015\340\223\230\140\256\176\306\044\227  
\212\141\137\221\216\146\222\011\207\066\315\213\233\055\076\366  
\121\324\120\324\131\050\275\203\362\314\050\173\123\206\155\330  
\046\210\160\327\352\221\315\076\271\312\300\220\156\132\306\136  
\164\145\327\134\376\243\342

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "D-TRUST Root Class 3 CA 2 2009"

# Issuer: CN=D-TRUST Root Class 3 CA 2 2009,O=D-Trust GmbH,C=DE

```

# Serial Number: 623603 (0x983f3)
# Subject: CN=D-TRUST Root Class 3 CA 2 2009,O=D-Trust GmbH,C=DE
# Not Valid Before: Thu Nov 05 08:35:58 2009
# Not Valid After : Mon Nov 05 08:35:58 2029
# Fingerprint (SHA-256):
49:E7:A4:42:AC:F0:EA:62:87:05:00:54:B5:25:64:B6:50:E4:F4:9E:42:E3:48:D6:AA:38:E0:39:E9:57:B1:C1
# Fingerprint (SHA1): 58:E8:AB:B0:36:15:33:FB:80:F7:9B:1B:6D:29:D3:FF:8D:5F:00:F0
CKA_CLASS
CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "D-TRUST Root Class 3 CA 2 2009"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\130\350\253\260\066\025\063\373\200\367\233\033\155\051\323\377
\215\137\000\360
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\315\340\045\151\215\107\254\234\211\065\220\367\375\121\075\057
END
CKA_ISSUER MULTILINE_OCTAL
\060\115\061\013\060\011\006\003\125\004\006\023\002\104\105\061
\025\060\023\006\003\125\004\012\014\014\104\055\124\162\165\163
\164\040\107\155\142\110\061\047\060\045\006\003\125\004\003\014
\036\104\055\124\122\125\123\124\040\122\157\157\164\040\103\154
\141\163\163\040\063\040\103\101\040\062\040\062\060\060\071
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\003\011\203\363
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED
CK_BBOOL CK_FALSE

#
# Certificate "D-TRUST Root Class 3 CA 2 EV 2009"
#
# Issuer: CN=D-TRUST Root Class 3 CA 2 EV 2009,O=D-Trust GmbH,C=DE
# Serial Number: 623604 (0x983f4)
# Subject: CN=D-TRUST Root Class 3 CA 2 EV 2009,O=D-Trust GmbH,C=DE
# Not Valid Before: Thu Nov 05 08:50:46 2009
# Not Valid After : Mon Nov 05 08:50:46 2029
# Fingerprint (SHA-256):
EE:C5:49:6B:98:8C:E9:86:25:B9:34:09:2E:EC:29:08:BE:D0:B0:F3:16:C2:D4:73:0C:84:EA:F1:F3:D3:48:81
# Fingerprint (SHA1): 96:C9:1B:0B:95:B4:10:98:42:FA:D0:D8:22:79:FE:60:FA:B9:16:83
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE

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CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "D-TRUST Root Class 3 CA 2 EV 2009"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\120\061\013\060\011\006\003\125\004\006\023\002\104\105\061
\025\060\023\006\003\125\004\012\014\014\104\055\124\162\165\163
\164\040\107\155\142\110\061\052\060\050\006\003\125\004\003\014
\041\104\055\124\122\125\123\124\040\122\157\157\164\040\103\154
\141\163\163\040\063\040\103\101\040\062\040\105\126\040\062\060
\060\071
END
CKA_ID
UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\120\061\013\060\011\006\003\125\004\006\023\002\104\105\061
\025\060\023\006\003\125\004\012\014\014\104\055\124\162\165\163
\164\040\107\155\142\110\061\052\060\050\006\003\125\004\003\014
\041\104\055\124\122\125\123\124\040\122\157\157\164\040\103\154
\141\163\163\040\063\040\103\101\040\062\040\105\126\040\062\060
\060\071
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\003\011\203\364
END
CKA_VALUE MULTILINE_OCTAL
\060\202\004\103\060\202\003\053\240\003\002\001\002\002\003\011
\203\364\060\015\006\011\052\206\110\206\367\015\001\001\013\005
\000\060\120\061\013\060\011\006\003\125\004\006\023\002\104\105
\061\025\060\023\006\003\125\004\012\014\014\104\055\124\162\165
\163\164\040\107\155\142\110\061\052\060\050\006\003\125\004\003
\014\041\104\055\124\122\125\123\124\040\122\157\157\164\040\103
\154\141\163\163\040\063\040\103\101\040\062\040\105\126\040\062
\060\060\071\060\036\027\015\060\071\061\061\060\065\060\070\065
\060\064\066\132\027\015\062\071\061\061\060\065\060\070\065\060
\064\066\132\060\120\061\013\060\011\006\003\125\004\006\023\002
\104\105\061\025\060\023\006\003\125\004\012\014\014\104\055\124
\162\165\163\164\040\107\155\142\110\061\052\060\050\006\003\125
\004\003\014\041\104\055\124\122\125\123\124\040\122\157\157\164
\040\103\154\141\163\163\040\063\040\103\101\040\062\040\105\126
\040\062\060\060\071\060\202\001\042\060\015\006\011\052\206\110
\206\367\015\001\001\001\005\000\003\202\001\017\000\060\202\001
\012\002\202\001\001\000\231\361\204\064\160\272\057\267\060\240
\216\275\174\004\317\276\142\274\231\375\202\227\322\172\012\147
\226\070\011\366\020\116\225\042\163\231\215\332\025\055\347\005
\374\031\163\042\267\216\230\000\274\074\075\254\241\154\373\326
\171\045\113\255\360\314\144\332\210\076\051\270\017\011\323\064
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\335\063\365\142\321\341\315\031\351\356\030\117\114\130\256\342  
\036\326\014\133\025\132\330\072\270\304\030\144\036\343\063\262  
\265\211\167\116\014\277\331\224\153\023\227\157\022\243\376\231  
\251\004\314\025\354\140\150\066\355\010\173\267\365\277\223\355  
\146\061\203\214\306\161\064\207\116\027\352\257\213\221\215\034  
\126\101\256\042\067\136\067\362\035\331\321\055\015\057\151\121  
\247\276\146\246\212\072\052\275\307\032\261\341\024\360\276\072  
\035\271\317\133\261\152\376\264\261\106\040\242\373\036\073\160  
\357\223\230\175\214\163\226\362\305\357\205\160\255\051\046\374  
\036\004\076\034\240\330\017\313\122\203\142\174\356\213\123\225  
\220\251\127\242\352\141\005\330\371\115\304\047\372\156\255\355  
\371\327\121\367\153\245\002\003\001\000\001\243\202\001\044\060  
\202\001\040\060\017\006\003\125\035\023\001\001\377\004\005\060  
\003\001\001\377\060\035\006\003\125\035\016\004\026\004\024\323  
\224\212\114\142\023\052\031\056\314\257\162\212\175\066\327\232  
\034\334\147\060\016\006\003\125\035\017\001\001\377\004\004\003  
\002\001\006\060\201\335\006\003\125\035\037\004\201\325\060\201  
\322\060\201\207\240\201\204\240\201\201\206\177\154\144\141\160  
\072\057\057\144\151\162\145\143\164\157\162\171\056\144\055\164  
\162\165\163\164\056\156\145\164\057\103\116\075\104\055\124\122  
\125\123\124\045\062\060\122\157\157\164\045\062\060\103\154\141  
\163\163\045\062\060\063\045\062\060\103\101\045\062\060\062\045  
\062\060\105\126\045\062\060\062\060\060\071\054\117\075\104\055  
\124\162\165\163\164\045\062\060\107\155\142\110\054\103\075\104  
\105\077\143\145\162\164\151\146\151\143\141\164\145\162\145\166  
\157\143\141\164\151\157\156\154\151\163\164\060\106\240\104\240  
\102\206\100\150\164\164\160\072\057\057\167\167\167\056\144\055  
\164\162\165\163\164\056\156\145\164\057\143\162\154\057\144\055  
\164\162\165\163\164\137\162\157\157\164\137\143\154\141\163\163  
\137\063\137\143\141\137\062\137\145\166\137\062\060\060\071\056  
\143\162\154\060\015\006\011\052\206\110\206\367\015\001\001\013  
\005\000\003\202\001\001\000\064\355\173\132\074\244\224\210\357  
\032\021\165\007\057\263\376\074\372\036\121\046\353\207\366\051  
\336\340\361\324\306\044\011\351\301\317\125\033\264\060\331\316  
\032\376\006\121\246\025\244\055\357\262\113\277\040\050\045\111  
\321\246\066\167\064\350\144\337\122\261\021\307\163\172\315\071  
\236\302\255\214\161\041\362\132\153\257\337\074\116\125\257\262  
\204\145\024\211\271\167\313\052\061\276\317\243\155\317\157\110  
\224\062\106\157\347\161\214\240\246\204\031\067\007\362\003\105  
\011\053\206\165\174\337\137\151\127\000\333\156\330\246\162\042  
\113\120\324\165\230\126\337\267\030\377\103\103\120\256\172\104  
\173\360\171\121\327\103\075\247\323\201\323\360\311\117\271\332  
\306\227\206\320\202\303\344\102\155\376\260\342\144\116\016\046  
\347\100\064\046\265\010\211\327\010\143\143\070\047\165\036\063  
\352\156\250\335\237\231\117\164\115\201\211\200\113\335\232\227  
\051\134\057\276\201\101\271\214\377\352\175\140\006\236\315\327  
\075\323\056\243\025\274\250\346\046\345\157\303\334\270\003\041  
\352\237\026\361\054\124\265

```

END
CKA_NSS_MOZILLA_CA_POLICY
CK_BBOOL CK_TRUE
CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE
CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

# Trust for "D-TRUST Root Class 3 CA 2 EV 2009"
# Issuer: CN=D-TRUST Root Class 3 CA 2 EV 2009,O=D-Trust GmbH,C=DE
# Serial Number: 623604 (0x983f4)
# Subject: CN=D-TRUST Root Class 3 CA 2 EV 2009,O=D-Trust GmbH,C=DE
# Not Valid Before: Thu Nov 05 08:50:46 2009
# Not Valid After : Mon Nov 05 08:50:46 2029
# Fingerprint (SHA-256):
EE:C5:49:6B:98:8C:E9:86:25:B9:34:09:2E:EC:29:08:BE:D0:B0:F3:16:C2:D4:73:0C:84:EA:F1:F3:D3:48:81
# Fingerprint (SHA1): 96:C9:1B:0B:95:B4:10:98:42:FA:D0:D8:22:79:FE:60:FA:B9:16:83
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "D-TRUST Root Class 3 CA 2 EV 2009"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\226\311\033\013\225\264\020\230\102\372\320\330\042\171\376\140
\372\271\026\203
END
CKA_CERT_MD5_HASH
MULTILINE_OCTAL
\252\306\103\054\136\055\315\304\064\300\120\117\021\002\117\266
END
CKA_ISSUER MULTILINE_OCTAL
\060\120\061\013\060\011\006\003\125\004\006\023\002\104\105\061
\025\060\023\006\003\125\004\012\014\014\104\055\124\162\165\163
\164\040\107\155\142\110\061\052\060\050\006\003\125\004\003\014
\041\104\055\124\122\125\123\124\040\122\157\157\164\040\103\154
\141\163\163\040\063\040\103\101\040\062\040\105\126\040\062\060
\060\071
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\003\011\203\364
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "CA Disig Root R2"
#
# Issuer: CN=CA Disig Root R2,O=Disig a.s.,L=Bratislava,C=SK

```

```
# Serial Number:00:92:b8:88:db:b0:8a:c1:63
# Subject: CN=CA Disig Root R2,O=Disig a.s.,L=Bratislava,C=SK
# Not Valid Before: Thu
Jul 19 09:15:30 2012
# Not Valid After : Sat Jul 19 09:15:30 2042
# Fingerprint (SHA-256):
E2:3D:4A:03:6D:7B:70:E9:F5:95:B1:42:20:79:D2:B9:1E:DF:BB:1F:B6:51:A0:63:3E:AA:8A:9D:C5:F8:07:03
# Fingerprint (SHA1): B5:61:EB:EA:A4:DE:E4:25:4B:69:1A:98:A5:57:47:C2:34:C7:D9:71
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "CA Disig Root R2"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\122\061\013\060\011\006\003\125\004\006\023\002\123\113\061
\023\060\021\006\003\125\004\007\023\012\102\162\141\164\151\163
\154\141\166\141\061\023\060\021\006\003\125\004\012\023\012\104
\151\163\151\147\040\141\056\163\056\061\031\060\027\006\003\125
\004\003\023\020\103\101\040\104\151\163\151\147\040\122\157\157
\164\040\122\062
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\122\061\013\060\011\006\003\125\004\006\023\002\123\113\061
\023\060\021\006\003\125\004\007\023\012\102\162\141\164\151\163
\154\141\166\141\061\023\060\021\006\003\125\004\012\023\012\104
\151\163\151\147\040\141\056\163\056\061\031\060\027\006\003\125
\004\003\023\020\103\101\040\104\151\163\151\147\040\122\157\157
\164\040\122\062
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\011\000\222\270\210\333\260\212\301\143
END
CKA_VALUE MULTILINE_OCTAL
\060\202\005\151\060\202\003\121\240\003\002\001\002\002\011\000
\222\270\210\333\260\212\301\143\060\015\006\011\052\206\110\206
\367\015\001\001\013\005\000\060\122\061\013\060\011\006\003\125
\004\006\023\002\123\113\061\023\060\021\006\003\125\004\007\023
\012\102\162\141\164\151\163\154\141\166\141\061\023\060\021\006
\003\125\004\012\023\012\104\151\163\151\147\040\141\056\163\056
\061\031\060\027\006\003\125\004\003\023\020\103\101\040\104\151
\163\151\147\040\122\157\157\164\040\122\062\060\036\027\015\061
\062\060\067\061\071\060\071\061\065\063\060\132\027\015\064\062
\060\067\061\071\060\071\061\065\063\060\132\060\122\061\013\060
\011\006\003\125\004\006\023\002\123\113\061\023\060\021\006\003
\125\004\007\023\012\102\162\141\164\151\163\154\141\166\141\061
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\023\060\021\006\003\125\004\012\023\012\104\151\163\151\147\040  
\141\056\163\056\061\031\060\027\006\003\125\004\003\023\020\103  
\101\040\104\151\163\151\147\040\122\157\157\164\040\122\062\060  
\202\002\042\060\015\006\011\052\206\110\206\367\015\001\001\001  
\005\000\003\202\002\017\000\060\202\002\012\002\202\002\001\000  
\242\243\304\000\011\326\205\135\055\155\024\366\302\303\163\236  
\065\302\161\125\176\201\373\253\106\120\340\301\174\111\170\346  
\253\171\130\074\332\377\174\034\237\330\227\002\170\076\153\101  
\004\351\101\275\276\003\054\105\366\057\144\324\253\135\243\107  
\075\144\233\351\150\232\306\314\033\077\272\276\262\213\064\002  
\056\230\125\031\374\214\157\252\137\332\114\316\115\003\041\243  
\330\322\064\223\126\226\313\114\014\000\026\074\137\032\315\310  
\307\154\246\255\323\061\247\274\350\345\341\146\326\322\373\003  
\264\101\145\311\020\256\016\005\143\306\200\152\151\060\375\322  
\356\220\357\015\047\337\237\225\163\364\341\045\332\154\026\336  
\101\070\064\352\213\374\321\350\004\024\141\055\101\176\254\307  
\167\116\313\121\124\373\136\222\030\033\004\132\150\306\311\304  
\372\267\023\240\230\267\021\053\267\326\127\314\174\236\027\321  
\313\045\376\206\116\044\056\126\014\170\115\236\001\022\246\053  
\247\001\145\156\174\142\035\204\204\337\352\300\153\265\245\052  
\225\203\303\123\021\014\163\035\013\262\106\220\321\102\072\316  
\100\156\225\255\377\306\224\255\156\227\204\216\175\157\236\212  
\200\015\111\155\163\342\173\222\036\303\363\301\363\353\056\005  
\157\331\033\317\067\166\004\310\264\132\344\027\247\313\335\166  
\037\320\031\166\350\054\005\263\326\234\064\330\226\334\141\207  
\221\005\344\104\010\063\301\332\271\010\145\324\256\262\066\015  
\353\272\070\272\014\345\233\236\353\215\146\335\231\317\326\211  
\101\366\004\222\212\051\051\155\153\072\034\347\165\175\002\161  
\016\363\300\347\275\313\031\335\235\140\262\302\146\140\266\261  
\004\356\311\346\206\271\232\146\100\250\347\021\355\201\105\003  
\213\366\147\131\350\301\006\021\275\335\317\200\002\117\145\100  
\170\134\107\120\310\233\346\037\201\173\344\104\250\133\205\232  
\342\336\132\325\307\371\072\104\146\113\344\062\124\174\344\154  
\234\263\016\075\027\242\262\064\022\326\176\262\250\111\273\321  
\172\050\100\276\242\026\037\337\344\067\037\021\163\373\220\012  
\145\103\242\015\174\370\006\001\125\063\175\260\015\270\364\365  
\256\245\102\127\174\066\021\214\173\136\304\003\235\214\171\235  
\002\003\001\000\001\243\102\060\100\060\017\006\003\125\035\023  
\001\001\377\004\005\060\003\001\001\377\060\016\006\003\125\035  
\017\001\001\377\004\004\003\002\001\006\060\035\006\003\125\035  
\016\004\026\004\024\265\231\370\257\260\224\365\343\040\326\012  
\255\316\116\126\244\056\156\102\355\060\015\006\011\052\206\110  
\206\367\015\001\001\013\005\000\003\202\002\001\000\046\006\136  
\160\347\145\063\310\202\156\331\234\027\072\033\172\146\262\001  
\366\170\073\151\136\057\352\377\116\371\050\303\230\052\141\114  
\264\044\022\212\175\155\021\024\367\234\265\312\346\274\236\047  
\216\114\031\310\251\275\172\300\327\066\016\155\205\162\156\250  
\306\242\155\366\372\163\143\177\274\156\171\010\034\235\212\237

\032\212\123\246\330\273\331\065\125\261\021\305\251\003\263\126  
\073\271\204\223\042\136\176\301\366\022\122\213\352\054\147\274  
\376\066\114\365\270\317\321\263\111\222\073\323\051\016\231\033  
\226\367\141\270\073\304\053\266\170\154\264\043\157\360\375\323  
\262\136\165\037\231\225\250\254\366\332\341\305\061\173\373\321  
\106\263\322\274\147\264\142\124\272\011\367\143\260\223\242\232  
\371\351\122\056\213\140\022\253\374\365\140\126\357\020\134\213  
\304\032\102\334\203\133\144\016\313\265\274\326\117\301\174\074  
\156\215\023\155\373\173\353\060\320\334\115\257\305\325\266\245  
\114\133\161\311\350\061\276\350\070\006\110\241\032\342\352\322  
\336\022\071\130\032\377\200\016\202\165\346\267\311\007\154\016  
\357\377\070\361\230\161\304\267\177\016\025\320\045\151\275\042  
\235\053\355\005\366\106\107\254\355\300\360\324\073\342\354\356  
\226\133\220\023\116\036\126\072\353\260\357\226\273\226\043\021  
\272\362\103\206\164\144\225\310\050\165\337\035\065\272\322\067  
\203\070\123\070\066\073\317\154\351\371\153\016\320\373\004\350  
\117\167\327\145\001\170\206\014\172\076\041\142\361\177\143\161  
\014\311\237\104\333\250\047\242\165\276\156\201\076\327\300\353  
\033\230\017\160\134\064\262\212\314\300\205\030\353\156\172\263  
\367\132\241\007\277\251\102\222\363\140\042\227\344\024\241\007  
\233\116\166\300\216\175\375\244\045\307\107\355\377\037\163\254  
\314\303\245\351\157\012\216\233\145\302\120\205\265\243\240\123  
\022\314\125\207\141\363\201\256\020\106\141\275\104\041\270\302  
\075\164\317\176\044\065\372\034\007\016\233\075\042\312\357\061  
\057\214\254\022\275\357\100\050\374\051\147\237\262\023\117\146  
\044\304\123\031\351\036\051\025\357\346\155\260\177\055\147\375  
\363\154\033\165\106\243\345\112\027\351\244\327\013

END

CKA\_NSS\_Mozilla\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "CA Disig Root R2"

# Issuer: CN=CA Disig Root R2,O=Disig a.s.,L=Bratislava,C=SK

# Serial Number:00:92:b8:88:db:b0:8a:c1:63

# Subject: CN=CA Disig Root R2,O=Disig a.s.,L=Bratislava,C=SK

# Not Valid Before: Thu Jul 19 09:15:30 2012

# Not Valid After : Sat Jul 19 09:15:30 2042

# Fingerprint (SHA-256):

E2:3D:4A:03:6D:7B:70:E9:F5:95:B1:42:20:79:D2:B9:1E:DF:BB:1F:B6:51:A0:63:3E:AA:8A:9D:C5:F8:07:03

# Fingerprint (SHA1): B5:61:EB:EA:A4:DE:E4:25:4B:69:1A:98:A5:57:47:C2:34:C7:D9:71

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "CA Disig Root R2"

CKA\_CERT\_SHA1\_HASH MULTILINE\_OCTAL

\265\141\353\352\244\336\344\045\113\151\032\230\245\127\107\302  
\064\307\331\161

END

CKA\_CERT\_MD5\_HASH MULTILINE\_OCTAL

\046\001\373\330\047\247\027\232\105\124\070\032\103\001\073\003

END

CKA\_ISSUER

MULTILINE\_OCTAL

\060\122\061\013\060\011\006\003\125\004\006\023\002\123\113\061  
\023\060\021\006\003\125\004\007\023\012\102\162\141\164\151\163  
\154\141\166\141\061\023\060\021\006\003\125\004\012\023\012\104  
\151\163\151\147\040\141\056\163\056\061\031\060\027\006\003\125  
\004\003\023\020\103\101\040\104\151\163\151\147\040\122\157\157  
\164\040\122\062

END

CKA\_SERIAL\_NUMBER MULTILINE\_OCTAL

\002\011\000\222\270\210\333\260\212\301\143

END

CKA\_TRUST\_SERVER\_AUTH CK\_TRUST CKT\_NSS\_TRUSTED\_DELEGATOR

CKA\_TRUST\_EMAIL\_PROTECTION CK\_TRUST CKT\_NSS\_TRUSTED\_DELEGATOR

CKA\_TRUST\_CODE\_SIGNING CK\_TRUST CKT\_NSS\_MUST\_VERIFY\_TRUST

CKA\_TRUST\_STEP\_UP\_APPROVED CK\_BBOOL CK\_FALSE

#

# Certificate "ACCVRAIZ1"

#

# Issuer: C=ES,O=ACCV,OU=PKIACCV,CN=ACCVRAIZ1

# Serial Number:5e:c3:b7:a6:43:7f:a4:e0

# Subject: C=ES,O=ACCV,OU=PKIACCV,CN=ACCVRAIZ1

# Not Valid Before: Thu May 05 09:37:37 2011

# Not Valid After : Tue Dec 31 09:37:37 2030

# Fingerprint (SHA-256):

9A:6E:C0:12:E1:A7:DA:9D:BE:34:19:4D:47:8A:D7:C0:DB:18:22:FB:07:1D:F1:29:81:49:6E:D1:04:38:41:13

#

Fingerprint (SHA1): 93:05:7A:88:15:C6:4F:CE:88:2F:FA:91:16:52:28:78:BC:53:64:17

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_CERTIFICATE

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "ACCVRAIZ1"

CKA\_CERTIFICATE\_TYPE CK\_CERTIFICATE\_TYPE CKC\_X\_509

CKA\_SUBJECT MULTILINE\_OCTAL

\060\102\061\022\060\020\006\003\125\004\003\014\011\101\103\103  
\126\122\101\111\132\061\061\020\060\016\006\003\125\004\013\014  
\007\120\113\111\101\103\103\126\061\015\060\013\006\003\125\004  
\012\014\004\101\103\103\126\061\013\060\011\006\003\125\004\006  
\023\002\105\123

END

CKA\_ID UTF8 "0"

CKA\_ISSUER MULTILINE\_OCTAL

\060\102\061\022\060\020\006\003\125\004\003\014\011\101\103\103  
\126\122\101\111\132\061\061\020\060\016\006\003\125\004\013\014  
\007\120\113\111\101\103\103\126\061\015\060\013\006\003\125\004  
\012\014\004\101\103\103\126\061\013\060\011\006\003\125\004\006  
\023\002\105\123

END

CKA\_SERIAL\_NUMBER

MULTILINE\_OCTAL

\002\010\136\303\267\246\103\177\244\340

END

CKA\_VALUE MULTILINE\_OCTAL

\060\202\007\323\060\202\005\273\240\003\002\001\002\002\010\136  
\303\267\246\103\177\244\340\060\015\006\011\052\206\110\206\367  
\015\001\001\005\005\000\060\102\061\022\060\020\006\003\125\004  
\003\014\011\101\103\103\126\122\101\111\132\061\061\020\060\016  
\006\003\125\004\013\014\007\120\113\111\101\103\103\126\061\015  
\060\013\006\003\125\004\012\014\004\101\103\103\126\061\013\060  
\011\006\003\125\004\006\023\002\105\123\060\036\027\015\061\061  
\060\065\060\065\060\071\063\067\063\067\132\027\015\063\060\061  
\062\063\061\060\071\063\067\063\067\132\060\102\061\022\060\020  
\006\003\125\004\003\014\011\101\103\103\126\122\101\111\132\061  
\061\020\060\016\006\003\125\004\013\014\007\120\113\111\101\103  
\103\126\061\015\060\013\006\003\125\004\012\014\004\101\103\103  
\126\061\013\060\011\006\003\125\004\006\023\002\105\123\060\202  
\002\042\060\015\006\011\052\206\110\206\367\015\001\001\001\005  
\000\003\202\002\017\000\060\202\002\012\002\202\002\001\000\233  
\251\253\277\141\112\227\257\057\227\146\232\164\137\320\331\226  
\375\317\342\344\146\357\037\037\107\063\302\104\243\337\232\336  
\037\265\124\335\025\174\151\065\021\157\273\310\014\216\152\030  
\036\330\217\331\026\274\020\110\066\134\360\143\263\220\132\134  
\044\067\327\243\326\313\011\161\271\361\001\162\204\260\175\333  
\115\200\315\374\323\157\311\370\332\266\016\202\322\105\205\250  
\033\150\250\075\350\364\104\154\275\241\302\313\003\276\214\076  
\023\000\204\337\112\110\300\343\042\012\350\351\067\247\030\114  
\261\011\015\043\126\177\004\115\331\027\204\030\245\310\332\100  
\224\163\353\316\016\127\074\003\201\072\235\012\241\127\103\151  
\254\127\155\171\220\170\345\265\264\073\330\274\114\215\050\241  
\247\243\247\272\002\116\045\321\052\256\355\256\003\042\270\153  
\040\017\060\050\124\225\177\340\356\316\012\146\235\321\100\055  
\156\042\257\235\032\301\005\031\322\157\300\362\237\370\173\263  
\002\102\373\120\251\035\055\223\017\043\253\306\301\017\222\377  
\320\242\025\365\123\011\161\034\377\105\023\204\346\046\136\370  
\340\210\034\012\374\026\266\250\163\006\270\360\143\204\002\240  
\306\132\354\347\164\337\160\256\243\203\045\352\326\307\227\207  
\223\247\306\212\212\063\227\140\067\020\076\227\076\156\051\025  
\326\241\017\321\210\054\022\237\157\252\244\306\102\353\101\242

\343\225\103\323\001\205\155\216\273\073\363\043\066\307\376\073  
\340\241\045\007\110\253\311\211\164\377\010\217\200\277\300\226  
\145\363\356\354\113\150\275\235\210\303\061\263\100\361\350\317  
\366\070\273\234\344\321\177\324\345\130\233\174\372\324\363\016  
\233\165\221\344\272\122\056\031\176\321\365\315\132\031\374\272  
\006\366\373\122\250\113\231\004\335\370\371\264\213\120\243\116  
\142\211\360\207\044\372\203\102\301\207\372\325\055\051\052\132  
\161\172\144\152\327\047\140\143\015\333\316\111\365\215\037\220  
\211\062\027\370\163\103\270\322\132\223\206\141\326\341\165\012  
\352\171\146\166\210\117\161\353\004\045\326\012\132\172\223\345  
\271\113\027\100\017\261\266\271\365\336\117\334\340\263\254\073  
\021\160\140\204\112\103\156\231\040\300\051\161\012\300\145\002  
\003\001\000\001\243\202\002\313\060\202\002\307\060\175\006\010  
\053\006\001\005\005\007\001\001\004\161\060\157\060\114\006\010  
\053\006\001\005\005\007\060\002\206\100\150\164\164\160\072\057  
\057\167\167\167\056\141\143\143\166\056\145\163\057\146\151\154  
\145\141\144\155\151\156\057\101\162\143\150\151\166\157\163\057  
\143\145\162\164\151\146\151\143\141\144\157\163\057\162\141\151  
\172\141\143\143\166\061\056\143\162\164\060\037\006\010\053\006  
\001\005\005\007\060\001\206\023\150\164\164\160\072\057\057\157  
\143\163\160\056\141\143\143\166\056\145\163\060\035\006\003\125  
\035\016\004\026\004\024\322\207\264\343\337\067\047\223\125\366  
\126\352\201\345\066\314\214\036\077\275\060\017\006\003\125\035  
\023\001\001\377\004\005\060\003\001\001\377\060\037\006\003\125  
\035\043\004\030\060\026\200\024\322\207\264\343\337\067\047\223  
\125\366\126\352\201\345\066\314\214\036\077\275\060\202\001\163  
\006\003\125\035\040\004\202\001\152\060\202\001\146\060\202\001  
\142\006\004\125\035\040\000\060\202\001\130\060\202\001\042\006  
\010\053\006\001\005\005\007\002\002\060\202\001\024\036\202\001  
\020\000\101\000\165\000\164\000\157\000\162\000\151\000\144\000  
\141\000\144\000\040\000\144\000\145\000\040\000\103\000\145\000  
\162\000\164\000\151\000\146\000\151\000\143\000\141\000\143\000  
\151\000\363\000\156\000\040\000\122\000\141\000\355\000\172\000  
\040\000\144\000\145\000\040\000\154\000\141\000\040\000\101\000  
\103\000\103\000\126\000\040\000\050\000\101\000\147\000\145\000  
\156\000\143\000\151\000\141\000\040\000\144\000\145\000\040\000  
\124\000\145\000\143\000\156\000\157\000\154\000\157\000\147\000  
\355\000\141\000\040\000\171\000\040\000\103\000\145\000\162\000  
\164\000\151\000\146\000\151\000\143\000\141\000\143\000\151\000  
\363\000\156\000\040\000\105\000\154\000\145\000\143\000\164\000  
\162\000\363\000\156\000\151\000\143\000\141\000\054\000\040\000  
\103\000\111\000\106\000\040\000\121\000\064\000\066\000\060\000  
\061\000\061\000\065\000\066\000\105\000\051\000\056\000\040\000  
\103\000\120\000\123\000\040\000\145\000\156\000\040\000\150\000  
\164\000\164\000\160\000\072\000\057\000\057\000\167\000\167\000  
\167\000\056\000\141\000\143\000\143\000\166\000\056\000\145\000  
\163\060\060\006\010\053\006\001\005\005\007\002\001\026\044\150  
\164\164\160\072\057\057\167\167\167\056\141\143\143\166\056\145

\163\057\154\145\147\151\163\154\141\143\151\157\156\137\143\056  
\150\164\155\060\125\006\003\125\035\037\004\116\060\114\060\112  
\240\110\240\106\206\104\150\164\164\160\072\057\057\167\167\167  
\056\141\143\143\166\056\145\163\057\146\151\154\145\141\144\155  
\151\156\057\101\162\143\150\151\166\157\163\057\143\145\162\164  
\151\146\151\143\141\144\157\163\057\162\141\151\172\141\143\143  
\166\061\137\144\145\162\056\143\162\154\060\016\006\003\125\035  
\017\001\001\377\004\004\003\002\001\006\060\027\006\003\125\035  
\021\004\020\060\016\201\014\141\143\143\166\100\141\143\143\166  
\056\145\163\060\015\006\011\052\206\110\206\367\015\001\001\005  
\005\000\003\202\002\001\000\227\061\002\237\347\375\103\147\110  
\104\024\344\051\207\355\114\050\146\320\217\065\332\115\141\267  
\112\227\115\265\333\220\340\005\056\016\306\171\320\362\227\151  
\017\275\004\107\331\276\333\265\051\332\233\331\256\251\231\325  
\323\074\060\223\365\215\241\250\374\006\215\104\364\312\026\225  
\174\063\334\142\213\250\067\370\047\330\011\055\033\357\310\024  
\047\040\251\144\104\377\056\326\165\252\154\115\140\100\031\111  
\103\124\143\332\342\314\272\146\345\117\104\172\133\331\152\201  
\053\100\325\177\371\001\047\130\054\310\355\110\221\174\077\246  
\000\317\304\051\163\021\066\336\206\031\076\235\356\031\212\033  
\325\260\355\216\075\234\052\300\015\330\075\146\343\074\015\275  
\325\224\134\342\342\247\065\033\004\000\366\077\132\215\352\103  
\275\137\211\035\251\301\260\314\231\342\115\000\012\332\311\047  
\133\347\023\220\134\344\365\063\242\125\155\334\340\011\115\057  
\261\046\133\047\165\000\011\304\142\167\051\010\137\236\131\254  
\266\176\255\237\124\060\042\003\301\036\161\144\376\371\070\012  
\226\030\335\002\024\254\043\313\006\034\036\244\175\215\015\336  
\047\101\350\255\332\025\267\260\043\335\053\250\323\332\045\207  
\355\350\125\104\115\210\364\066\176\204\232\170\254\367\016\126  
\111\016\326\063\045\326\204\120\102\154\040\022\035\052\325\276  
\274\362\160\201\244\160\140\276\005\265\233\236\004\104\276\141  
\043\254\351\245\044\214\021\200\224\132\242\242\271\111\322\301  
\334\321\247\355\061\021\054\236\031\246\356\341\125\341\300\352  
\317\015\204\344\027\267\242\174\245\336\125\045\006\356\314\300  
\207\134\100\332\314\225\077\125\340\065\307\270\204\276\264\135  
\315\172\203\001\162\356\207\346\137\035\256\265\205\306\046\337  
\346\301\232\351\036\002\107\237\052\250\155\251\133\317\354\105  
\167\177\230\047\232\062\135\052\343\204\356\305\230\146\057\226  
\040\035\335\330\303\047\327\260\371\376\331\175\315\320\237\217  
\013\024\130\121\237\057\213\303\070\055\336\350\217\326\215\207  
\244\365\126\103\026\231\054\364\244\126\264\064\270\141\067\311  
\302\130\200\033\240\227\241\374\131\215\351\021\366\321\017\113  
\125\064\106\052\213\206\073

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

```

# Trust for "ACCVRAIZ1"
# Issuer: C=ES,O=ACCV,OU=PKIACCV,CN=ACCVRAIZ1
# Serial Number:5e:c3:b7:a6:43:7f:a4:e0
# Subject: C=ES,O=ACCV,OU=PKIACCV,CN=ACCVRAIZ1
# Not Valid Before: Thu May 05 09:37:37 2011
# Not Valid After : Tue Dec 31 09:37:37 2030
# Fingerprint (SHA-256):
9A:6E:C0:12:E1:A7:DA:9D:BE:34:19:4D:47:8A:D7:C0:DB:18:22:FB:07:1D:F1:29:81:49:6E:D1:04:38:41:13
# Fingerprint (SHA1): 93:05:7A:88:15:C6:4F:CE:88:2F:FA:91:16:52:28:78:BC:53:64:17
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8
"ACCVRAIZ1"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\223\005\172\210\025\306\117\316\210\057\372\221\026\122\050\170
\274\123\144\027
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\320\240\132\356\005\266\011\224\041\241\175\361\262\051\202\002
END
CKA_ISSUER MULTILINE_OCTAL
\060\102\061\022\060\020\006\003\125\004\003\014\011\101\103\103
\126\122\101\111\132\061\061\020\060\016\006\003\125\004\013\014
\007\120\113\111\101\103\103\126\061\015\060\013\006\003\125\004
\012\014\004\101\103\103\126\061\013\060\011\006\003\125\004\006
\023\002\105\123
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\010\136\303\267\246\103\177\244\340
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "TWCA Global Root CA"
#
# Issuer: CN=TWCA Global Root CA,OU=Root CA,O=TAIWAN-CA,C=TW
# Serial Number: 3262 (0xcbe)
# Subject: CN=TWCA Global
Root CA,OU=Root CA,O=TAIWAN-CA,C=TW
# Not Valid Before: Wed Jun 27 06:28:33 2012
# Not Valid After : Tue Dec 31 15:59:59 2030
# Fingerprint (SHA-256):

```

59:76:90:07:F7:68:5D:0F:CD:50:87:2F:9F:95:D5:75:5A:5B:2B:45:7D:81:F3:69:2B:61:0A:98:67:2F:0E:1B

# Fingerprint (SHA1): 9C:BB:48:53:F6:A4:F6:D3:52:A4:E8:32:52:55:60:13:F5:AD:AF:65

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_CERTIFICATE

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "TWCA Global Root CA"

CKA\_CERTIFICATE\_TYPE CK\_CERTIFICATE\_TYPE CKC\_X\_509

CKA\_SUBJECT MULTILINE\_OCTAL

\060\121\061\013\060\011\006\003\125\004\006\023\002\124\127\061  
\022\060\020\006\003\125\004\012\023\011\124\101\111\127\101\116  
\055\103\101\061\020\060\016\006\003\125\004\013\023\007\122\157  
\157\164\040\103\101\061\034\060\032\006\003\125\004\003\023\023  
\124\127\103\101\040\107\154\157\142\141\154\040\122\157\157\164  
\040\103\101

END

CKA\_ID UTF8 "0"

CKA\_ISSUER MULTILINE\_OCTAL

\060\121\061\013\060\011\006\003\125\004\006\023\002\124\127\061  
\022\060\020\006\003\125\004\012\023\011\124\101\111\127\101\116  
\055\103\101\061\020\060\016\006\003\125\004\013\023\007\122\157  
\157\164\040\103\101\061\034\060\032\006\003\125\004\003\023\023  
\124\127\103\101\040\107\154\157\142\141\154\040\122\157\157\164  
\040\103\101

END

CKA\_SERIAL\_NUMBER

MULTILINE\_OCTAL

\002\002\014\276

END

CKA\_VALUE MULTILINE\_OCTAL

\060\202\005\101\060\202\003\051\240\003\002\001\002\002\002\014  
\276\060\015\006\011\052\206\110\206\367\015\001\001\013\005\000  
\060\121\061\013\060\011\006\003\125\004\006\023\002\124\127\061  
\022\060\020\006\003\125\004\012\023\011\124\101\111\127\101\116  
\055\103\101\061\020\060\016\006\003\125\004\013\023\007\122\157  
\157\164\040\103\101\061\034\060\032\006\003\125\004\003\023\023  
\124\127\103\101\040\107\154\157\142\141\154\040\122\157\157\164  
\040\103\101\060\036\027\015\061\062\060\066\062\067\060\066\062  
\070\063\063\132\027\015\063\060\061\062\063\061\061\065\065\071  
\065\071\132\060\121\061\013\060\011\006\003\125\004\006\023\002  
\124\127\061\022\060\020\006\003\125\004\012\023\011\124\101\111  
\127\101\116\055\103\101\061\020\060\016\006\003\125\004\013\023  
\007\122\157\157\164\040\103\101\061\034\060\032\006\003\125\004  
\003\023\023\124\127\103\101\040\107\154\157\142\141\154\040\122  
\157\157\164\040\103\101\060\202\002\042\060\015\006\011\052\206  
\110\206\367\015\001\001\001\005\000\003\202\002\017\000\060\202  
\002\012\002\202\002\001\000\260\005\333\310\353\214\304\156\212  
\041\357\216\115\234\161\012\037\122\160\355\155\202\234\227\305



\327\114\116\105\111\313\100\102\265\022\064\154\031\302\164\244  
\061\137\205\002\227\354\103\063\012\123\322\234\214\216\267\270  
\171\333\053\325\152\362\216\146\304\356\053\001\007\222\324\263  
\320\002\337\120\366\125\257\146\016\313\340\107\140\057\053\062  
\071\065\122\072\050\203\370\173\026\306\030\270\142\326\107\045  
\221\316\360\031\022\115\255\143\365\323\077\165\137\051\360\241  
\060\034\052\240\230\246\025\275\356\375\031\066\360\342\221\103  
\217\372\312\326\020\047\111\114\357\335\301\361\205\160\233\312  
\352\250\132\103\374\155\206\157\163\351\067\105\251\360\066\307  
\314\210\165\036\273\154\006\377\233\153\076\027\354\141\252\161  
\174\306\035\242\367\111\351\025\265\074\326\241\141\365\021\367  
\005\157\035\375\021\276\320\060\007\302\051\260\011\116\046\334  
\343\242\250\221\152\037\302\221\105\210\134\345\230\270\161\245  
\025\031\311\174\165\021\314\160\164\117\055\233\035\221\104\375  
\126\050\240\376\273\206\152\310\372\134\013\130\334\306\113\166  
\310\253\042\331\163\017\245\364\132\002\211\077\117\236\042\202  
\356\242\164\123\052\075\123\047\151\035\154\216\062\054\144\000  
\046\143\141\066\116\243\106\267\077\175\263\055\254\155\220\242  
\225\242\316\317\332\202\347\007\064\031\226\351\270\041\252\051  
\176\246\070\276\216\051\112\041\146\171\037\263\303\265\011\147  
\336\326\324\007\106\363\052\332\346\042\067\140\313\201\266\017  
\240\017\351\310\225\177\277\125\221\005\172\317\075\025\300\157  
\336\011\224\001\203\327\064\033\314\100\245\360\270\233\147\325  
\230\221\073\247\204\170\225\046\244\132\010\370\053\164\264\000  
\004\074\337\270\024\216\350\337\251\215\154\147\222\063\035\300  
\267\322\354\222\310\276\011\277\054\051\005\157\002\153\236\357  
\274\277\052\274\133\300\120\217\101\160\161\207\262\115\267\004  
\251\204\243\062\257\256\356\153\027\213\262\261\376\154\341\220  
\214\210\250\227\110\316\310\115\313\363\006\317\137\152\012\102  
\261\036\036\167\057\216\240\346\222\016\006\374\005\042\322\046  
\341\061\121\175\062\334\017\002\003\001\000\001\243\043\060\041  
\060\016\006\003\125\035\017\001\001\377\004\004\003\002\001\006  
\060\017\006\003\125\035\023\001\001\377\004\005\060\003\001\001  
\377\060\015\006\011\052\206\110\206\367\015\001\001\013\005\000  
\003\202\002\001\000\137\064\201\166\357\226\035\325\345\265\331  
\002\143\204\026\301\256\240\160\121\247\367\114\107\065\310\013  
\327\050\075\211\161\331\252\063\101\352\024\033\154\041\000\300  
\154\102\031\176\237\151\133\040\102\337\242\322\332\304\174\227  
\113\215\260\350\254\310\356\245\151\004\231\012\222\246\253\047  
\056\032\115\201\277\204\324\160\036\255\107\376\375\112\235\063  
\340\362\271\304\105\010\041\012\332\151\151\163\162\015\276\064  
\376\224\213\255\303\036\065\327\242\203\357\345\070\307\245\205  
\037\253\317\064\354\077\050\376\014\361\127\206\116\311\125\367  
\034\324\330\245\175\006\172\157\325\337\020\337\201\116\041\145  
\261\266\341\027\171\225\105\006\316\137\314\334\106\211\143\150  
\104\215\223\364\144\160\240\075\235\050\005\303\071\160\270\142  
\173\040\375\344\333\351\010\241\270\236\075\011\307\117\373\054  
\370\223\166\101\336\122\340\341\127\322\235\003\274\167\236\376

```
\236\051\136\367\301\121\140\037\336\332\013\262\055\165\267\103
\110\223\347\366\171\306\204\135\200\131\140\224\374\170\230\217
\074\223\121\355\100\220\007\337\144\143\044\313\116\161\005\241
\327\224\032\210\062\361\042\164\042\256\245\246\330\022\151\114
\140\243\002\356\053\354\324\143\222\013\136\276\057\166\153\243
\266\046\274\217\003\330\012\362\114\144\106\275\071\142\345\226
\353\064\143\021\050\314\225\361\255\357\357\334\200\130\110\351
\113\270\352\145\254\351\374\200\265\265\310\105\371\254\301\237
\331\271\352\142\210\216\304\361\113\203\022\255\346\213\204\326
\236\302\353\203\030\237\152\273\033\044\140\063\160\314\354\367
\062\363\134\331\171\175\357\236\244\376\311\043\303\044\356\025
\222\261\075\221\117\046\206\275\146\163\044\023\352\244\256\143
\301\255\175\204\003\074\020\170\206\033\171\343\304\363\362\004
\225\040\256\043\202\304\263\072\000\142\277\346\066\044\341\127
\272\307\036\220\165\325\137\077\225\141\053\301\073\315\345\263
\150\141\320\106\046\251\041\122\151\055\353\056\307\353\167\316
\246\072\265\003\063\117\166\321\347\134\124\001\135\313\170\364
\311\014\277\317\022\216\027\055\043\150\224\347\253\376\251\262
\053\006\320\004\315
```

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL

CK\_FALSE

# Trust for "TWCA Global Root CA"

# Issuer: CN=TWCA Global Root CA,OU=Root CA,O=TAIWAN-CA,C=TW

# Serial Number: 3262 (0xcbe)

# Subject: CN=TWCA Global Root CA,OU=Root CA,O=TAIWAN-CA,C=TW

# Not Valid Before: Wed Jun 27 06:28:33 2012

# Not Valid After : Tue Dec 31 15:59:59 2030

# Fingerprint (SHA-256):

59:76:90:07:F7:68:5D:0F:CD:50:87:2F:9F:95:D5:75:5A:5B:2B:45:7D:81:F3:69:2B:61:0A:98:67:2F:0E:1B

# Fingerprint (SHA1): 9C:BB:48:53:F6:A4:F6:D3:52:A4:E8:32:52:55:60:13:F5:AD:AF:65

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "TWCA Global Root CA"

CKA\_CERT\_SHA1\_HASH MULTILINE\_OCTAL

```
\234\273\110\123\366\244\366\323\122\244\350\062\122\125\140\023
\365\255\257\145
```

END

CKA\_CERT\_MD5\_HASH MULTILINE\_OCTAL

```
\371\003\176\317\346\236\074\163\172\052\220\007\151\377\053\226
```

END

CKA\_ISSUER MULTILINE\_OCTAL

```

\060\121\061\013\060\011\006\003\125\004\006\023\002\124\127\061
\022\060\020\006\003\125\004\012\023\011\124\101\111\127\101\116
\055\103\101\061\020\060\016\006\003\125\004\013\023\007\122\157
\157\164\040\103\101\061\034\060\032\006\003\125\004\003\023\023
\124\127\103\101\040\107\154\157\142\141\154\040\122\157\157\164
\040\103\101
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\002\014\276
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "TeliaSonera Root CA v1"
#
# Issuer: CN=TeliaSonera Root CA v1,O=TeliaSonera
# Serial Number:00:95:be:16:a0:f7:2e:46:f1:7b:39:82:72:fa:8b:cd:96
# Subject: CN=TeliaSonera Root CA v1,O=TeliaSonera
# Not Valid Before: Thu Oct 18 12:00:50 2007
# Not Valid After : Mon Oct 18 12:00:50 2032
# Fingerprint (SHA-256):
DD:69:36:FE:21:F8:F0:77:C1:23:A1:A5:21:C1:22:24:F7:22:55:B7:3E:03:A7:26:06:93:E8:A2:4B:0F:A3:89
# Fingerprint (SHA1): 43:13:BB:96:F1:D5:86:9B:C1:4E:6A:92:F6:CF:F6:34:69:87:82:37
CKA_CLASS
CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "TeliaSonera Root CA v1"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\067\061\024\060\022\006\003\125\004\012\014\013\124\145\154
\151\141\123\157\156\145\162\141\061\037\060\035\006\003\125\004
\003\014\026\124\145\154\151\141\123\157\156\145\162\141\040\122
\157\157\164\040\103\101\040\166\061
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\067\061\024\060\022\006\003\125\004\012\014\013\124\145\154
\151\141\123\157\156\145\162\141\061\037\060\035\006\003\125\004
\003\014\026\124\145\154\151\141\123\157\156\145\162\141\040\122
\157\157\164\040\103\101\040\166\061
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL

```

\002\021\000\225\276\026\240\367\056\106\361\173\071\202\162\372  
\213\315\226

END

CKA\_VALUE MULTILINE\_OCTAL

\060\202\005\070\060\202\003\040\240\003\002\001\002\002\021\000  
\225\276\026\240\367\056\106\361\173\071\202\162\372\213\315\226  
\060\015\006\011\052\206\110\206\367\015\001\001\005\005\000\060  
\067\061\024\060\022\006\003\125\004\012\014\013\124\145\154\151  
\141\123\157\156\145\162\141\061\037\060\035\006\003\125\004\003  
\014\026\124\145\154\151\141\123\157\156\145\162\141\040\122\157  
\157\164\040\103\101\040\166\061\060\036\027\015\060\067\061\060  
\061\070\061\062\060\060\065\060\132\027\015\063\062\061\060\061  
\070\061\062\060\060\065\060\132\060\067\061\024\060\022\006\003  
\125\004\012\014\013\124\145\154\151\141\123\157\156\145\162\141  
\061\037\060\035\006\003\125\004\003\014\026\124\145\154\151\141  
\123\157\156\145\162\141\040\122\157\157\164\040\103\101\040\166  
\061\060\202\002\042\060\015\006\011\052\206\110\206\367\015\001  
\001\001\005\000\003\202\002\017\000\060\202\002\012\002\202\002  
\001\000\302\276\353\047\360\041\243\363\151\046\125\176\235\305  
\125\026\221\134\375\357\041\277\123\200\172\055\322\221\214\143  
\061\360\354\044\360\303\245\322\162\174\020\155\364\067\267\345  
\346\174\171\352\214\265\202\213\256\110\266\254\000\334\145\165  
\354\052\115\137\301\207\365\040\145\053\201\250\107\076\211\043  
\225\060\026\220\177\350\127\007\110\347\031\256\277\105\147\261  
\067\033\006\052\376\336\371\254\175\203\373\136\272\344\217\227  
\147\276\113\216\215\144\007\127\070\125\151\064\066\075\023\110  
\357\117\342\323\146\036\244\317\032\267\136\066\063\324\264\006  
\275\030\001\375\167\204\120\000\105\365\214\135\350\043\274\176  
\376\065\341\355\120\173\251\060\215\031\323\011\216\150\147\135  
\277\074\227\030\123\273\051\142\305\312\136\162\301\307\226\324  
\333\055\240\264\037\151\003\354\352\342\120\361\014\074\360\254  
\363\123\055\360\034\365\355\154\071\071\163\200\026\310\122\260  
\043\315\340\076\334\335\074\107\240\273\065\212\342\230\150\213  
\276\345\277\162\356\322\372\245\355\022\355\374\230\030\251\046  
\166\334\050\113\020\040\034\323\177\026\167\055\355\157\200\367  
\111\273\123\005\273\135\150\307\324\310\165\026\077\211\132\213  
\367\027\107\324\114\361\322\211\171\076\115\075\230\250\141\336  
\072\036\322\370\136\003\340\301\311\034\214\323\215\115\323\225  
\066\263\067\137\143\143\233\063\024\360\055\046\153\123\174\211  
\214\062\302\156\354\075\041\000\071\311\241\150\342\120\203\056  
\260\072\053\363\066\240\254\057\344\157\141\302\121\011\071\076  
\213\123\271\273\147\332\334\123\271\166\131\066\235\103\345\040  
\340\075\062\140\205\042\121\267\307\063\273\335\025\057\244\170  
\246\007\173\201\106\066\004\206\335\171\065\307\225\054\073\260  
\243\027\065\345\163\037\264\134\131\357\332\352\020\145\173\172  
\320\177\237\263\264\052\067\073\160\213\233\133\271\053\267\354  
\262\121\022\227\123\051\132\324\360\022\020\334\117\002\273\022  
\222\057\142\324\077\151\103\174\015\326\374\130\165\001\210\235

\130\026\113\336\272\220\377\107\001\211\006\152\366\137\262\220  
\152\263\002\246\002\210\277\263\107\176\052\331\325\372\150\170  
\065\115\002\003\001\000\001\243\077\060\075\060\017\006\003\125  
\035\023\001\001\377\004\005\060\003\001\001\377\060\013\006\003  
\125\035\017\004\004\003\002\001\006\060\035\006\003\125\035\016  
\004\026\004\024\360\217\131\070\000\263\365\217\232\226\014\325  
\353\372\173\252\027\350\023\022\060\015\006\011\052\206\110\206  
\367\015\001\001\005\005\000\003\202\002\001\000\276\344\134\142  
\116\044\364\014\010\377\360\323\014\150\344\223\111\042\077\104  
\047\157\273\155\336\203\146\316\250\314\015\374\365\232\006\345  
\167\024\221\353\235\101\173\231\052\204\345\377\374\041\301\135  
\360\344\037\127\267\165\251\241\137\002\046\377\327\307\367\116  
\336\117\370\367\034\106\300\172\117\100\054\042\065\360\031\261  
\320\153\147\054\260\250\340\300\100\067\065\366\204\134\134\343  
\257\102\170\376\247\311\015\120\352\015\204\166\366\121\357\203  
\123\306\172\377\016\126\111\056\217\172\326\014\346\047\124\343  
\115\012\140\162\142\315\221\007\326\245\277\310\231\153\355\304  
\031\346\253\114\021\070\305\157\061\342\156\111\310\077\166\200  
\046\003\046\051\340\066\366\366\040\123\343\027\160\064\027\235  
\143\150\036\153\354\303\115\206\270\023\060\057\135\106\015\107  
\103\325\033\252\131\016\271\134\215\006\110\255\164\207\137\307  
\374\061\124\101\023\342\307\041\016\236\340\036\015\341\300\173  
\103\205\220\305\212\130\306\145\012\170\127\362\306\043\017\001  
\331\040\113\336\017\373\222\205\165\052\134\163\215\155\173\045  
\221\312\356\105\256\006\113\000\314\323\261\131\120\332\072\210  
\073\051\103\106\136\227\053\124\316\123\157\215\112\347\226\372  
\277\161\016\102\213\174\375\050\240\320\110\312\332\304\201\114  
\273\242\163\223\046\310\353\014\326\046\210\266\300\044\317\273  
\275\133\353\165\175\351\010\216\206\063\054\171\167\011\151\245  
\211\374\263\160\220\207\166\217\323\042\273\102\316\275\163\013  
\040\046\052\320\233\075\160\036\044\154\315\207\166\251\027\226  
\267\317\015\222\373\216\030\251\230\111\321\236\376\140\104\162  
\041\271\031\355\302\365\061\361\071\110\210\220\044\165\124\026  
\255\316\364\370\151\024\144\071\373\243\270\272\160\100\307\047  
\034\277\304\126\123\372\143\145\320\363\034\016\026\365\153\206  
\130\115\030\324\344\015\216\245\235\133\221\334\166\044\120\077  
\306\052\373\331\267\234\265\326\346\320\331\350\031\213\025\161  
\110\255\267\352\330\131\210\324\220\277\026\263\331\351\254\131  
\141\124\310\034\272\312\301\312\341\271\040\114\217\072\223\211  
\245\240\314\277\323\366\165\244\165\226\155\126

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "TeliaSonera Root CA v1"

# Issuer: CN=TeliaSonera Root CA v1,O=TeliaSonera

```
# Serial Number:00:95:be:16:a0:f7:2e:46:f1:7b:39:82:72:fa:8b:cd:96
# Subject: CN=TeliaSonera Root CA v1,O=TeliaSonera
# Not Valid Before: Thu Oct 18 12:00:50 2007
# Not Valid After : Mon Oct 18 12:00:50 2032
# Fingerprint (SHA-256):
DD:69:36:FE:21:F8:F0:77:C1:23:A1:A5:21:C1:22:24:F7:22:55:B7:3E:03:A7:26:06:93:E8:A2:4B:0F:A3:89
# Fingerprint (SHA1): 43:13:BB:96:F1:D5:86:9B:C1:4E:6A:92:F6:CF:F6:34:69:87:82:37
CKA_CLASS
CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "TeliaSonera Root CA v1"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\103\023\273\226\361\325\206\233\301\116\152\222\366\317\366\064
\151\207\202\067
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\067\101\111\033\030\126\232\046\365\255\302\146\373\100\245\114
END
CKA_ISSUER MULTILINE_OCTAL
\060\067\061\024\060\022\006\003\125\004\012\014\013\124\145\154
\151\141\123\157\156\145\162\141\061\037\060\035\006\003\125\004
\003\014\026\124\145\154\151\141\123\157\156\145\162\141\040\122
\157\157\164\040\103\101\040\166\061
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\021\000\225\276\026\240\367\056\106\361\173\071\202\162\372
\213\315\226
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED
CK_BBOOL CK_FALSE

#
# Certificate "E-Tugra Certification Authority"
#
# Issuer: CN=E-Tugra Certification Authority,OU=E-Tugra Sertifikasyon Merkezi,O=E-Tu..ra EBG Bili..im
Teknolojileri ve Hizmetleri A....,L=Ankara,C=TR
# Serial Number:6a:68:3e:9c:51:9b:cb:53
# Subject: CN=E-Tugra Certification Authority,OU=E-Tugra Sertifikasyon Merkezi,O=E-Tu..ra EBG Bili..im
Teknolojileri ve Hizmetleri A....,L=Ankara,C=TR
# Not Valid Before: Tue Mar 05 12:09:48 2013
# Not Valid After : Fri Mar 03 12:09:48 2023
# Fingerprint (SHA-256):
B0:BF:D5:2B:B0:D7:D9:BD:92:BF:5D:4D:C1:3D:A2:55:C0:2C:54:2F:37:83:65:EA:89:39:11:F5:5E:55:F2:3C
```

# Fingerprint (SHA1): 51:C6:E7:08:49:06:6E:F3:92:D4:5C:A0:0D:6D:A3:62:8F:C3:52:39

```
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "E-Tugra Certification Authority"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\201\262\061\013\060\011\006\003\125\004\006\023\002\124\122
\061\017\060\015\006\003\125\004\007\014\006\101\156\153\141\162
\141\061\100\060\076\006\003\125\004\012\014\067\105\055\124\165
\304\237\162\141\040\105\102\107\040\102\151\154\151\305\237\151
\155\040\124\145\153\156\157\154\157\152\151\154\145\162\151\040
\166\145\040\110\151\172\155\145\164\154\145\162\151\040\101\056
\305\236\056\061\046\060\044\006\003\125\004\013\014\035\105\055
\124\165\147\162\141\040\123\145\162\164\151\146\151\153\141\163
\171\157\156\040\115\145\162\153\145\172\151\061\050\060\046\006
\003\125\004\003\014\037\105\055\124\165\147\162\141\040\103\145
\162\164\151\146\151\143\141\164\151\157\156\040\101\165\164\150
\157\162\151\164\171
```

END

CKA\_ID

UTF8 "0"

```
CKA_ISSUER MULTILINE_OCTAL
\060\201\262\061\013\060\011\006\003\125\004\006\023\002\124\122
\061\017\060\015\006\003\125\004\007\014\006\101\156\153\141\162
\141\061\100\060\076\006\003\125\004\012\014\067\105\055\124\165
\304\237\162\141\040\105\102\107\040\102\151\154\151\305\237\151
\155\040\124\145\153\156\157\154\157\152\151\154\145\162\151\040
\166\145\040\110\151\172\155\145\164\154\145\162\151\040\101\056
\305\236\056\061\046\060\044\006\003\125\004\013\014\035\105\055
\124\165\147\162\141\040\123\145\162\164\151\146\151\153\141\163
\171\157\156\040\115\145\162\153\145\172\151\061\050\060\046\006
\003\125\004\003\014\037\105\055\124\165\147\162\141\040\103\145
\162\164\151\146\151\143\141\164\151\157\156\040\101\165\164\150
\157\162\151\164\171
```

END

CKA\_SERIAL\_NUMBER

MULTILINE\_OCTAL

```
\002\010\152\150\076\234\121\233\313\123
```

END

CKA\_VALUE MULTILINE\_OCTAL

```
\060\202\006\113\060\202\004\063\240\003\002\001\002\002\010\152
\150\076\234\121\233\313\123\060\015\006\011\052\206\110\206\367
\015\001\001\013\005\000\060\201\262\061\013\060\011\006\003\125
\004\006\023\002\124\122\061\017\060\015\006\003\125\004\007\014
\006\101\156\153\141\162\141\061\100\060\076\006\003\125\004\012
\014\067\105\055\124\165\304\237\162\141\040\105\102\107\040\102
```

\151\154\151\305\237\151\155\040\124\145\153\156\157\154\157\152  
\151\154\145\162\151\040\166\145\040\110\151\172\155\145\164\154  
\145\162\151\040\101\056\305\236\056\061\046\060\044\006\003\125  
\004\013\014\035\105\055\124\165\147\162\141\040\123\145\162\164  
\151\146\151\153\141\163\171\157\156\040\115\145\162\153\145\172  
\151\061\050\060\046\006\003\125\004\003\014\037\105\055\124\165  
\147\162\141\040\103\145\162\164\151\146\151\143\141\164\151\157  
\156\040\101\165\164\150\157\162\151\164\171\060\036\027\015\061  
\063\060\063\060\065\061\062\060\071\064\070\132\027\015\062\063  
\060\063\060\063\061\062\060\071\064\070\132\060\201\262\061\013  
\060\011\006\003\125\004\006\023\002\124\122\061\017\060\015\006  
\003\125\004\007\014\006\101\156\153\141\162\141\061\100\060\076  
\006\003\125\004\012\014\067\105\055\124\165\304\237\162\141\040  
\105\102\107\040\102\151\154\151\305\237\151\155\040\124\145\153  
\156\157\154\157\152\151\154\145\162\151\040\166\145\040\110\151  
\172\155\145\164\154\145\162\151\040\101\056\305\236\056\061\046  
\060\044\006\003\125\004\013\014\035\105\055\124\165\147\162\141  
\040\123\145\162\164\151\146\151\153\141\163\171\157\156\040\115  
\145\162\153\145\172\151\061\050\060\046\006\003\125\004\003\014  
\037\105\055\124\165\147\162\141\040\103\145\162\164\151\146\151  
\143\141\164\151\157\156\040\101\165\164\150\157\162\151\164\171  
\060\202\002\042\060\015\006\011\052\206\110\206\367\015\001\001  
\001\005\000\003\202\002\017\000\060\202\002\012\002\202\002\001  
\000\342\365\077\223\005\121\036\205\142\124\136\172\013\365\030  
\007\203\256\176\257\174\367\324\212\153\245\143\103\071\271\113  
\367\303\306\144\211\075\224\056\124\200\122\071\071\007\113\113  
\335\205\007\166\207\314\277\057\225\114\314\175\247\075\274\107  
\017\230\160\370\214\205\036\164\216\222\155\033\100\321\231\015  
\273\165\156\310\251\153\232\300\204\061\257\312\103\313\353\053  
\064\350\217\227\153\001\233\325\016\112\010\252\133\222\164\205  
\103\323\200\256\241\210\133\256\263\352\136\313\026\232\167\104  
\310\241\366\124\150\316\336\217\227\053\272\133\100\002\014\144  
\027\300\265\223\315\341\361\023\146\316\014\171\357\321\221\050  
\253\137\240\022\122\060\163\031\216\217\341\214\007\242\303\273  
\112\360\352\037\025\250\356\045\314\244\106\370\033\042\357\263  
\016\103\272\054\044\270\305\054\134\324\034\370\135\144\275\303  
\223\136\050\247\077\047\361\216\036\323\052\120\005\243\125\331  
\313\347\071\123\300\230\236\214\124\142\213\046\260\367\175\215  
\174\344\306\236\146\102\125\202\107\347\262\130\215\146\367\007  
\174\056\066\346\120\034\077\333\103\044\305\277\206\107\171\263  
\171\034\367\132\364\023\354\154\370\077\342\131\037\225\356\102  
\076\271\255\250\062\205\111\227\106\376\113\061\217\132\313\255  
\164\107\037\351\221\267\337\050\004\042\240\324\017\135\342\171  
\117\352\154\205\206\275\250\246\316\344\372\303\341\263\256\336  
\074\121\356\313\023\174\001\177\204\016\135\121\224\236\023\014  
\266\056\245\114\371\071\160\066\157\226\312\056\014\104\125\305  
\312\372\135\002\243\337\326\144\214\132\263\001\012\251\265\012  
\107\027\377\357\221\100\052\216\241\106\072\061\230\345\021\374



\314\273\111\126\212\374\271\320\141\232\157\145\154\346\303\313  
\076\165\111\376\217\247\342\211\305\147\327\235\106\023\116\061  
\166\073\044\263\236\021\145\206\253\177\357\035\324\370\274\347  
\254\132\134\267\132\107\134\125\316\125\264\042\161\133\133\013  
\360\317\334\240\141\144\352\251\327\150\012\143\247\340\015\077  
\240\257\323\252\322\176\357\121\240\346\121\053\125\222\025\027  
\123\313\267\146\016\146\114\370\371\165\114\220\347\022\160\307  
\105\002\003\001\000\001\243\143\060\141\060\035\006\003\125\035  
\016\004\026\004\024\056\343\333\262\111\320\234\124\171\134\372  
\047\052\376\314\116\322\350\116\124\060\017\006\003\125\035\023  
\001\001\377\004\005\060\003\001\001\377\060\037\006\003\125\035  
\043\004\030\060\026\200\024\056\343\333\262\111\320\234\124\171  
\134\372\047\052\376\314\116\322\350\116\124\060\016\006\003\125  
\035\017\001\001\377\004\004\003\002\001\006\060\015\006\011\052  
\206\110\206\367\015\001\001\013\005\000\003\202\002\001\000\005  
\067\072\364\115\267\105\342\105\165\044\217\266\167\122\350\034  
\330\020\223\145\363\362\131\006\244\076\036\051\354\135\321\320  
\253\174\340\012\220\110\170\355\116\230\003\231\376\050\140\221  
\035\060\035\270\143\174\250\346\065\265\372\323\141\166\346\326  
\007\113\312\151\232\262\204\172\167\223\105\027\025\237\044\320  
\230\023\022\377\273\240\056\375\116\114\207\370\316\134\252\230  
\033\005\340\000\106\112\202\200\245\063\213\050\334\355\070\323  
\337\345\076\351\376\373\131\335\141\204\117\322\124\226\023\141  
\023\076\217\200\151\276\223\107\265\065\103\322\132\273\075\134  
\357\263\102\107\315\073\125\023\006\260\011\333\375\143\366\072  
\210\012\231\157\176\341\316\033\123\152\104\146\043\121\010\173  
\274\133\122\242\375\006\067\070\100\141\217\112\226\270\220\067  
\370\146\307\170\220\000\025\056\213\255\121\065\123\007\250\153  
\150\256\371\116\074\007\046\315\010\005\160\314\071\077\166\275  
\245\323\147\046\001\206\246\123\322\140\073\174\103\177\125\212  
\274\225\032\301\050\071\114\037\103\322\221\364\162\131\212\271  
\126\374\077\264\235\332\160\234\166\132\214\103\120\356\216\060  
\162\115\337\377\111\367\306\251\147\331\155\254\002\021\342\072  
\026\045\247\130\010\313\157\123\101\234\110\070\107\150\063\321  
\327\307\217\324\164\041\324\303\005\220\172\377\316\226\210\261  
\025\051\135\043\253\320\140\241\022\117\336\364\027\315\062\345  
\311\277\310\103\255\375\056\216\361\257\342\364\230\372\022\037  
\040\330\300\247\014\205\305\220\364\073\055\226\046\261\054\276  
\114\253\353\261\322\212\311\333\170\023\017\036\011\235\155\217  
\000\237\002\332\301\372\037\172\172\011\304\112\346\210\052\227  
\237\211\213\375\067\137\137\072\316\070\131\206\113\257\161\013  
\264\330\362\160\117\237\062\023\343\260\247\127\345\332\332\103  
\313\204\064\362\050\304\352\155\364\052\357\301\153\166\332\373  
\176\273\205\074\322\123\302\115\276\161\341\105\321\375\043\147  
\015\023\165\373\317\145\147\042\235\256\260\011\321\011\377\035  
\064\277\376\043\227\067\322\071\372\075\015\006\013\264\333\073  
\243\253\157\134\035\266\176\350\263\202\064\355\006\134\044

END

```

CKA_NSS_Mozilla_CA_POLICY
CK_BBOOL CK_TRUE
CKA_NSS_SERVER_DISTRUST_AFTER CK_BBOOL CK_FALSE
CKA_NSS_EMAIL_DISTRUST_AFTER CK_BBOOL CK_FALSE

# Trust for "E-Tugra Certification Authority"
# Issuer: CN=E-Tugra Certification Authority,OU=E-Tugra Sertifikasyon Merkezi,O=E-Tu..ra EBG Bili..im
Teknolojileri ve Hizmetleri A....,L=Ankara,C=TR
# Serial Number:6a:68:3e:9c:51:9b:cb:53
# Subject: CN=E-Tugra Certification Authority,OU=E-Tugra Sertifikasyon Merkezi,O=E-Tu..ra EBG Bili..im
Teknolojileri ve Hizmetleri A....,L=Ankara,C=TR
# Not Valid Before: Tue Mar 05 12:09:48 2013
# Not Valid After : Fri Mar 03 12:09:48 2023
# Fingerprint (SHA-256):
B0:BF:D5:2B:B0:D7:D9:BD:92:BF:5D:4D:C1:3D:A2:55:C0:2C:54:2F:37:83:65:EA:89:39:11:F5:5E:55:F2:3C
# Fingerprint (SHA1): 51:C6:E7:08:49:06:6E:F3:92:D4:5C:A0:0D:6D:A3:62:8F:C3:52:39
CKA_CLASS CK_OBJECT_CLASS
CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "E-Tugra Certification Authority"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\121\306\347\010\111\006\156\363\222\324\134\240\015\155\243\142
\217\303\122\071
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\270\241\003\143\260\275\041\161\160\212\157\023\072\273\171\111
END
CKA_ISSUER MULTILINE_OCTAL
\060\201\262\061\013\060\011\006\003\125\004\006\023\002\124\122
\061\017\060\015\006\003\125\004\007\014\006\101\156\153\141\162
\141\061\100\060\076\006\003\125\004\012\014\067\105\055\124\165
\304\237\162\141\040\105\102\107\040\102\151\154\151\305\237\151
\155\040\124\145\153\156\157\154\157\152\151\154\145\162\151\040
\166\145\040\110\151\172\155\145\164\154\145\162\151\040\101\056
\305\236\056\061\046\060\044\006\003\125\004\013\014\035\105\055
\124\165\147\162\141\040\123\145\162\164\151\146\151\153\141\163
\171\157\156\040\115\145\162\153\145\172\151\061\050\060\046\006
\003\125\004\003\014\037\105\055\124\165\147\162\141\040\103\145
\162\164\151\146\151\143\141\164\151\157\156\040\101\165\164\150
\157\162\151\164\171
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\010\152\150\076\234\121\233\313\123
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR

```

```
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE
```

```
#
```

```
# Certificate "T-TeleSec GlobalRoot Class 2"
```

```
#
```

```
# Issuer: CN=T-TeleSec GlobalRoot Class 2,OU=T-Systems Trust Center,O=T-Systems Enterprise Services
GmbH,C=DE
```

```
# Serial Number: 1 (0x1)
```

```
# Subject: CN=T-TeleSec GlobalRoot Class 2,OU=T-Systems Trust Center,O=T-Systems Enterprise Services
GmbH,C=DE
```

```
# Not Valid Before: Wed Oct 01 10:40:14 2008
```

```
# Not Valid After : Sat Oct 01 23:59:59 2033
```

```
# Fingerprint (SHA-256):
```

```
91:E2:F5:78:8D:58:10:EB:A7:BA:58:73:7D:E1:54:8A:8E:CA:CD:01:45:98:BC:0B:14:3E:04:1B:17:05:25:52
```

```
# Fingerprint (SHA1): 59:0D:2D:7D:88:4F:40:2E:61:7E:A5:62:32:17:65:CF:17:D8:94:E9
```

```
CKA_CLASS
```

```
CK_OBJECT_CLASS CKO_CERTIFICATE
```

```
CKA_TOKEN CK_BBOOL CK_TRUE
```

```
CKA_PRIVATE CK_BBOOL CK_FALSE
```

```
CKA_MODIFIABLE CK_BBOOL CK_FALSE
```

```
CKA_LABEL UTF8 "T-TeleSec GlobalRoot Class 2"
```

```
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
```

```
CKA_SUBJECT MULTILINE_OCTAL
```

```
\060\201\202\061\013\060\011\006\003\125\004\006\023\002\104\105
\061\053\060\051\006\003\125\004\012\014\042\124\055\123\171\163
\164\145\155\163\040\105\156\164\145\162\160\162\151\163\145\040
\123\145\162\166\151\143\145\163\040\107\155\142\110\061\037\060
\035\006\003\125\004\013\014\026\124\055\123\171\163\164\145\155
\163\040\124\162\165\163\164\040\103\145\156\164\145\162\061\045
\060\043\006\003\125\004\003\014\034\124\055\124\145\154\145\123
\145\143\040\107\154\157\142\141\154\122\157\157\164\040\103\154
\141\163\163\040\062
```

```
END
```

```
CKA_ID UTF8 "0"
```

```
CKA_ISSUER MULTILINE_OCTAL
```

```
\060\201\202\061\013\060\011\006\003\125\004\006\023\002\104\105
\061\053\060\051\006\003\125\004\012\014\042\124\055\123\171\163
\164\145\155\163\040\105\156\164\145\162\160\162\151\163\145\040
\123\145\162\166\151\143\145\163\040\107\155\142\110\061\037\060
\035\006\003\125\004\013\014\026\124\055\123\171\163\164\145\155
\163\040\124\162\165\163\164\040\103\145\156\164\145\162\061\045
\060\043\006\003\125\004\003\014\034\124\055\124\145\154\145\123
\145\143\040\107\154\157\142\141\154\122\157\157\164\040\103\154
\141\163\163\040\062
```

```
END
```

```
CKA_SERIAL_NUMBER
```

MULTILINE\_OCTAL

\002\001\001

END

CKA\_VALUE MULTILINE\_OCTAL

\060\202\003\303\060\202\002\253\240\003\002\001\002\002\001\001  
\060\015\006\011\052\206\110\206\367\015\001\001\013\005\000\060  
\201\202\061\013\060\011\006\003\125\004\006\023\002\104\105\061  
\053\060\051\006\003\125\004\012\014\042\124\055\123\171\163\164  
\145\155\163\040\105\156\164\145\162\160\162\151\163\145\040\123  
\145\162\166\151\143\145\163\040\107\155\142\110\061\037\060\035  
\006\003\125\004\013\014\026\124\055\123\171\163\164\145\155\163  
\040\124\162\165\163\164\040\103\145\156\164\145\162\061\045\060  
\043\006\003\125\004\003\014\034\124\055\124\145\154\145\123\145  
\143\040\107\154\157\142\141\154\122\157\157\164\040\103\154\141  
\163\163\040\062\060\036\027\015\060\070\061\060\060\061\061\060  
\064\060\061\064\132\027\015\063\063\061\060\060\061\062\063\065  
\071\065\071\132\060\201\202\061\013\060\011\006\003\125\004\006  
\023\002\104\105\061\053\060\051\006\003\125\004\012\014\042\124  
\055\123\171\163\164\145\155\163\040\105\156\164\145\162\160\162  
\151\163\145\040\123\145\162\166\151\143\145\163\040\107\155\142  
\110\061\037\060\035\006\003\125\004\013\014\026\124\055\123\171  
\163\164\145\155\163\040\124\162\165\163\164\040\103\145\156\164  
\145\162\061\045\060\043\006\003\125\004\003\014\034\124\055\124  
\145\154\145\123\145\143\040\107\154\157\142\141\154\122\157\157  
\164\040\103\154\141\163\163\040\062\060\202\001\042\060\015\006  
\011\052\206\110\206\367\015\001\001\001\005\000\003\202\001\017  
\000\060\202\001\012\002\202\001\001\000\252\137\332\033\137\350  
\163\221\345\332\134\364\242\346\107\345\363\150\125\140\005\035  
\002\244\263\233\131\363\036\212\257\064\255\374\015\302\331\110  
\031\356\151\217\311\040\374\041\252\007\031\355\260\134\254\145  
\307\137\355\002\174\173\174\055\033\326\272\271\200\302\030\202  
\026\204\372\146\260\010\306\124\043\201\344\315\271\111\077\366  
\117\156\067\110\050\070\017\305\276\347\150\160\375\071\227\115  
\322\307\230\221\120\252\304\104\263\043\175\071\107\351\122\142  
\326\022\223\136\267\061\226\102\005\373\166\247\036\243\365\302  
\374\351\172\305\154\251\161\117\352\313\170\274\140\257\307\336  
\364\331\313\276\176\063\245\156\224\203\360\064\372\041\253\352  
\216\162\240\077\244\336\060\133\357\206\115\152\225\133\103\104  
\250\020\025\034\345\001\127\305\230\361\346\006\050\221\252\040  
\305\267\123\046\121\103\262\013\021\225\130\341\300\017\166\331  
\300\215\174\201\363\162\160\236\157\376\032\216\331\137\065\306  
\262\157\064\174\276\110\117\342\132\071\327\330\235\170\236\237  
\206\076\003\136\031\213\104\242\325\307\002\003\001\000\001\243  
\102\060\100\060\017\006\003\125\035\023\001\001\377\004\005\060  
\003\001\001\377\060\016\006\003\125\035\017\001\001\377\004\004  
\003\002\001\006\060\035\006\003\125\035\016\004\026\004\024\277  
\131\040\066\000\171\240\240\042\153\214\325\362\141\322\270\054  
\313\202\112\060\015\006\011\052\206\110\206\367\015\001\001\013

```
\005\000\003\202\001\001\000\061\003\242\141\013\037\164\350\162
\066\306\155\371\115\236\372\042\250\341\201\126\317\315\273\237
\352\253\221\031\070\257\252\174\025\115\363\266\243\215\245\364
\216\366\104\251\247\350\041\225\255\076\000\142\026\210\360\002
\272\374\141\043\346\063\233\060\172\153\066\142\173\255\004\043
\204\130\145\342\333\053\212\347\045\123\067\142\123\137\274\332
\001\142\051\242\246\047\161\346\072\042\176\301\157\035\225\160
\040\112\007\064\337\352\377\025\200\345\272\327\172\330\133\165
\174\005\172\051\107\176\100\250\061\023\167\315\100\073\264\121
\107\172\056\021\343\107\021\336\235\146\320\213\325\124\146\372
\203\125\352\174\302\051\211\033\351\157\263\316\342\005\204\311
\057\076\170\205\142\156\311\137\301\170\143\164\130\300\110\030
\014\231\071\353\244\314\032\265\171\132\215\025\234\330\024\015
\366\172\007\127\307\042\203\005\055\074\233\045\046\075\030\263
\251\103\174\310\310\253\144\217\016\243\277\234\033\235\060\333
\332\320\031\056\252\074\361\373\063\200\166\344\315\255\031\117
\005\047\216\023\241\156\302
```

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "T-TeleSec GlobalRoot Class 2"

# Issuer: CN=T-TeleSec GlobalRoot Class 2,OU=T-Systems Trust Center,O=T-Systems Enterprise Services GmbH,C=DE

# Serial Number: 1 (0x1)

# Subject: CN=T-TeleSec GlobalRoot Class 2,OU=T-Systems Trust Center,O=T-Systems Enterprise Services GmbH,C=DE

# Not Valid Before: Wed Oct 01 10:40:14 2008

# Not Valid After : Sat Oct 01 23:59:59 2033

# Fingerprint (SHA-256):

91:E2:F5:78:8D:58:10:EB:A7:BA:58:73:7D:E1:54:8A:8E:CA:CD:01:45:98:BC:0B:14:3E:04:1B:17:05:25:52

#

Fingerprint (SHA1): 59:0D:2D:7D:88:4F:40:2E:61:7E:A5:62:32:17:65:CF:17:D8:94:E9

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "T-TeleSec GlobalRoot Class 2"

CKA\_CERT\_SHA1\_HASH MULTILINE\_OCTAL

```
\131\015\055\175\210\117\100\056\141\176\245\142\062\027\145\317
\027\330\224\351
```

END

CKA\_CERT\_MD5\_HASH MULTILINE\_OCTAL

```
\053\233\236\344\173\154\037\000\162\032\314\301\167\171\337\152
```

END

CKA\_ISSUER MULTILINE\_OCTAL

```
\060\201\202\061\013\060\011\006\003\125\004\006\023\002\104\105
\061\053\060\051\006\003\125\004\012\014\042\124\055\123\171\163
\164\145\155\163\040\105\156\164\145\162\160\162\151\163\145\040
\123\145\162\166\151\143\145\163\040\107\155\142\110\061\037\060
\035\006\003\125\004\013\014\026\124\055\123\171\163\164\145\155
\163\040\124\162\165\163\164\040\103\145\156\164\145\162\061\045
\060\043\006\003\125\004\003\014\034\124\055\124\145\154\145\123
\145\143\040\107\154\157\142\141\154\122\157\157\164\040\103\154
\141\163\163\040\062
```

END

CKA\_SERIAL\_NUMBER

MULTILINE\_OCTAL

```
\002\001\001
```

END

CKA\_TRUST\_SERVER\_AUTH CK\_TRUST CKT\_NSS\_TRUSTED\_DELEGATOR

CKA\_TRUST\_EMAIL\_PROTECTION CK\_TRUST CKT\_NSS\_TRUSTED\_DELEGATOR

CKA\_TRUST\_CODE\_SIGNING CK\_TRUST CKT\_NSS\_MUST\_VERIFY\_TRUST

CKA\_TRUST\_STEP\_UP\_APPROVED CK\_BBOOL CK\_FALSE

#

# Certificate "Atos TrustedRoot 2011"

#

# Issuer: C=DE,O=Atos,CN=Atos TrustedRoot 2011

# Serial Number:5c:33:cb:62:2c:5f:b3:32

# Subject: C=DE,O=Atos,CN=Atos TrustedRoot 2011

# Not Valid Before: Thu Jul 07 14:58:30 2011

# Not Valid After : Tue Dec 31 23:59:59 2030

# Fingerprint (SHA-256):

F3:56:BE:A2:44:B7:A9:1E:B3:5D:53:CA:9A:D7:86:4A:CE:01:8E:2D:35:D5:F8:F9:6D:DF:68:A6:F4:1A:A4:74

# Fingerprint (SHA1): 2B:B1:F5:3E:55:0C:1D:C5:F1:D4:E6:B7:6A:46:4B:55:06:02:AC:21

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_CERTIFICATE

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL

CK\_FALSE

CKA\_LABEL UTF8 "Atos TrustedRoot 2011"

CKA\_CERTIFICATE\_TYPE CK\_CERTIFICATE\_TYPE CKC\_X\_509

CKA\_SUBJECT MULTILINE\_OCTAL

```
\060\074\061\036\060\034\006\003\125\004\003\014\025\101\164\157
\163\040\124\162\165\163\164\145\144\122\157\157\164\040\062\060
\061\061\061\015\060\013\006\003\125\004\012\014\004\101\164\157
\163\061\013\060\011\006\003\125\004\006\023\002\104\105
```

END

CKA\_ID UTF8 "0"

CKA\_ISSUER MULTILINE\_OCTAL

```
\060\074\061\036\060\034\006\003\125\004\003\014\025\101\164\157
\163\040\124\162\165\163\164\145\144\122\157\157\164\040\062\060
\061\061\061\015\060\013\006\003\125\004\012\014\004\101\164\157
```

\163\061\013\060\011\006\003\125\004\006\023\002\104\105

END

CKA\_SERIAL\_NUMBER MULTILINE\_OCTAL

\002\010\134\063\313\142\054\137\263\062

END

CKA\_VALUE MULTILINE\_OCTAL

\060\202\003\167\060\202\002\137\240\003\002\001\002\002\010\134  
\063\313\142\054\137\263\062\060\015\006\011\052\206\110\206\367  
\015\001\001\013\005\000\060\074\061\036\060\034\006\003\125\004  
\003\014\025\101\164\157\163\040\124\162\165\163\164\145\144\122  
\157\157\164\040\062\060\061\061\061\015\060\013\006\003\125\004  
\012\014\004\101\164\157\163\061\013\060\011\006\003\125\004\006  
\023\002\104\105\060\036\027\015\061\061\060\067\060\067\061\064  
\065\070\063\060\132\027\015\063\060\061\062\063\061\062\063\065  
\071\065\071\132\060\074\061\036\060\034\006\003\125\004\003\014  
\025\101\164\157\163\040\124\162\165\163\164\145\144\122\157\157  
\164\040\062\060\061\061\061\015\060\013\006\003\125\004\012\014  
\004\101\164\157\163\061\013\060\011\006\003\125\004\006\023\002  
\104\105\060\202\001\042\060\015\006\011\052\206\110\206\367\015  
\001\001\001\005\000\003\202\001\017\000\060\202\001\012\002\202  
\001\001\000\225\205\073\227\157\052\073\056\073\317\246\363\051  
\065\276\317\030\254\076\252\331\370\115\240\076\032\107\271\274  
\232\337\362\376\314\076\107\350\172\226\302\044\216\065\364\251  
\014\374\202\375\155\301\162\142\047\275\352\153\353\347\212\314  
\124\076\220\120\317\200\324\225\373\350\265\202\324\024\305\266  
\251\125\045\127\333\261\120\366\260\140\144\131\172\151\317\003  
\267\157\015\276\312\076\157\164\162\352\252\060\052\163\142\276  
\111\221\141\310\021\376\016\003\052\367\152\040\334\002\025\015  
\136\025\152\374\343\202\301\265\305\235\144\011\154\243\131\230  
\007\047\307\033\226\053\141\164\161\154\103\361\367\065\211\020  
\340\236\354\125\241\067\042\242\207\004\005\054\107\175\264\034  
\271\142\051\146\050\312\267\341\223\365\244\224\003\231\271\160  
\205\265\346\110\352\215\120\374\331\336\314\157\007\016\335\013  
\162\235\200\060\026\007\225\077\050\016\375\305\165\117\123\326  
\164\232\264\044\056\216\002\221\317\166\305\233\036\125\164\234  
\170\041\261\360\055\361\013\237\302\325\226\030\037\360\124\042  
\172\214\007\002\003\001\000\001\243\175\060\173\060\035\006\003  
\125\035\016\004\026\004\024\247\245\006\261\054\246\011\140\356  
\321\227\351\160\256\274\073\031\154\333\041\060\017\006\003\125  
\035\023\001\001\377\004\005\060\003\001\001\377\060\037\006\003  
\125\035\043\004\030\060\026\200\024\247\245\006\261\054\246\011  
\140\356\321\227\351\160\256\274\073\031\154\333\041\060\030\006  
\003\125\035\040\004\021\060\017\060\015\006\013\053\006\001\004  
\001\260\055\003\004\001\001\060\016\006\003\125\035\017\001\001  
\377\004\004\003\002\001\206\060\015\006\011\052\206\110\206\367  
\015\001\001\013\005\000\003\202\001\001\000\046\167\064\333\224  
\110\206\052\101\235\054\076\006\220\140\304\214\254\013\124\270  
\037\271\173\323\007\071\344\372\076\173\262\075\116\355\237\043

```
\275\227\363\153\134\357\356\375\100\246\337\241\223\241\012\206
\254\357\040\320\171\001\275\170\367\031\330\044\061\064\004\001
\246\272\025\232\303\047\334\330\117\017\314\030\143\377\231\017
\016\221\153\165\026\341\041\374\330\046\307\107\267\246\317\130
\162\161\176\272\341\115\225\107\073\311\257\155\241\264\301\354
\211\366\264\017\070\265\342\144\334\045\317\246\333\353\232\134
\231\241\305\010\336\375\346\332\325\326\132\105\014\304\267\302
\265\024\357\264\021\377\016\025\265\365\365\333\306\275\353\132
\247\360\126\042\251\074\145\124\306\025\250\275\206\236\315\203
\226\150\172\161\201\211\341\013\341\352\021\033\150\010\314\151
\236\354\236\101\236\104\062\046\172\342\207\012\161\075\353\344
\132\244\322\333\305\315\306\336\140\177\271\363\117\104\222\357
\052\267\030\076\247\031\331\013\175\261\067\101\102\260\272\140
\035\362\376\011\021\260\360\207\173\247\235
```

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "Atos TrustedRoot 2011"

# Issuer: C=DE,O=Atos,CN=Atos TrustedRoot 2011

# Serial Number:5c:33:cb:62:2c:5f:b3:32

# Subject: C=DE,O=Atos,CN=Atos TrustedRoot 2011

# Not Valid Before: Thu Jul 07 14:58:30 2011

# Not Valid After : Tue Dec 31 23:59:59 2030

# Fingerprint (SHA-256):

F3:56:BE:A2:44:B7:A9:1E:B3:5D:53:CA:9A:D7:86:4A:CE:01:8E:2D:35:D5:F8:F9:6D:DF:68:A6:F4:1A:A4:74

# Fingerprint (SHA1): 2B:B1:F5:3E:55:0C:1D:C5:F1:D4:E6:B7:6A:46:4B:55:06:02:AC:21

CKA\_CLASS

CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "Atos TrustedRoot 2011"

CKA\_CERT\_SHA1\_HASH MULTILINE\_OCTAL

```
\053\261\365\076\125\014\035\305\361\324\346\267\152\106\113\125
\006\002\254\041
```

END

CKA\_CERT\_MD5\_HASH MULTILINE\_OCTAL

```
\256\271\304\062\113\254\177\135\146\314\167\224\273\052\167\126
```

END

CKA\_ISSUER MULTILINE\_OCTAL

```
\060\074\061\036\060\034\006\003\125\004\003\014\025\101\164\157
\163\040\124\162\165\163\164\145\144\122\157\157\164\040\062\060
\061\061\061\015\060\013\006\003\125\004\012\014\004\101\164\157
\163\061\013\060\011\006\003\125\004\006\023\002\104\105
```

END



```

CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\010\134\063\313\142\054\137\263\062
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate
# "QuoVadis Root CA 1 G3"
#
# Issuer: CN=QuoVadis Root CA 1 G3,O=QuoVadis Limited,C=BM
# Serial Number:78:58:5f:2e:ad:2c:19:4b:e3:37:07:35:34:13:28:b5:96:d4:65:93
# Subject: CN=QuoVadis Root CA 1 G3,O=QuoVadis Limited,C=BM
# Not Valid Before: Thu Jan 12 17:27:44 2012
# Not Valid After : Sun Jan 12 17:27:44 2042
# Fingerprint (SHA-256):
8A:86:6F:D1:B2:76:B5:7E:57:8E:92:1C:65:82:8A:2B:ED:58:E9:F2:F2:88:05:41:34:B7:F1:F4:BF:C9:CC:74
# Fingerprint (SHA1): 1B:8E:EA:57:96:29:1A:C9:39:EA:B8:0A:81:1A:73:73:C0:93:79:67
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "QuoVadis Root CA 1 G3"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\110\061\013\060\011\006\003\125\004\006\023\002\102\115\061
\031\060\027\006\003\125\004\012\023\020\121\165\157\126\141\144
\151\163\040\114\151\155\151\164\145\144\061\036\060\034\006\003
\125\004\003\023\025\121\165\157\126\141\144\151\163\040\122\157
\157\164\040\103\101\040\061\040\107\063
END
CKA_ID
UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\110\061\013\060\011\006\003\125\004\006\023\002\102\115\061
\031\060\027\006\003\125\004\012\023\020\121\165\157\126\141\144
\151\163\040\114\151\155\151\164\145\144\061\036\060\034\006\003
\125\004\003\023\025\121\165\157\126\141\144\151\163\040\122\157
\157\164\040\103\101\040\061\040\107\063
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\024\170\130\137\056\255\054\031\113\343\067\007\065\064\023
\050\265\226\324\145\223
END
CKA_VALUE MULTILINE_OCTAL
\060\202\005\140\060\202\003\110\240\003\002\001\002\002\024\170

```

\130\137\056\255\054\031\113\343\067\007\065\064\023\050\265\226  
\324\145\223\060\015\006\011\052\206\110\206\367\015\001\001\013  
\005\000\060\110\061\013\060\011\006\003\125\004\006\023\002\102  
\115\061\031\060\027\006\003\125\004\012\023\020\121\165\157\126  
\141\144\151\163\040\114\151\155\151\164\145\144\061\036\060\034  
\006\003\125\004\003\023\025\121\165\157\126\141\144\151\163\040  
\122\157\157\164\040\103\101\040\061\040\107\063\060\036\027\015  
\061\062\060\061\061\062\061\067\062\067\064\064\132\027\015\064  
\062\060\061\061\062\061\067\062\067\064\064\132\060\110\061\013  
\060\011\006\003\125\004\006\023\002\102\115\061\031\060\027\006  
\003\125\004\012\023\020\121\165\157\126\141\144\151\163\040\114  
\151\155\151\164\145\144\061\036\060\034\006\003\125\004\003\023  
\025\121\165\157\126\141\144\151\163\040\122\157\157\164\040\103  
\101\040\061\040\107\063\060\202\002\042\060\015\006\011\052\206  
\110\206\367\015\001\001\001\005\000\003\202\002\017\000\060\202  
\002\012\002\202\002\001\000\240\276\120\020\216\351\362\154\100  
\264\004\234\205\271\061\312\334\055\344\021\251\004\074\033\125  
\301\347\130\060\035\044\264\303\357\205\336\214\054\341\301\075  
\337\202\346\117\255\107\207\154\354\133\111\301\112\325\273\217  
\354\207\254\177\202\232\206\354\075\003\231\122\001\322\065\236  
\254\332\360\123\311\146\074\324\254\002\001\332\044\323\073\250  
\002\106\257\244\034\343\370\163\130\166\267\366\016\220\015\265  
\360\317\314\372\371\306\114\345\303\206\060\012\215\027\176\065  
\353\305\337\273\016\234\300\215\207\343\210\070\205\147\372\076  
\307\253\340\023\234\005\030\230\317\223\365\261\222\264\374\043  
\323\317\325\304\047\111\340\236\074\233\010\243\213\135\052\041  
\340\374\071\252\123\332\175\176\317\032\011\123\274\135\005\004  
\317\241\112\217\213\166\202\015\241\370\322\307\024\167\133\220  
\066\007\201\233\076\006\372\122\136\143\305\246\000\376\245\351  
\122\033\122\265\222\071\162\003\011\142\275\260\140\026\156\246  
\335\045\302\003\146\335\363\004\321\100\342\116\213\206\364\157  
\345\203\240\047\204\136\004\301\365\220\275\060\075\304\357\250  
\151\274\070\233\244\244\226\321\142\332\151\300\001\226\256\313  
\304\121\064\352\014\252\377\041\216\131\217\112\134\344\141\232  
\247\322\351\052\170\215\121\075\072\025\356\242\131\216\251\134  
\336\305\371\220\042\345\210\105\161\335\221\231\154\172\237\075  
\075\230\174\136\366\276\026\150\240\136\256\013\043\374\132\017  
\252\042\166\055\311\241\020\035\344\323\104\043\220\210\237\306  
\052\346\327\365\232\263\130\036\057\060\211\010\033\124\242\265  
\230\043\354\010\167\034\225\135\141\321\313\211\234\137\242\112  
\221\232\357\041\252\111\026\010\250\275\141\050\061\311\164\255  
\205\366\331\305\261\213\321\345\020\062\115\137\213\040\072\074  
\111\037\063\205\131\015\333\313\011\165\103\151\163\373\153\161  
\175\360\337\304\114\175\306\243\056\310\225\171\313\163\242\216  
\116\115\044\373\136\344\004\276\162\033\246\047\055\111\132\231  
\172\327\134\011\040\267\177\224\271\117\361\015\034\136\210\102  
\033\021\267\347\221\333\236\154\364\152\337\214\006\230\003\255  
\314\050\357\245\107\363\123\002\003\001\000\001\243\102\060\100

\060\017\006\003\125\035\023\001\001\377\004\005\060\003\001\001  
\377\060\016\006\003\125\035\017\001\001\377\004\004\003\002\001  
\006\060\035\006\003\125\035\016\004\026\004\024\243\227\326\363  
\136\242\020\341\253\105\237\074\027\144\074\356\001\160\234\314  
\060\015\006\011\052\206\110\206\367\015\001\001\013\005\000\003  
\202\002\001\000\030\372\133\165\374\076\172\307\137\167\307\312  
\337\317\137\303\022\304\100\135\324\062\252\270\152\327\325\025  
\025\106\230\043\245\346\220\133\030\231\114\343\255\102\243\202  
\061\066\210\315\351\373\304\004\226\110\213\001\307\215\001\317  
\133\063\006\226\106\146\164\035\117\355\301\266\271\264\015\141  
\314\143\176\327\056\167\214\226\034\052\043\150\153\205\127\166  
\160\063\023\376\341\117\246\043\167\030\372\032\214\350\275\145  
\311\317\077\364\311\027\334\353\307\274\300\004\056\055\106\057  
\151\146\303\033\217\376\354\076\323\312\224\277\166\012\045\015  
\251\173\002\034\251\320\073\137\013\300\201\072\075\144\341\277  
\247\055\116\275\115\304\330\051\306\042\030\320\305\254\162\002  
\202\077\252\072\242\072\042\227\061\335\010\143\303\165\024\271  
\140\050\055\133\150\340\026\251\146\202\043\121\365\353\123\330  
\061\233\173\351\267\235\113\353\210\026\317\371\135\070\212\111  
\060\217\355\361\353\031\364\167\032\061\030\115\147\124\154\057  
\157\145\371\333\075\354\041\354\136\364\364\213\312\140\145\124  
\321\161\144\364\371\246\243\201\063\066\063\161\360\244\170\137  
\116\255\203\041\336\064\111\215\350\131\254\235\362\166\132\066  
\362\023\364\257\340\011\307\141\052\154\367\340\235\256\273\206  
\112\050\157\056\356\264\171\315\220\063\303\263\166\372\365\360  
\154\235\001\220\372\236\220\366\234\162\317\107\332\303\037\344  
\065\040\123\362\124\321\337\141\203\246\002\342\045\070\336\205  
\062\055\136\163\220\122\135\102\304\316\075\113\341\371\031\204  
\035\325\242\120\314\101\373\101\024\303\275\326\311\132\243\143  
\146\002\200\275\005\072\073\107\234\354\000\046\114\365\210\121  
\277\250\043\177\030\007\260\013\355\213\046\241\144\323\141\112  
\353\134\237\336\263\257\147\003\263\037\335\155\135\151\150\151  
\253\136\072\354\174\151\274\307\073\205\116\236\025\271\264\025  
\117\303\225\172\130\327\311\154\351\154\271\363\051\143\136\264  
\054\360\055\075\355\132\145\340\251\133\100\302\110\231\201\155  
\236\037\006\052\074\022\264\213\017\233\242\044\360\246\215\326  
\172\340\113\266\144\226\143\225\204\302\112\315\034\056\044\207  
\063\140\345\303

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "QuoVadis Root CA 1 G3"

# Issuer: CN=QuoVadis Root CA 1 G3,O=QuoVadis Limited,C=BM

# Serial Number:78:58:5f:2e:ad:2c:19:4b:e3:37:07:35:34:13:28:b5:96:d4:65:93

# Subject: CN=QuoVadis Root CA 1 G3,O=QuoVadis Limited,C=BM

```

# Not Valid Before: Thu Jan 12 17:27:44 2012
# Not Valid After : Sun Jan 12 17:27:44 2042
# Fingerprint (SHA-256):
8A:86:6F:D1:B2:76:B5:7E:57:8E:92:1C:65:82:8A:2B:ED:58:E9:F2:F2:88:05:41:34:B7:F1:F4:BF:C9:CC:74
# Fingerprint (SHA1): 1B:8E:EA:57:96:29:1A:C9:39:EA:B8:0A:81:1A:73:73:C0:93:79:67
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "QuoVadis
Root CA 1 G3"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\033\216\352\127\226\051\032\311\071\352\270\012\201\032\163\163
\300\223\171\147
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\244\274\133\077\376\067\232\372\144\360\342\372\005\075\013\253
END
CKA_ISSUER MULTILINE_OCTAL
\060\110\061\013\060\011\006\003\125\004\006\023\002\102\115\061
\031\060\027\006\003\125\004\012\023\020\121\165\157\126\141\144
\151\163\040\114\151\155\151\164\145\144\061\036\060\034\006\003
\125\004\003\023\025\121\165\157\126\141\144\151\163\040\122\157
\157\164\040\103\101\040\061\040\107\063
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\024\170\130\137\056\255\054\031\113\343\067\007\065\064\023
\050\265\226\324\145\223
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "QuoVadis Root CA 2 G3"
#
# Issuer: CN=QuoVadis Root CA
2 G3,O=QuoVadis Limited,C=BM
# Serial Number:44:57:34:24:5b:81:89:9b:35:f2:ce:b8:2b:3b:5b:a7:26:f0:75:28
# Subject: CN=QuoVadis Root CA 2 G3,O=QuoVadis Limited,C=BM
# Not Valid Before: Thu Jan 12 18:59:32 2012
# Not Valid After : Sun Jan 12 18:59:32 2042
# Fingerprint (SHA-256):
8F:E4:FB:0A:F9:3A:4D:0D:67:DB:0B:EB:B2:3E:37:C7:1B:F3:25:DC:BC:DD:24:0E:A0:4D:AF:58:B4:7E:18:40
# Fingerprint (SHA1): 09:3C:61:F3:8B:8B:DC:7D:55:DF:75:38:02:05:00:E1:25:F5:C8:36
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE

```

```
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "QuoVadis Root CA 2 G3"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\110\061\013\060\011\006\003\125\004\006\023\002\102\115\061
\031\060\027\006\003\125\004\012\023\020\121\165\157\126\141\144
\151\163\040\114\151\155\151\164\145\144\061\036\060\034\006\003
\125\004\003\023\025\121\165\157\126\141\144\151\163\040\122\157
\157\164\040\103\101\040\062\040\107\063
END
CKA_ID
UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\110\061\013\060\011\006\003\125\004\006\023\002\102\115\061
\031\060\027\006\003\125\004\012\023\020\121\165\157\126\141\144
\151\163\040\114\151\155\151\164\145\144\061\036\060\034\006\003
\125\004\003\023\025\121\165\157\126\141\144\151\163\040\122\157
\157\164\040\103\101\040\062\040\107\063
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\024\104\127\064\044\133\201\211\233\065\362\316\270\053\073
\133\247\046\360\165\050
END
CKA_VALUE MULTILINE_OCTAL
\060\202\005\140\060\202\003\110\240\003\002\001\002\002\024\104
\127\064\044\133\201\211\233\065\362\316\270\053\073\133\247\046
\360\165\050\060\015\006\011\052\206\110\206\367\015\001\001\013
\005\000\060\110\061\013\060\011\006\003\125\004\006\023\002\102
\115\061\031\060\027\006\003\125\004\012\023\020\121\165\157\126
\141\144\151\163\040\114\151\155\151\164\145\144\061\036\060\034
\006\003\125\004\003\023\025\121\165\157\126\141\144\151\163\040
\122\157\157\164\040\103\101\040\062\040\107\063\060\036\027\015
\061\062\060\061\061\062\061\070\065\071\063\062\132\027\015\064
\062\060\061\061\062\061\070\065\071\063\062\132\060\110\061\013
\060\011\006\003\125\004\006\023\002\102\115\061\031\060\027\006
\003\125\004\012\023\020\121\165\157\126\141\144\151\163\040\114
\151\155\151\164\145\144\061\036\060\034\006\003\125\004\003\023
\025\121\165\157\126\141\144\151\163\040\122\157\157\164\040\103
\101\040\062\040\107\063\060\202\002\042\060\015\006\011\052\206
\110\206\367\015\001\001\001\005\000\003\202\002\017\000\060\202
\002\012\002\202\002\001\000\241\256\045\262\001\030\334\127\210
\077\106\353\371\257\342\353\043\161\342\232\321\141\146\041\137
\252\257\047\121\345\156\033\026\324\055\175\120\260\123\167\275
\170\072\140\342\144\002\233\174\206\233\326\032\216\255\377\037
\025\177\325\225\036\022\313\346\024\204\004\301\337\066\263\026
\237\212\343\311\333\230\064\316\330\063\027\050\106\374\247\311
\360\322\264\325\115\011\162\111\371\362\207\343\251\332\175\241
```

\175\153\262\072\045\251\155\122\104\254\370\276\156\373\334\246  
\163\221\220\141\246\003\024\040\362\347\207\243\210\255\255\240  
\214\377\246\013\045\122\045\347\026\001\325\313\270\065\201\014  
\243\073\360\341\341\374\132\135\316\200\161\155\370\111\253\076  
\073\272\270\327\200\001\373\245\353\133\263\305\136\140\052\061  
\240\257\067\350\040\072\237\250\062\054\014\314\011\035\323\236  
\216\135\274\114\230\356\305\032\150\173\354\123\246\351\024\065  
\243\337\315\200\237\014\110\373\034\364\361\277\112\270\372\325  
\214\161\112\307\037\255\376\101\232\263\203\135\362\204\126\357  
\245\127\103\316\051\255\214\253\125\277\304\373\133\001\335\043  
\041\241\130\000\216\303\320\152\023\355\023\343\022\053\200\334  
\147\346\225\262\315\036\042\156\052\370\101\324\362\312\024\007  
\215\212\125\022\306\151\365\270\206\150\057\123\136\260\322\252  
\041\301\230\346\060\343\147\125\307\233\156\254\031\250\125\246  
\105\006\320\043\072\333\353\145\135\052\021\021\360\073\117\312  
\155\364\064\304\161\344\377\000\132\366\134\256\043\140\205\163  
\361\344\020\261\045\256\325\222\273\023\301\014\340\071\332\264  
\071\127\265\253\065\252\162\041\073\203\065\347\061\337\172\041  
\156\270\062\010\175\035\062\221\025\112\142\162\317\343\167\241  
\274\325\021\033\166\001\147\010\340\101\013\303\353\025\156\370  
\244\031\331\242\253\257\342\047\122\126\053\002\212\054\024\044  
\371\277\102\002\277\046\310\306\217\340\156\070\175\123\055\345  
\355\230\263\225\143\150\177\371\065\364\337\210\305\140\065\222  
\300\174\151\034\141\225\026\320\353\336\013\257\076\004\020\105  
\145\130\120\070\257\110\362\131\266\026\362\074\015\220\002\306  
\160\056\001\255\074\025\327\002\003\001\000\001\243\102\060\100  
\060\017\006\003\125\035\023\001\001\377\004\005\060\003\001\001  
\377\060\016\006\003\125\035\017\001\001\377\004\004\003\002\001  
\006\060\035\006\003\125\035\016\004\026\004\024\355\347\157\166  
\132\277\140\354\111\133\306\245\167\273\162\026\161\233\304\075  
\060\015\006\011\052\206\110\206\367\015\001\001\013\005\000\003  
\202\002\001\000\221\337\200\077\103\011\176\161\302\367\353\263  
\210\217\341\121\262\274\075\165\371\050\135\310\274\231\233\173  
\135\252\345\312\341\012\367\350\262\323\237\335\147\061\176\272  
\001\252\307\152\101\073\220\324\010\134\262\140\152\220\360\310  
\316\003\142\371\213\355\373\156\052\334\006\115\074\051\017\211  
\026\212\130\114\110\017\350\204\141\352\074\162\246\167\344\102  
\256\210\243\103\130\171\176\256\312\245\123\015\251\075\160\275  
\040\031\141\244\154\070\374\103\062\341\301\107\377\370\354\361  
\021\042\062\226\234\302\366\133\151\226\173\040\014\103\101\232  
\133\366\131\031\210\336\125\210\067\121\013\170\134\012\036\243  
\102\375\307\235\210\017\300\362\170\002\044\124\223\257\211\207  
\210\311\112\200\035\352\320\156\076\141\056\066\273\065\016\047  
\226\375\146\064\073\141\162\163\361\026\134\107\006\124\111\000  
\172\130\022\260\012\357\205\375\261\270\063\165\152\223\034\022  
\346\140\136\157\035\177\311\037\043\313\204\141\237\036\202\104  
\371\137\255\142\125\044\232\122\230\355\121\347\241\176\227\072  
\346\057\037\021\332\123\200\054\205\236\253\065\020\333\042\137

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\152\305\136\227\123\362\062\002\011\060\243\130\360\015\001\325
\162\306\261\174\151\173\303\365\066\105\314\141\156\136\114\224
\305\136\256\350\016\136\213\277\367\315\340\355\241\016\033\063
\356\124\030\376\017\276\357\176\204\153\103\343\160\230\333\135
\165\262\015\131\007\205\025\043\071\326\361\337\251\046\017\326
\110\307\263\246\042\365\063\067\132\225\107\237\173\272\030\025
\157\377\326\024\144\203\111\322\012\147\041\333\017\065\143\140
\050\042\343\261\225\203\315\205\246\335\057\017\347\147\122\156
\273\057\205\174\365\112\163\347\305\076\300\275\041\022\005\077
\374\267\003\111\002\133\310\045\346\342\124\070\365\171\207\214
\035\123\262\116\205\173\006\070\307\054\370\370\260\162\215\045
\345\167\122\364\003\034\110\246\120\137\210\040\060\156\362\202
\103\253\075\227\204\347\123\373\041\301\117\017\042\232\206\270
\131\052\366\107\075\031\210\055\350\205\341\236\354\205\010\152
\261\154\064\311\035\354\110\053\073\170\355\146\304\216\171\151
\203\336\177\214
```

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "QuoVadis Root CA 2 G3"

# Issuer: CN=QuoVadis Root CA 2 G3,O=QuoVadis Limited,C=BM

# Serial Number:44:57:34:24:5b:81:89:9b:35:f2:ce:b8:2b:3b:5b:a7:26:f0:75:28

# Subject: CN=QuoVadis Root CA 2 G3,O=QuoVadis Limited,C=BM

# Not Valid Before: Thu Jan 12 18:59:32 2012

# Not Valid After : Sun Jan 12 18:59:32 2042

# Fingerprint (SHA-256):

8F:E4:FB:0A:F9:3A:4D:0D:67:DB:0B:EB:B2:3E:37:C7:1B:F3:25:DC:BC:DD:24:0E:A0:4D:AF:58:B4:7E:18:40

# Fingerprint (SHA1): 09:3C:61:F3:8B:8B:DC:7D:55:DF:75:38:02:05:00:E1:25:F5:C8:36

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "QuoVadis Root CA 2 G3"

CKA\_CERT\_SHA1\_HASH MULTILINE\_OCTAL

```
\011\074\141\363\213\213\334\175\125\337\165\070\002\005\000\341
\045\365\310\066
```

END

CKA\_CERT\_MD5\_HASH

MULTILINE\_OCTAL

```
\257\014\206\156\277\100\055\177\013\076\022\120\272\022\075\006
```

END

CKA\_ISSUER MULTILINE\_OCTAL

```
\060\110\061\013\060\011\006\003\125\004\006\023\002\102\115\061
\031\060\027\006\003\125\004\012\023\020\121\165\157\126\141\144
\151\163\040\114\151\155\151\164\145\144\061\036\060\034\006\003
```

```

\125\004\003\023\025\121\165\157\126\141\144\151\163\040\122\157
\157\164\040\103\101\040\062\040\107\063
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\024\104\127\064\044\133\201\211\233\065\362\316\270\053\073
\133\247\046\360\165\050
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "QuoVadis Root CA 3 G3"
#
# Issuer: CN=QuoVadis Root CA 3 G3,O=QuoVadis Limited,C=BM
# Serial Number:2e:f5:9b:02:28:a7:db:7a:ff:d5:a3:a9:ee:bd:03:a0:cf:12:6a:1d
#
# Subject: CN=QuoVadis Root CA 3 G3,O=QuoVadis Limited,C=BM
# Not Valid Before: Thu Jan 12 20:26:32 2012
# Not Valid After : Sun Jan 12 20:26:32 2042
# Fingerprint (SHA-256):
88:EF:81:DE:20:2E:B0:18:45:2E:43:F8:64:72:5C:EA:5F:BD:1F:C2:D9:D2:05:73:07:09:C5:D8:B8:69:0F:46
# Fingerprint (SHA1): 48:12:BD:92:3C:A8:C4:39:06:E7:30:6D:27:96:E6:A4:CF:22:2E:7D
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "QuoVadis Root CA 3 G3"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\110\061\013\060\011\006\003\125\004\006\023\002\102\115\061
\031\060\027\006\003\125\004\012\023\020\121\165\157\126\141\144
\151\163\040\114\151\155\151\164\145\144\061\036\060\034\006\003
\125\004\003\023\025\121\165\157\126\141\144\151\163\040\122\157
\157\164\040\103\101\040\063\040\107\063
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\110\061\013\060\011\006\003\125\004\006\023\002\102\115\061
\031\060\027\006\003\125\004\012\023\020\121\165\157\126\141\144
\151\163\040\114\151\155\151\164\145\144\061\036\060\034\006\003
\125\004\003\023\025\121\165\157\126\141\144\151\163\040\122\157
\157\164\040\103\101\040\063\040\107\063
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\024\056\365\233\002\050\247\333\172\377\325\243\251\356\275

```



\003\240\317\022\152\035

END

CKA\_VALUE MULTILINE\_OCTAL

\060\202\005\140\060\202\003\110\240\003\002\001\002\002\024\056  
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\022\152\035\060\015\006\011\052\206\110\206\367\015\001\001\013  
\005\000\060\110\061\013\060\011\006\003\125\004\006\023\002\102  
\115\061\031\060\027\006\003\125\004\012\023\020\121\165\157\126  
\141\144\151\163\040\114\151\155\151\164\145\144\061\036\060\034  
\006\003\125\004\003\023\025\121\165\157\126\141\144\151\163\040  
\122\157\157\164\040\103\101\040\063\040\107\063\060\036\027\015  
\061\062\060\061\061\062\062\060\062\066\063\062\132\027\015\064  
\062\060\061\061\062\062\060\062\066\063\062\132\060\110\061\013  
\060\011\006\003\125\004\006\023\002\102\115\061\031\060\027\006  
\003\125\004\012\023\020\121\165\157\126\141\144\151\163\040\114  
\151\155\151\164\145\144\061\036\060\034\006\003\125\004\003\023  
\025\121\165\157\126\141\144\151\163\040\122\157\157\164\040\103  
\101\040\063\040\107\063\060\202\002\042\060\015\006\011\052\206  
\110\206\367\015\001\001\001\005\000\003\202\002\017\000\060\202  
\002\012\002\202\002\001\000\263\313\016\020\147\216\352\024\227  
\247\062\052\012\126\066\177\150\114\307\263\157\072\043\024\221  
\377\031\177\245\312\254\356\263\166\235\172\351\213\033\253\153  
\061\333\372\013\123\114\257\305\245\032\171\074\212\114\377\254  
\337\045\336\116\331\202\062\013\104\336\312\333\214\254\243\156  
\026\203\073\246\144\113\062\211\373\026\026\070\176\353\103\342  
\323\164\112\302\142\012\163\012\335\111\263\127\322\260\012\205  
\235\161\074\336\243\313\300\062\363\001\071\040\103\033\065\321  
\123\263\261\356\305\223\151\202\076\026\265\050\106\241\336\352  
\211\011\355\103\270\005\106\212\206\365\131\107\276\033\157\001  
\041\020\271\375\251\322\050\312\020\071\011\312\023\066\317\234  
\255\255\100\164\171\053\002\077\064\377\372\040\151\175\323\356  
\141\365\272\263\347\060\320\067\043\206\162\141\105\051\110\131  
\150\157\167\246\056\201\276\007\115\157\257\316\304\105\023\221  
\024\160\006\217\037\237\370\207\151\261\016\357\303\211\031\353  
\352\034\141\374\172\154\212\334\326\003\013\236\046\272\022\335  
\324\124\071\253\046\243\063\352\165\201\332\055\315\017\117\344  
\003\321\357\025\227\033\153\220\305\002\220\223\146\002\041\261  
\107\336\213\232\112\200\271\125\217\265\242\057\300\326\063\147  
\332\176\304\247\264\004\104\353\107\373\346\130\271\367\014\360  
\173\053\261\300\160\051\303\100\142\055\073\110\151\334\043\074  
\110\353\173\011\171\251\155\332\250\060\230\317\200\162\003\210  
\246\133\106\256\162\171\174\010\003\041\145\256\267\341\034\245  
\261\052\242\061\336\146\004\367\300\164\350\161\336\377\075\131  
\314\226\046\022\213\205\225\127\032\253\153\165\013\104\075\021  
\050\074\173\141\267\342\217\147\117\345\354\074\114\140\200\151  
\127\070\036\001\133\215\125\350\307\337\300\314\167\043\064\111  
\165\174\366\230\021\353\055\336\355\101\056\024\005\002\177\340  
\376\040\353\065\347\021\254\042\316\127\075\336\311\060\155\020

\003\205\315\361\377\214\026\265\301\262\076\210\154\140\177\220  
\117\225\367\366\055\255\001\071\007\004\372\165\200\175\277\111  
\120\355\357\311\304\174\034\353\200\176\333\266\320\335\023\376  
\311\323\234\327\262\227\251\002\003\001\000\001\243\102\060\100  
\060\017\006\003\125\035\023\001\001\377\004\005\060\003\001\001  
\377\060\016\006\003\125\035\017\001\001\377\004\004\003\002\001  
\006\060\035\006\003\125\035\016\004\026\004\024\306\027\320\274  
\250\352\002\103\362\033\006\231\135\053\220\040\271\327\234\344  
\060\015\006\011\052\206\110\206\367\015\001\001\013\005\000\003  
\202\002\001\000\064\141\331\126\265\022\207\125\115\335\243\065  
\061\106\273\244\007\162\274\137\141\142\350\245\373\013\067\261  
\074\266\263\372\051\235\177\002\365\244\311\250\223\267\172\161  
\050\151\217\163\341\122\220\332\325\276\072\345\267\166\152\126  
\200\041\337\135\346\351\072\236\345\076\366\242\151\307\052\012  
\260\030\107\334\040\160\175\122\243\076\131\174\301\272\311\310  
\025\100\141\312\162\326\160\254\322\267\360\034\344\206\051\360  
\316\357\150\143\320\265\040\212\025\141\232\176\206\230\264\311  
\302\166\373\314\272\060\026\314\243\141\306\164\023\345\153\357  
\243\025\352\003\376\023\213\144\344\323\301\322\350\204\373\111  
\321\020\115\171\146\353\252\375\364\215\061\036\160\024\255\334  
\336\147\023\114\201\025\141\274\267\331\221\167\161\031\201\140  
\273\360\130\245\265\234\013\367\217\042\125\047\300\113\001\155  
\073\231\015\324\035\233\143\147\057\320\356\015\312\146\274\224  
\117\246\255\355\374\356\143\254\127\077\145\045\317\262\206\217  
\320\010\377\270\166\024\156\336\345\047\354\253\170\265\123\271  
\266\077\350\040\371\322\250\276\141\106\312\207\214\204\363\371  
\361\240\150\233\042\036\201\046\233\020\004\221\161\300\006\037  
\334\240\323\271\126\247\343\230\055\177\203\235\337\214\053\234  
\062\216\062\224\360\001\074\042\052\237\103\302\056\303\230\071  
\007\070\173\374\136\000\102\037\363\062\046\171\203\204\366\345  
\360\301\121\022\300\013\036\004\043\014\124\245\114\057\111\305  
\112\321\266\156\140\015\153\374\153\213\205\044\144\267\211\016  
\253\045\107\133\074\317\176\111\275\307\351\012\306\332\367\176  
\016\027\010\323\110\227\320\161\222\360\017\071\076\064\152\034  
\175\330\362\042\256\273\151\364\063\264\246\110\125\321\017\016  
\046\350\354\266\013\055\247\205\065\315\375\131\310\237\321\315  
\076\132\051\064\271\075\204\316\261\145\324\131\221\221\126\165  
\041\301\167\236\371\172\341\140\235\323\255\004\030\364\174\353  
\136\223\217\123\112\042\051\370\110\053\076\115\206\254\133\177  
\313\006\231\131\140\330\130\145\225\215\104\321\367\177\176\047  
\177\175\256\200\365\007\114\266\076\234\161\124\231\004\113\375  
\130\371\230\364

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

```

# Trust for "QuoVadis Root CA 3 G3"
# Issuer: CN=QuoVadis Root CA 3 G3,O=QuoVadis Limited,C=BM
# Serial Number:2e:f5:9b:02:28:a7:db:7a:ff:d5:a3:a9:ee:bd:03:a0:cf:12:6a:1d
# Subject: CN=QuoVadis Root CA 3 G3,O=QuoVadis Limited,C=BM
# Not Valid Before: Thu Jan 12 20:26:32 2012
# Not Valid After : Sun Jan 12 20:26:32 2042
# Fingerprint (SHA-256):
88:EF:81:DE:20:2E:B0:18:45:2E:43:F8:64:72:5C:EA:5F:BD:1F:C2:D9:D2:05:73:07:09:C5:D8:B8:69:0F:46
# Fingerprint (SHA1): 48:12:BD:92:3C:A8:C4:39:06:E7:30:6D:27:96:E6:A4:CF:22:2E:7D
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "QuoVadis Root CA 3 G3"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\110\022\275\222\074\250\304\071\006\347\060\155\047\226\346\244
\317\042\056\175
END
CKA_CERT_MD5_HASH
MULTILINE_OCTAL
\337\175\271\255\124\157\150\241\337\211\127\003\227\103\260\327
END
CKA_ISSUER MULTILINE_OCTAL
\060\110\061\013\060\011\006\003\125\004\006\023\002\102\115\061
\031\060\027\006\003\125\004\012\023\020\121\165\157\126\141\144
\151\163\040\114\151\155\151\164\145\144\061\036\060\034\006\003
\125\004\003\023\025\121\165\157\126\141\144\151\163\040\122\157
\157\164\040\103\101\040\063\040\107\063
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\024\056\365\233\002\050\247\333\172\377\325\243\251\356\275
\003\240\317\022\152\035
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "DigiCert Assured ID Root G2"
#
# Issuer: CN=DigiCert Assured ID Root G2,OU=www.digicert.com,O=DigiCert Inc,C=US
# Serial Number:0b:93:1c:3a:d6:39:67:ea:67:23:bf:c3:af:9a:f4:4b
# Subject:
CN=DigiCert Assured ID Root G2,OU=www.digicert.com,O=DigiCert Inc,C=US
# Not Valid Before: Thu Aug 01 12:00:00 2013
# Not Valid After : Fri Jan 15 12:00:00 2038
# Fingerprint (SHA-256):

```

```
7D:05:EB:B6:82:33:9F:8C:94:51:EE:09:4E:EB:FE:FA:79:53:A1:14:ED:B2:F4:49:49:45:2F:AB:7D:2F:C1:85
# Fingerprint (SHA1): A1:4B:48:D9:43:EE:0A:0E:40:90:4F:3C:E0:A4:C0:91:93:51:5D:3F
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "DigiCert Assured ID Root G2"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\145\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\025\060\023\006\003\125\004\012\023\014\104\151\147\151\103\145
\162\164\040\111\156\143\061\031\060\027\006\003\125\004\013\023
\020\167\167\167\056\144\151\147\151\143\145\162\164\056\143\157
\155\061\044\060\042\006\003\125\004\003\023\033\104\151\147\151
\103\145\162\164\040\101\163\163\165\162\145\144\040\111\104\040
\122\157\157\164\040\107\062
END
CKA_ID
UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\145\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\025\060\023\006\003\125\004\012\023\014\104\151\147\151\103\145
\162\164\040\111\156\143\061\031\060\027\006\003\125\004\013\023
\020\167\167\167\056\144\151\147\151\143\145\162\164\056\143\157
\155\061\044\060\042\006\003\125\004\003\023\033\104\151\147\151
\103\145\162\164\040\101\163\163\165\162\145\144\040\111\104\040
\122\157\157\164\040\107\062
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\020\013\223\034\072\326\071\147\352\147\043\277\303\257\232
\364\113
END
CKA_VALUE MULTILINE_OCTAL
\060\202\003\226\060\202\002\176\240\003\002\001\002\002\020\013
\223\034\072\326\071\147\352\147\043\277\303\257\232\364\113\060
\015\006\011\052\206\110\206\367\015\001\001\013\005\000\060\145
\061\013\060\011\006\003\125\004\006\023\002\125\123\061\025\060
\023\006\003\125\004\012\023\014\104\151\147\151\103\145\162\164
\040\111\156\143\061\031\060\027\006\003\125\004\013\023\020\167
\167\167\056\144\151\147\151\143\145\162\164\056\143\157\155\061
\044\060\042\006\003\125\004\003\023\033\104\151\147\151\103\145
\162\164\040\101\163\163\165\162\145\144\040\111\104\040\122\157
\157\164\040\107\062\060\036\027\015\061\063\060\070\060\061\061
\062\060\060\060\060\132\027\015\063\070\060\061\061\065\061\062
\060\060\060\060\132\060\145\061\013\060\011\006\003\125\004\006
\023\002\125\123\061\025\060\023\006\003\125\004\012\023\014\104
\151\147\151\103\145\162\164\040\111\156\143\061\031\060\027\006
\003\125\004\013\023\020\167\167\167\056\144\151\147\151\143\145
```

\162\164\056\143\157\155\061\044\060\042\006\003\125\004\003\023  
\033\104\151\147\151\103\145\162\164\040\101\163\163\165\162\145  
\144\040\111\104\040\122\157\157\164\040\107\062\060\202\001\042  
\060\015\006\011\052\206\110\206\367\015\001\001\001\005\000\003  
\202\001\017\000\060\202\001\012\002\202\001\001\000\331\347\050  
\057\122\077\066\162\111\210\223\064\363\370\152\036\061\124\200  
\237\255\124\101\265\107\337\226\250\324\257\200\055\271\012\317  
\165\375\211\245\175\044\372\343\042\014\053\274\225\027\013\063  
\277\031\115\101\006\220\000\275\014\115\020\376\007\265\347\034  
\156\042\125\061\145\227\275\323\027\322\036\142\363\333\352\154  
\120\214\077\204\014\226\317\267\313\003\340\312\155\241\024\114  
\033\211\335\355\000\260\122\174\257\221\154\261\070\023\321\351  
\022\010\300\000\260\034\053\021\332\167\160\066\233\256\316\171  
\207\334\202\160\346\011\164\160\125\151\257\243\150\237\277\335  
\266\171\263\362\235\160\051\125\364\253\377\225\141\363\311\100  
\157\035\321\276\223\273\323\210\052\273\235\277\162\132\126\161  
\073\077\324\363\321\012\376\050\357\243\356\331\231\257\003\323  
\217\140\267\362\222\241\261\275\211\211\037\060\315\303\246\056  
\142\063\256\026\002\167\104\132\347\201\012\074\247\104\056\171  
\270\077\004\274\134\240\207\341\033\257\121\216\315\354\054\372  
\370\376\155\360\072\174\252\213\344\147\225\061\215\002\003\001  
\000\001\243\102\060\100\060\017\006\003\125\035\023\001\001\377  
\004\005\060\003\001\001\377\060\016\006\003\125\035\017\001\001  
\377\004\004\003\002\001\206\060\035\006\003\125\035\016\004\026  
\004\024\316\303\112\271\231\125\362\270\333\140\277\251\176\275  
\126\265\227\066\247\326\060\015\006\011\052\206\110\206\367\015  
\001\001\013\005\000\003\202\001\001\000\312\245\125\214\343\310  
\101\156\151\047\247\165\021\357\074\206\066\157\322\235\306\170  
\070\035\151\226\242\222\151\056\070\154\233\175\004\324\211\245  
\261\061\067\212\311\041\314\253\154\315\213\034\232\326\277\110  
\322\062\146\301\212\300\363\057\072\357\300\343\324\221\206\321  
\120\343\003\333\163\167\157\112\071\123\355\336\046\307\265\175  
\257\053\102\321\165\142\343\112\053\002\307\120\113\340\151\342  
\226\154\016\104\146\020\104\217\255\005\353\370\171\254\246\033  
\350\067\064\235\123\311\141\252\242\122\257\112\160\026\206\302  
\072\310\261\023\160\066\330\317\356\364\012\064\325\133\114\375  
\007\234\242\272\331\001\162\134\363\115\301\335\016\261\034\015  
\304\143\276\255\364\024\373\211\354\242\101\016\114\314\310\127  
\100\320\156\003\252\315\014\216\211\231\231\154\360\074\060\257  
\070\337\157\274\243\276\051\040\047\253\164\377\023\042\170\336  
\227\122\125\036\203\265\124\040\003\356\256\300\117\126\336\067  
\314\303\177\252\004\047\273\323\167\270\142\333\027\174\234\050  
\042\023\163\154\317\046\365\212\051\347

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

```

# Trust for "DigiCert Assured ID Root G2"
# Issuer: CN=DigiCert Assured ID Root G2,OU=www.digicert.com,O=DigiCert Inc,C=US
# Serial Number:0b:93:1c:3a:d6:39:67:ea:67:23:bf:c3:af:9a:f4:4b
# Subject: CN=DigiCert Assured ID Root G2,OU=www.digicert.com,O=DigiCert Inc,C=US
# Not Valid Before: Thu Aug 01 12:00:00 2013
# Not Valid After : Fri Jan 15 12:00:00 2038
# Fingerprint (SHA-256):
7D:05:EB:B6:82:33:9F:8C:94:51:EE:09:4E:EB:FE:FA:79:53:A1:14:ED:B2:F4:49:49:45:2F:AB:7D:2F:C1:85
#
Fingerprint (SHA1): A1:4B:48:D9:43:EE:0A:0E:40:90:4F:3C:E0:A4:C0:91:93:51:5D:3F
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "DigiCert Assured ID Root G2"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\241\113\110\331\103\356\012\016\100\220\117\074\340\244\300\221
\223\121\135\077
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\222\070\271\370\143\044\202\145\054\127\063\346\376\201\217\235
END
CKA_ISSUER MULTILINE_OCTAL
\060\145\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\025\060\023\006\003\125\004\012\023\014\104\151\147\151\103\145
\162\164\040\111\156\143\061\031\060\027\006\003\125\004\013\023
\020\167\167\167\056\144\151\147\151\143\145\162\164\056\143\157
\155\061\044\060\042\006\003\125\004\003\023\033\104\151\147\151
\103\145\162\164\040\101\163\163\165\162\145\144\040\111\104\040
\122\157\157\164\040\107\062
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\020\013\223\034\072\326\071\147\352\147\043\277\303\257\232
\364\113
END
CKA_TRUST_SERVER_AUTH
CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "DigiCert Assured ID Root G3"
#
# Issuer: CN=DigiCert Assured ID Root G3,OU=www.digicert.com,O=DigiCert Inc,C=US
# Serial Number:0b:a1:5a:fa:1d:df:a0:b5:49:44:af:cd:24:a0:6c:ec
# Subject: CN=DigiCert Assured ID Root G3,OU=www.digicert.com,O=DigiCert Inc,C=US

```

```
# Not Valid Before: Thu Aug 01 12:00:00 2013
# Not Valid After : Fri Jan 15 12:00:00 2038
# Fingerprint (SHA-256):
7E:37:CB:8B:4C:47:09:0C:AB:36:55:1B:A6:F4:5D:B8:40:68:0F:BA:16:6A:95:2D:B1:00:71:7F:43:05:3F:C2
# Fingerprint (SHA1): F5:17:A2:4F:9A:48:C6:C9:F8:A2:00:26:9F:DC:0F:48:2C:AB:30:89
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL
  UTF8 "DigiCert Assured ID Root G3"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\145\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\025\060\023\006\003\125\004\012\023\014\104\151\147\151\103\145
\162\164\040\111\156\143\061\031\060\027\006\003\125\004\013\023
\020\167\167\167\056\144\151\147\151\143\145\162\164\056\143\157
\155\061\044\060\042\006\003\125\004\003\023\033\104\151\147\151
\103\145\162\164\040\101\163\163\165\162\145\144\040\111\104\040
\122\157\157\164\040\107\063
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\145\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\025\060\023\006\003\125\004\012\023\014\104\151\147\151\103\145
\162\164\040\111\156\143\061\031\060\027\006\003\125\004\013\023
\020\167\167\167\056\144\151\147\151\143\145\162\164\056\143\157
\155\061\044\060\042\006\003\125\004\003\023\033\104\151\147\151
\103\145\162\164\040\101\163\163\165\162\145\144\040\111\104\040
\122\157\157\164\040\107\063
END
CKA_SERIAL_NUMBER
  MULTILINE_OCTAL
\002\020\013\241\132\372\035\337\240\265\111\104\257\315\044\240
\154\354
END
CKA_VALUE MULTILINE_OCTAL
\060\202\002\106\060\202\001\315\240\003\002\001\002\002\020\013
\241\132\372\035\337\240\265\111\104\257\315\044\240\154\354\060
\012\006\010\052\206\110\316\075\004\003\003\060\145\061\013\060
\011\006\003\125\004\006\023\002\125\123\061\025\060\023\006\003
\125\004\012\023\014\104\151\147\151\103\145\162\164\040\111\156
\143\061\031\060\027\006\003\125\004\013\023\020\167\167\167\056
\144\151\147\151\143\145\162\164\056\143\157\155\061\044\060\042
\006\003\125\004\003\023\033\104\151\147\151\103\145\162\164\040
\101\163\163\165\162\145\144\040\111\104\040\122\157\157\164\040
\107\063\060\036\027\015\061\063\060\070\060\061\061\062\060\060
\060\060\132\027\015\063\070\060\061\061\065\061\062\060\060\060
```

\060\132\060\145\061\013\060\011\006\003\125\004\006\023\002\125  
\123\061\025\060\023\006\003\125\004\012\023\014\104\151\147\151  
\103\145\162\164\040\111\156\143\061\031\060\027\006\003\125\004  
\013\023\020\167\167\167\056\144\151\147\151\143\145\162\164\056  
\143\157\155\061\044\060\042\006\003\125\004\003\023\033\104\151  
\147\151\103\145\162\164\040\101\163\163\165\162\145\144\040\111  
\104\040\122\157\157\164\040\107\063\060\166\060\020\006\007\052  
\206\110\316\075\002\001\006\005\053\201\004\000\042\003\142\000  
\004\031\347\274\254\104\145\355\315\270\077\130\373\215\261\127  
\251\104\055\005\025\362\357\013\377\020\164\237\265\142\122\137  
\146\176\037\345\334\033\105\171\013\314\306\123\012\235\215\135  
\002\331\251\131\336\002\132\366\225\052\016\215\070\112\212\111  
\306\274\306\003\070\007\137\125\332\176\011\156\342\177\136\320  
\105\040\017\131\166\020\326\240\044\360\055\336\066\362\154\051  
\071\243\102\060\100\060\017\006\003\125\035\023\001\001\377\004  
\005\060\003\001\001\377\060\016\006\003\125\035\017\001\001\377  
\004\004\003\002\001\206\060\035\006\003\125\035\016\004\026\004  
\024\313\320\275\251\341\230\005\121\241\115\067\242\203\171\316  
\215\035\052\344\204\060\012\006\010\052\206\110\316\075\004\003  
\003\003\147\000\060\144\002\060\045\244\201\105\002\153\022\113  
\165\164\117\310\043\343\160\362\165\162\336\174\211\360\317\221  
\162\141\236\136\020\222\131\126\271\203\307\020\347\070\351\130  
\046\066\175\325\344\064\206\071\002\060\174\066\123\360\060\345  
\142\143\072\231\342\266\243\073\233\064\372\036\332\020\222\161  
\136\221\023\247\335\244\156\222\314\062\326\365\041\146\307\057  
\352\226\143\152\145\105\222\225\001\264

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "DigiCert Assured ID Root G3"

# Issuer: CN=DigiCert Assured ID Root G3,OU=www.digicert.com,O=DigiCert Inc,C=US

# Serial Number:0b:a1:5a:fa:1d:df:a0:b5:49:44:af:cd:24:a0:6c:ec

# Subject: CN=DigiCert Assured ID Root G3,OU=www.digicert.com,O=DigiCert Inc,C=US

# Not Valid Before: Thu Aug 01 12:00:00 2013

# Not Valid After : Fri

Jan 15 12:00:00 2038

# Fingerprint (SHA-256):

7E:37:CB:8B:4C:47:09:0C:AB:36:55:1B:A6:F4:5D:B8:40:68:0F:BA:16:6A:95:2D:B1:00:71:7F:43:05:3F:C2

# Fingerprint (SHA1): F5:17:A2:4F:9A:48:C6:C9:F8:A2:00:26:9F:DC:0F:48:2C:AB:30:89

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "DigiCert Assured ID Root G3"

CKA\_CERT\_SHA1\_HASH MULTILINE\_OCTAL



\365\027\242\117\232\110\306\311\370\242\000\046\237\334\017\110  
\054\253\060\211

END

CKA\_CERT\_MD5\_HASH MULTILINE\_OCTAL

\174\177\145\061\014\201\337\215\272\076\231\342\134\255\156\373

END

CKA\_ISSUER MULTILINE\_OCTAL

\060\145\061\013\060\011\006\003\125\004\006\023\002\125\123\061  
\025\060\023\006\003\125\004\012\023\014\104\151\147\151\103\145  
\162\164\040\111\156\143\061\031\060\027\006\003\125\004\013\023  
\020\167\167\167\056\144\151\147\151\143\145\162\164\056\143\157  
\155\061\044\060\042\006\003\125\004\003\023\033\104\151\147\151  
\103\145\162\164\040\101\163\163\165\162\145\144\040\111\104\040  
\122\157\157\164\040\107\063

END

CKA\_SERIAL\_NUMBER

MULTILINE\_OCTAL

\002\020\013\241\132\372\035\337\240\265\111\104\257\315\044\240  
\154\354

END

CKA\_TRUST\_SERVER\_AUTH CK\_TRUST CKT\_NSS\_TRUSTED\_DELEGATOR

CKA\_TRUST\_EMAIL\_PROTECTION CK\_TRUST CKT\_NSS\_TRUSTED\_DELEGATOR

CKA\_TRUST\_CODE\_SIGNING CK\_TRUST CKT\_NSS\_MUST\_VERIFY\_TRUST

CKA\_TRUST\_STEP\_UP\_APPROVED CK\_BBOOL CK\_FALSE

#

# Certificate "DigiCert Global Root G2"

#

# Issuer: CN=DigiCert Global Root G2,OU=www.digicert.com,O=DigiCert Inc,C=US

# Serial Number:03:3a:f1:e6:a7:11:a9:a0:bb:28:64:b1:1d:09:fa:e5

# Subject: CN=DigiCert Global Root G2,OU=www.digicert.com,O=DigiCert Inc,C=US

# Not Valid Before: Thu Aug 01 12:00:00 2013

# Not Valid After : Fri Jan 15 12:00:00 2038

# Fingerprint (SHA-256):

CB:3C:CB:B7:60:31:E5:E0:13:8F:8D:D3:9A:23:F9:DE:47:FF:C3:5E:43:C1:14:4C:EA:27:D4:6A:5A:B1:CB:5F

# Fingerprint (SHA1): DF:3C:24:F9:BF:D6:66:76:1B:26:80:73:FE:06:D1:CC:8D:4F:82:A4

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_CERTIFICATE

CKA\_TOKEN

CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "DigiCert Global Root G2"

CKA\_CERTIFICATE\_TYPE CK\_CERTIFICATE\_TYPE CKC\_X\_509

CKA\_SUBJECT MULTILINE\_OCTAL

\060\141\061\013\060\011\006\003\125\004\006\023\002\125\123\061  
\025\060\023\006\003\125\004\012\023\014\104\151\147\151\103\145  
\162\164\040\111\156\143\061\031\060\027\006\003\125\004\013\023  
\020\167\167\167\056\144\151\147\151\143\145\162\164\056\143\157

\155\061\040\060\036\006\003\125\004\003\023\027\104\151\147\151  
\103\145\162\164\040\107\154\157\142\141\154\040\122\157\157\164  
\040\107\062

END

CKA\_ID UTF8 "0"

CKA\_ISSUER MULTILINE\_OCTAL

\060\141\061\013\060\011\006\003\125\004\006\023\002\125\123\061  
\025\060\023\006\003\125\004\012\023\014\104\151\147\151\103\145  
\162\164\040\111\156\143\061\031\060\027\006\003\125\004\013\023  
\020\167\167\167\056\144\151\147\151\143\145\162\164\056\143\157  
\155\061\040\060\036\006\003\125\004\003\023\027\104\151\147\151  
\103\145\162\164\040\107\154\157\142\141\154\040\122\157\157\164  
\040\107\062

END

CKA\_SERIAL\_NUMBER

MULTILINE\_OCTAL

\002\020\003\072\361\346\247\021\251\240\273\050\144\261\035\011  
\372\345

END

CKA\_VALUE MULTILINE\_OCTAL

\060\202\003\216\060\202\002\166\240\003\002\001\002\002\020\003  
\072\361\346\247\021\251\240\273\050\144\261\035\011\372\345\060  
\015\006\011\052\206\110\206\367\015\001\001\013\005\000\060\141  
\061\013\060\011\006\003\125\004\006\023\002\125\123\061\025\060  
\023\006\003\125\004\012\023\014\104\151\147\151\103\145\162\164  
\040\111\156\143\061\031\060\027\006\003\125\004\013\023\020\167  
\167\167\056\144\151\147\151\143\145\162\164\056\143\157\155\061  
\040\060\036\006\003\125\004\003\023\027\104\151\147\151\103\145  
\162\164\040\107\154\157\142\141\154\040\122\157\157\164\040\107  
\062\060\036\027\015\061\063\060\070\060\061\061\062\060\060\060  
\060\132\027\015\063\070\060\061\061\065\061\062\060\060\060\060  
\132\060\141\061\013\060\011\006\003\125\004\006\023\002\125\123  
\061\025\060\023\006\003\125\004\012\023\014\104\151\147\151\103  
\145\162\164\040\111\156\143\061\031\060\027\006\003\125\004\013  
\023\020\167\167\167\056\144\151\147\151\143\145\162\164\056\143  
\157\155\061\040\060\036\006\003\125\004\003\023\027\104\151\147  
\151\103\145\162\164\040\107\154\157\142\141\154\040\122\157\157  
\164\040\107\062\060\202\001\042\060\015\006\011\052\206\110\206  
\367\015\001\001\001\005\000\003\202\001\017\000\060\202\001\012  
\002\202\001\001\000\273\067\315\064\334\173\153\311\262\150\220  
\255\112\165\377\106\272\041\012\010\215\365\031\124\311\373\210  
\333\363\256\362\072\211\221\074\172\346\253\006\032\153\317\254  
\055\350\136\011\044\104\272\142\232\176\326\243\250\176\340\124  
\165\040\005\254\120\267\234\143\032\154\060\334\332\037\031\261  
\327\036\336\375\327\340\313\224\203\067\256\354\037\103\116\335  
\173\054\322\275\056\245\057\344\251\270\255\072\324\231\244\266  
\045\351\233\153\000\140\222\140\377\117\041\111\030\367\147\220  
\253\141\006\234\217\362\272\351\264\351\222\062\153\265\363\127

\350\135\033\315\214\035\253\225\004\225\111\363\065\055\226\343  
\111\155\335\167\343\373\111\113\264\254\125\007\251\217\225\263  
\264\043\273\114\155\105\360\366\251\262\225\060\264\375\114\125  
\214\047\112\127\024\174\202\235\315\163\222\323\026\112\006\014  
\214\120\321\217\036\011\276\027\241\346\041\312\375\203\345\020  
\274\203\245\012\304\147\050\366\163\024\024\075\106\166\303\207  
\024\211\041\064\115\257\017\105\014\246\111\241\272\273\234\305  
\261\063\203\051\205\002\003\001\000\001\243\102\060\100\060\017  
\006\003\125\035\023\001\001\377\004\005\060\003\001\001\377\060  
\016\006\003\125\035\017\001\001\377\004\004\003\002\001\206\060  
\035\006\003\125\035\016\004\026\004\024\116\042\124\040\030\225  
\346\343\156\346\017\372\372\271\022\355\006\027\217\071\060\015  
\006\011\052\206\110\206\367\015\001\001\013\005\000\003\202\001  
\001\000\140\147\050\224\157\016\110\143\353\061\335\352\147\030  
\325\211\175\074\305\213\112\177\351\276\333\053\027\337\260\137  
\163\167\052\062\023\071\201\147\102\204\043\362\105\147\065\354  
\210\277\370\217\260\141\014\064\244\256\040\114\204\306\333\370  
\065\341\166\331\337\246\102\273\307\104\010\206\177\066\164\044  
\132\332\154\015\024\131\065\275\362\111\335\266\037\311\263\015  
\107\052\075\231\057\273\134\273\265\324\040\341\231\137\123\106  
\025\333\150\233\360\363\060\325\076\061\342\215\204\236\343\212  
\332\332\226\076\065\023\245\137\360\371\160\120\160\107\101\021  
\127\031\116\300\217\256\006\304\225\023\027\057\033\045\237\165  
\362\261\216\231\241\157\023\261\101\161\376\210\052\310\117\020  
\040\125\327\363\024\105\345\340\104\364\352\207\225\062\223\016  
\376\123\106\372\054\235\377\213\042\271\113\331\011\105\244\336  
\244\270\232\130\335\033\175\122\237\216\131\103\210\201\244\236  
\046\325\157\255\335\015\306\067\175\355\003\222\033\345\167\137  
\166\356\074\215\304\135\126\133\242\331\146\156\263\065\067\345  
\062\266

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER

CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "DigiCert Global Root G2"

# Issuer: CN=DigiCert Global Root G2,OU=www.digicert.com,O=DigiCert Inc,C=US

# Serial Number:03:3a:f1:e6:a7:11:a9:a0:bb:28:64:b1:1d:09:fa:e5

# Subject: CN=DigiCert Global Root G2,OU=www.digicert.com,O=DigiCert Inc,C=US

# Not Valid Before: Thu Aug 01 12:00:00 2013

# Not Valid After : Fri Jan 15 12:00:00 2038

# Fingerprint (SHA-256):

CB:3C:CB:B7:60:31:E5:E0:13:8F:8D:D3:9A:23:F9:DE:47:FF:C3:5E:43:C1:14:4C:EA:27:D4:6A:5A:B1:CB:5F

# Fingerprint (SHA1): DF:3C:24:F9:BF:D6:66:76:1B:26:80:73:FE:06:D1:CC:8D:4F:82:A4

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

```

CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "DigiCert Global Root G2"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\337\074\044\371\277\326\146\166\033\046\200\163\376\006\321\314
\215\117\202\244
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\344\246\212\310\124\254\122\102\106\012\375\162\110\033\052\104
END
CKA_ISSUER
MULTILINE_OCTAL
\060\141\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\025\060\023\006\003\125\004\012\023\014\104\151\147\151\103\145
\162\164\040\111\156\143\061\031\060\027\006\003\125\004\013\023
\020\167\167\167\056\144\151\147\151\143\145\162\164\056\143\157
\155\061\040\060\036\006\003\125\004\003\023\027\104\151\147\151
\103\145\162\164\040\107\154\157\142\141\154\040\122\157\157\164
\040\107\062
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\020\003\072\361\346\247\021\251\240\273\050\144\261\035\011
\372\345
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "DigiCert Global Root G3"
#
# Issuer: CN=DigiCert Global Root G3,OU=www.digicert.com,O=DigiCert Inc,C=US
# Serial Number:05:55:56:bc:f2:5e:a4:35:35:c3:a4:0f:d5:ab:45:72
# Subject: CN=DigiCert Global
Root G3,OU=www.digicert.com,O=DigiCert Inc,C=US
# Not Valid Before: Thu Aug 01 12:00:00 2013
# Not Valid After : Fri Jan 15 12:00:00 2038
# Fingerprint (SHA-256):
31:AD:66:48:F8:10:41:38:C7:38:F3:9E:A4:32:01:33:39:3E:3A:18:CC:02:29:6E:F9:7C:2A:C9:EF:67:31:D0
# Fingerprint (SHA1): 7E:04:DE:89:6A:3E:66:6D:00:E6:87:D3:3F:FA:D9:3B:E8:3D:34:9E
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "DigiCert Global Root G3"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL

```

\060\141\061\013\060\011\006\003\125\004\006\023\002\125\123\061  
\025\060\023\006\003\125\004\012\023\014\104\151\147\151\103\145  
\162\164\040\111\156\143\061\031\060\027\006\003\125\004\013\023  
\020\167\167\167\056\144\151\147\151\143\145\162\164\056\143\157  
\155\061\040\060\036\006\003\125\004\003\023\027\104\151\147\151  
\103\145\162\164\040\107\154\157\142\141\154\040\122\157\157\164  
\040\107\063

END

CKA\_ID

UTF8 "0"

CKA\_ISSUER MULTILINE\_OCTAL

\060\141\061\013\060\011\006\003\125\004\006\023\002\125\123\061  
\025\060\023\006\003\125\004\012\023\014\104\151\147\151\103\145  
\162\164\040\111\156\143\061\031\060\027\006\003\125\004\013\023  
\020\167\167\167\056\144\151\147\151\143\145\162\164\056\143\157  
\155\061\040\060\036\006\003\125\004\003\023\027\104\151\147\151  
\103\145\162\164\040\107\154\157\142\141\154\040\122\157\157\164  
\040\107\063

END

CKA\_SERIAL\_NUMBER MULTILINE\_OCTAL

\002\020\005\125\126\274\362\136\244\065\065\303\244\017\325\253  
\105\162

END

CKA\_VALUE MULTILINE\_OCTAL

\060\202\002\077\060\202\001\305\240\003\002\001\002\002\020\005  
\125\126\274\362\136\244\065\065\303\244\017\325\253\105\162\060  
\012\006\010\052\206\110\316\075\004\003\003\060\141\061\013\060  
\011\006\003\125\004\006\023\002\125\123\061\025\060\023\006\003  
\125\004\012\023\014\104\151\147\151\103\145\162\164\040\111\156  
\143\061\031\060\027\006\003\125\004\013\023\020\167\167\167\056  
\144\151\147\151\143\145\162\164\056\143\157\155\061\040\060\036  
\006\003\125\004\003\023\027\104\151\147\151\103\145\162\164\040  
\107\154\157\142\141\154\040\122\157\157\164\040\107\063\060\036  
\027\015\061\063\060\070\060\061\061\062\060\060\060\060\132\027  
\015\063\070\060\061\061\065\061\062\060\060\060\060\132\060\141  
\061\013\060\011\006\003\125\004\006\023\002\125\123\061\025\060  
\023\006\003\125\004\012\023\014\104\151\147\151\103\145\162\164  
\040\111\156\143\061\031\060\027\006\003\125\004\013\023\020\167  
\167\167\056\144\151\147\151\143\145\162\164\056\143\157\155\061  
\040\060\036\006\003\125\004\003\023\027\104\151\147\151\103\145  
\162\164\040\107\154\157\142\141\154\040\122\157\157\164\040\107  
\063\060\166\060\020\006\007\052\206\110\316\075\002\001\006\005  
\053\201\004\000\042\003\142\000\004\335\247\331\273\212\270\013  
\373\013\177\041\322\360\276\276\163\363\063\135\032\274\064\352  
\336\306\233\274\320\225\366\360\314\320\013\272\141\133\121\106  
\176\236\055\237\356\216\143\014\027\354\007\160\365\317\204\056  
\100\203\234\350\077\101\155\073\255\323\244\024\131\066\170\235  
\003\103\356\020\023\154\162\336\256\210\247\241\153\265\103\316

```
\147\334\043\377\003\034\243\342\076\243\102\060\100\060\017\006
\003\125\035\023\001\001\377\004\005\060\003\001\001\377\060\016
\006\003\125\035\017\001\001\377\004\004\003\002\001\206\060\035
\006\003\125\035\016\004\026\004\024\263\333\110\244\371\241\305
\330\256\066\101\314\021\143\151\142\051\274\113\306\060\012\006
\010\052\206\110\316\075\004\003\003\003\150\000\060\145\002\061
\000\255\274\362\154\077\022\112\321\055\071\303\012\011\227\163
\364\210\066\214\210\047\273\346\210\215\120\205\247\143\371\236
\062\336\146\223\017\361\314\261\011\217\335\154\253\372\153\177
\240\002\060\071\146\133\302\144\215\270\236\120\334\250\325\111
\242\355\307\334\321\111\177\027\001\270\310\206\217\116\214\210
\053\250\232\251\212\305\321\000\275\370\124\342\232\345\133\174
\263\047\027
```

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER

CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "DigiCert Global Root G3"

# Issuer: CN=DigiCert Global Root G3,OU=www.digicert.com,O=DigiCert Inc,C=US

# Serial Number:05:55:56:bc:f2:5e:a4:35:35:c3:a4:0f:d5:ab:45:72

# Subject: CN=DigiCert Global Root G3,OU=www.digicert.com,O=DigiCert Inc,C=US

# Not Valid Before: Thu Aug 01 12:00:00 2013

# Not Valid After : Fri Jan 15 12:00:00 2038

# Fingerprint (SHA-256):

31:AD:66:48:F8:10:41:38:C7:38:F3:9E:A4:32:01:33:39:3E:3A:18:CC:02:29:6E:F9:7C:2A:C9:EF:67:31:D0

# Fingerprint (SHA1): 7E:04:DE:89:6A:3E:66:6D:00:E6:87:D3:3F:FA:D9:3B:E8:3D:34:9E

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "DigiCert Global Root G3"

CKA\_CERT\_SHA1\_HASH MULTILINE\_OCTAL

```
\176\004\336\211\152\076\146\155\000\346\207\323\077\372\331\073
\350\075\064\236
```

END

CKA\_CERT\_MD5\_HASH MULTILINE\_OCTAL

```
\365\135\244\120\245\373\050\176\036\017\015\314\226\127\126\312
```

END

CKA\_ISSUER

MULTILINE\_OCTAL

```
\060\141\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\025\060\023\006\003\125\004\012\023\014\104\151\147\151\103\145
\162\164\040\111\156\143\061\031\060\027\006\003\125\004\013\023
\020\167\167\167\056\144\151\147\151\143\145\162\164\056\143\157
\155\061\040\060\036\006\003\125\004\003\023\027\104\151\147\151
```

```

\103\145\162\164\040\107\154\157\142\141\154\040\122\157\157\164
\040\107\063
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\020\005\125\126\274\362\136\244\065\065\303\244\017\325\253
\105\162
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "DigiCert Trusted Root G4"
#
# Issuer: CN=DigiCert Trusted Root G4,OU=www.digicert.com,O=DigiCert Inc,C=US
# Serial Number:05:9b:1b:57:9e:8e:21:32:e2:39:07:bd:a7:77:75:5c
# Subject: CN=DigiCert
    Trusted Root G4,OU=www.digicert.com,O=DigiCert Inc,C=US
# Not Valid Before: Thu Aug 01 12:00:00 2013
# Not Valid After : Fri Jan 15 12:00:00 2038
# Fingerprint (SHA-256):
55:2F:7B:DC:F1:A7:AF:9E:6C:E6:72:01:7F:4F:12:AB:F7:72:40:C7:8E:76:1A:C2:03:D1:D9:D2:0A:C8:99:88
# Fingerprint (SHA1): DD:FB:16:CD:49:31:C9:73:A2:03:7D:3F:C8:3A:4D:7D:77:5D:05:E4
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "DigiCert Trusted Root G4"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\142\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\025\060\023\006\003\125\004\012\023\014\104\151\147\151\103\145
\162\164\040\111\156\143\061\031\060\027\006\003\125\004\013\023
\020\167\167\167\056\144\151\147\151\143\145\162\164\056\143\157
\155\061\041\060\037\006\003\125\004\003\023\030\104\151\147\151
\103\145\162\164\040\124\162\165\163\164\145\144\040\122\157\157
\164\040\107\064
END
CKA_ID
UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\142\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\025\060\023\006\003\125\004\012\023\014\104\151\147\151\103\145
\162\164\040\111\156\143\061\031\060\027\006\003\125\004\013\023
\020\167\167\167\056\144\151\147\151\143\145\162\164\056\143\157
\155\061\041\060\037\006\003\125\004\003\023\030\104\151\147\151
\103\145\162\164\040\124\162\165\163\164\145\144\040\122\157\157

```

\164\040\107\064

END

CKA\_SERIAL\_NUMBER MULTILINE\_OCTAL

\002\020\005\233\033\127\236\216\041\062\342\071\007\275\247\167  
\165\134

END

CKA\_VALUE MULTILINE\_OCTAL

\060\202\005\220\060\202\003\170\240\003\002\001\002\002\020\005  
\233\033\127\236\216\041\062\342\071\007\275\247\167\165\134\060  
\015\006\011\052\206\110\206\367\015\001\001\014\005\000\060\142  
\061\013\060\011\006\003\125\004\006\023\002\125\123\061\025\060  
\023\006\003\125\004\012\023\014\104\151\147\151\103\145\162\164  
\040\111\156\143\061\031\060\027\006\003\125\004\013\023\020\167  
\167\167\056\144\151\147\151\143\145\162\164\056\143\157\155\061  
\041\060\037\006\003\125\004\003\023\030\104\151\147\151\103\145  
\162\164\040\124\162\165\163\164\145\144\040\122\157\157\164\040  
\107\064\060\036\027\015\061\063\060\070\060\061\061\062\060\060  
\060\060\132\027\015\063\070\060\061\061\065\061\062\060\060\060  
\060\132\060\142\061\013\060\011\006\003\125\004\006\023\002\125  
\123\061\025\060\023\006\003\125\004\012\023\014\104\151\147\151  
\103\145\162\164\040\111\156\143\061\031\060\027\006\003\125\004  
\013\023\020\167\167\167\056\144\151\147\151\143\145\162\164\056  
\143\157\155\061\041\060\037\006\003\125\004\003\023\030\104\151  
\147\151\103\145\162\164\040\124\162\165\163\164\145\144\040\122  
\157\157\164\040\107\064\060\202\002\042\060\015\006\011\052\206  
\110\206\367\015\001\001\001\005\000\003\202\002\017\000\060\202  
\002\012\002\202\002\001\000\277\346\220\163\150\336\273\344\135  
\112\074\060\042\060\151\063\354\302\247\045\056\311\041\075\362  
\212\330\131\302\341\051\247\075\130\253\166\232\315\256\173\033  
\204\015\304\060\037\363\033\244\070\026\353\126\306\227\155\035  
\253\262\171\362\312\021\322\344\137\326\005\074\122\017\122\037  
\306\236\025\245\176\276\237\251\127\026\131\125\162\257\150\223  
\160\302\262\272\165\231\152\163\062\224\321\020\104\020\056\337  
\202\363\007\204\346\164\073\155\161\342\055\014\033\356\040\325  
\311\040\035\143\051\055\316\354\136\116\310\223\370\041\141\233  
\064\353\005\306\136\354\133\032\274\353\311\317\315\254\064\100  
\137\261\172\146\356\167\310\110\250\146\127\127\237\124\130\216  
\014\053\267\117\247\060\331\126\356\312\173\135\343\255\311\117  
\136\345\065\347\061\313\332\223\136\334\216\217\200\332\266\221  
\230\100\220\171\303\170\307\266\261\304\265\152\030\070\003\020  
\215\330\324\067\244\056\005\175\210\365\202\076\020\221\160\253  
\125\202\101\062\327\333\004\163\052\156\221\001\174\041\114\324  
\274\256\033\003\165\135\170\146\331\072\061\104\232\063\100\277  
\010\327\132\111\244\302\346\251\240\147\335\244\047\274\241\117  
\071\265\021\130\027\367\044\134\106\217\144\367\301\151\210\166  
\230\166\075\131\135\102\166\207\211\227\151\172\110\360\340\242  
\022\033\146\232\164\312\336\113\036\347\016\143\256\346\324\357  
\222\222\072\236\075\334\000\344\105\045\211\266\232\104\031\053



\176\300\224\264\322\141\155\353\063\331\305\337\113\004\000\314  
\175\034\225\303\217\367\041\262\262\021\267\273\177\362\325\214  
\160\054\101\140\252\261\143\030\104\225\032\166\142\176\366\200  
\260\373\350\144\246\063\321\211\007\341\275\267\346\103\244\030  
\270\246\167\001\341\017\224\014\041\035\262\124\051\045\211\154  
\345\016\122\121\107\164\276\046\254\266\101\165\336\172\254\137  
\215\077\311\274\323\101\021\022\133\345\020\120\353\061\305\312  
\162\026\042\011\337\174\114\165\077\143\354\041\137\304\040\121  
\153\157\261\253\206\213\117\302\326\105\137\235\040\374\241\036  
\305\300\217\242\261\176\012\046\231\365\344\151\057\230\035\055  
\365\331\251\262\035\345\033\002\003\001\000\001\243\102\060\100  
\060\017\006\003\125\035\023\001\001\377\004\005\060\003\001\001  
\377\060\016\006\003\125\035\017\001\001\377\004\004\003\002\001  
\206\060\035\006\003\125\035\016\004\026\004\024\354\327\343\202  
\322\161\135\144\114\337\056\147\077\347\272\230\256\034\017\117  
\060\015\006\011\052\206\110\206\367\015\001\001\014\005\000\003  
\202\002\001\000\273\141\331\175\251\154\276\027\304\221\033\303  
\241\242\000\215\343\144\150\017\126\317\167\256\160\371\375\232  
\112\231\271\311\170\134\014\014\137\344\346\024\051\126\013\066  
\111\135\104\143\340\255\234\226\030\146\033\043\015\075\171\351  
\155\153\326\124\370\322\074\301\103\100\256\035\120\365\122\374  
\220\073\273\230\231\151\153\307\301\247\250\150\244\047\334\235  
\371\047\256\060\205\271\366\147\115\072\076\217\131\071\042\123  
\104\353\310\135\003\312\355\120\172\175\142\041\012\200\310\163  
\146\321\240\005\140\137\350\245\264\247\257\250\367\155\065\234  
\174\132\212\326\242\070\231\363\170\213\364\115\322\040\013\336  
\004\356\214\233\107\201\162\015\300\024\062\357\060\131\056\256  
\340\161\362\126\344\152\227\157\222\120\155\226\215\150\172\232  
\262\066\024\172\006\362\044\271\011\021\120\327\010\261\270\211  
\172\204\043\141\102\051\345\243\315\242\040\101\327\321\234\144  
\331\352\046\241\213\024\327\114\031\262\120\101\161\075\077\115  
\160\043\206\014\112\334\201\322\314\062\224\204\015\010\011\227  
\034\117\300\356\153\040\164\060\322\340\071\064\020\205\041\025  
\001\010\350\125\062\336\161\111\331\050\027\120\115\346\276\115  
\321\165\254\320\312\373\101\270\103\245\252\323\303\005\104\117  
\054\066\233\342\372\342\105\270\043\123\154\006\157\147\125\177  
\106\265\114\077\156\050\132\171\046\322\244\250\142\227\322\036  
\342\355\112\213\274\033\375\107\112\015\337\147\146\176\262\133  
\101\320\073\344\364\073\364\004\143\351\357\302\124\000\121\240  
\212\052\311\316\170\314\325\352\207\004\030\263\316\257\111\210  
\257\363\222\231\266\263\346\141\017\322\205\000\347\120\032\344  
\033\225\235\031\241\271\234\261\233\261\000\036\357\320\017\117  
\102\154\311\012\274\356\103\372\072\161\245\310\115\046\245\065  
\375\211\135\274\205\142\035\062\322\240\053\124\355\232\127\301  
\333\372\020\317\031\267\213\112\033\217\001\266\047\225\123\350  
\266\211\155\133\274\150\324\043\350\213\121\242\126\371\360\246  
\200\240\326\036\263\274\017\017\123\165\051\252\352\023\167\344  
\336\214\201\041\255\007\020\107\021\255\207\075\007\321\165\274

```

\317\363\146\176
END
CKA_NSS_MOZILLA_CA_POLICY
CK_BBOOL CK_TRUE
CKA_NSS_SERVER_DISTRUST_AFTER CK_BBOOL CK_FALSE
CKA_NSS_EMAIL_DISTRUST_AFTER CK_BBOOL CK_FALSE

# Trust for "DigiCert Trusted Root G4"
# Issuer: CN=DigiCert Trusted Root G4,OU=www.digicert.com,O=DigiCert Inc,C=US
# Serial Number:05:9b:1b:57:9e:8e:21:32:e2:39:07:bd:a7:77:75:5c
# Subject: CN=DigiCert Trusted Root G4,OU=www.digicert.com,O=DigiCert Inc,C=US
# Not Valid Before: Thu Aug 01 12:00:00 2013
# Not Valid After : Fri Jan 15 12:00:00 2038
# Fingerprint (SHA-256):
55:2F:7B:DC:F1:A7:AF:9E:6C:E6:72:01:7F:4F:12:AB:F7:72:40:C7:8E:76:1A:C2:03:D1:D9:D2:0A:C8:99:88
#
Fingerprint (SHA1): DD:FB:16:CD:49:31:C9:73:A2:03:7D:3F:C8:3A:4D:7D:77:5D:05:E4
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "DigiCert Trusted Root G4"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\335\373\026\315\111\061\311\163\242\003\175\077\310\072\115\175
\167\135\005\344
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\170\362\374\252\140\037\057\264\353\311\067\272\123\056\165\111
END
CKA_ISSUER MULTILINE_OCTAL
\060\142\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\025\060\023\006\003\125\004\012\023\014\104\151\147\151\103\145
\162\164\040\111\156\143\061\031\060\027\006\003\125\004\013\023
\020\167\167\167\056\144\151\147\151\143\145\162\164\056\143\157
\155\061\041\060\037\006\003\125\004\003\023\030\104\151\147\151
\103\145\162\164\040\124\162\165\163\164\145\144\040\122\157\157
\164\040\107\064
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\020\005\233\033\127\236\216\041\062\342\071\007\275\247\167
\165\134
END
CKA_TRUST_SERVER_AUTH
CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

```

```

#
# Certificate "COMODO RSA Certification Authority"
#
# Issuer: CN=COMODO RSA Certification Authority,O=COMODO CA Limited,L=Salford,ST=Greater
Manchester,C=GB
# Serial Number:4c:aa:f9:ca:db:63:6f:e0:1f:f7:4e:d8:5b:03:86:9d
# Subject: CN=COMODO RSA Certification Authority,O=COMODO CA Limited,L=Salford,ST=Greater
Manchester,C=GB
# Not Valid Before: Tue Jan 19 00:00:00 2010
# Not Valid After : Mon Jan 18 23:59:59 2038
# Fingerprint (SHA-256):
52:F0:E1:C4:E5:8E:C6:29:29:1B:60:31:7F:07:46:71:B8:5D:7E:A8:0D:5B:07:27:34:63:53:4B:32:B4:02:34
# Fingerprint (SHA1): AF:E5:D2:44:A8:D1:19:42:30:FF:47:9F:E2:F8:97:BB:CD:7A:8C:B4
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE
CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "COMODO RSA Certification Authority"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\201\205\061\013\060\011\006\003\125\004\006\023\002\107\102
\061\033\060\031\006\003\125\004\010\023\022\107\162\145\141\164
\145\162\040\115\141\156\143\150\145\163\164\145\162\061\020\060
\016\006\003\125\004\007\023\007\123\141\154\146\157\162\144\061
\032\060\030\006\003\125\004\012\023\021\103\117\115\117\104\117
\040\103\101\040\114\151\155\151\164\145\144\061\053\060\051\006
\003\125\004\003\023\042\103\117\115\117\104\117\040\122\123\101
\040\103\145\162\164\151\146\151\143\141\164\151\157\156\040\101
\165\164\150\157\162\151\164\171
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
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\061\033\060\031\006\003\125\004\010\023\022\107\162\145\141\164
\145\162\040\115\141\156\143\150\145\163\164\145\162\061\020\060
\016\006\003\125\004\007\023\007\123\141\154\146\157\162\144\061
\032\060\030\006\003\125\004\012\023\021\103\117\115\117\104\117
\040\103\101\040\114\151\155\151\164\145\144\061\053\060\051\006
\003\125\004\003\023\042\103\117\115\117\104\117\040\122\123\101
\040\103\145\162\164\151\146\151\143\141\164\151\157\156\040\101
\165\164\150\157\162\151\164\171
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\020\114\252\371\312\333\143\157\340\037\367\116\330\133\003
\206\235
END

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CKA\_VALUE MULTILINE\_OCTAL

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\015\006\011\052\206\110\206\367\015\001\001\014\005\000\060\201  
\205\061\013\060\011\006\003\125\004\006\023\002\107\102\061\033  
\060\031\006\003\125\004\010\023\022\107\162\145\141\164\145\162  
\040\115\141\156\143\150\145\163\164\145\162\061\020\060\016\006  
\003\125\004\007\023\007\123\141\154\146\157\162\144\061\032\060  
\030\006\003\125\004\012\023\021\103\117\115\117\104\117\040\103  
\101\040\114\151\155\151\164\145\144\061\053\060\051\006\003\125  
\004\003\023\042\103\117\115\117\104\117\040\122\123\101\040\103  
\145\162\164\151\146\151\143\141\164\151\157\156\040\101\165\164  
\150\157\162\151\164\171\060\036\027\015\061\060\060\061\061\071  
\060\060\060\060\060\060\132\027\015\063\070\060\061\061\070\062  
\063\065\071\065\071\132\060\201\205\061\013\060\011\006\003\125  
\004\006\023\002\107\102\061\033\060\031\006\003\125\004\010\023  
\022\107\162\145\141\164\145\162\040\115\141\156\143\150\145\163  
\164\145\162\061\020\060\016\006\003\125\004\007\023\007\123\141  
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\103\117\115\117\104\117\040\103\101\040\114\151\155\151\164\145  
\144\061\053\060\051\006\003\125\004\003\023\042\103\117\115\117  
\104\117\040\122\123\101\040\103\145\162\164\151\146\151\143\141  
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\350\124\222\322\012\126\261\254\015\044\335\305\317\104\147\164  
\231\053\067\243\175\043\160\000\161\274\123\337\304\372\052\022  
\217\113\177\020\126\275\237\160\162\267\141\177\311\113\017\027  
\247\075\343\260\004\141\356\377\021\227\307\364\206\076\012\372  
\076\134\371\223\346\064\172\331\024\153\347\234\263\205\240\202  
\172\166\257\161\220\327\354\375\015\372\234\154\372\337\260\202  
\364\024\176\371\276\304\246\057\117\177\231\177\265\374\147\103  
\162\275\014\000\326\211\353\153\054\323\355\217\230\034\024\253  
\176\345\343\156\374\330\250\344\222\044\332\103\153\142\270\125  
\375\352\301\274\154\266\213\363\016\215\232\344\233\154\151\231  
\370\170\110\060\105\325\255\341\015\074\105\140\374\062\226\121  
\047\274\147\303\312\056\266\153\352\106\307\307\040\240\261\037  
\145\336\110\010\272\244\116\251\362\203\106\067\204\353\350\314  
\201\110\103\147\116\162\052\233\134\275\114\033\050\212\134\042  
\173\264\253\230\331\356\340\121\203\303\011\106\116\155\076\231  
\372\225\027\332\174\063\127\101\074\215\121\355\013\266\134\257  
\054\143\032\337\127\310\077\274\351\135\304\233\257\105\231\342  
\243\132\044\264\272\251\126\075\317\157\252\377\111\130\276\360  
\250\377\364\270\255\351\067\373\272\270\364\013\072\371\350\103  
\102\036\211\330\204\313\023\361\331\273\341\211\140\270\214\050  
\126\254\024\035\234\012\347\161\353\317\016\335\075\251\226\241  
\110\275\074\367\257\265\015\042\114\300\021\201\354\126\073\366  
\323\242\342\133\267\262\004\042\122\225\200\223\151\350\216\114

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\242\252\054\041\252\107\316\050\234\006\105\166\277\202\030\047  
\264\325\256\264\313\120\346\153\364\114\206\161\060\351\246\337  
\026\206\340\330\377\100\335\373\320\102\210\177\243\063\072\056  
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\075\136\050\235\234\314\277\263\121\332\247\107\345\204\123\002  
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\070\230\354\331\062\062\324\060\016\006\003\125\035\017\001\001  
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\377\004\005\060\003\001\001\377\060\015\006\011\052\206\110\206  
\367\015\001\001\014\005\000\003\202\002\001\000\012\361\325\106  
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\162\261\275\031\104\154\141\065\242\232\264\026\022\151\132\214  
\341\327\076\244\032\350\057\003\364\256\141\035\020\033\052\244  
\213\172\305\376\005\246\341\300\326\310\376\236\256\217\053\272  
\075\231\370\330\163\011\130\106\156\246\234\364\327\047\323\225  
\332\067\203\162\034\323\163\340\242\107\231\003\070\135\325\111  
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\127\236\024\367\321\353\117\310\275\207\043\267\266\111\103\171  
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\156\201\306\205\362\251\244\055\347\364\245\044\020\107\203\312  
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\314\131\306\346\072\355\022\056\151\074\154\225\261\375\252\035  
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\274\214\357\027\337\267\111\013\321\362\156\060\013\032\016\116  
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\372\040\363\304\344\345\315\015\250\313\221\222\261\174\205\354  
\265\024\151\146\016\202\347\315\316\310\055\246\121\177\041\301  
\065\123\205\006\112\135\237\255\273\033\137\164

END

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CKA_NSS_MOZILLA_CA_POLICY
CK_BBOOL CK_TRUE
CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE
CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

# Trust for "COMODO RSA Certification Authority"
# Issuer: CN=COMODO RSA Certification Authority,O=COMODO CA Limited,L=Salford,ST=Greater
Manchester,C=GB
# Serial Number:4c:aa:f9:ca:db:63:6f:e0:1f:f7:4e:d8:5b:03:86:9d
# Subject: CN=COMODO RSA Certification Authority,O=COMODO CA Limited,L=Salford,ST=Greater
Manchester,C=GB
# Not Valid Before: Tue Jan 19 00:00:00 2010
# Not Valid After : Mon Jan 18 23:59:59 2038
# Fingerprint (SHA-256):
52:F0:E1:C4:E5:8E:C6:29:29:1B:60:31:7F:07:46:71:B8:5D:7E:A8:0D:5B:07:27:34:63:53:4B:32:B4:02:34
# Fingerprint (SHA1): AF:E5:D2:44:A8:D1:19:42:30:FF:47:9F:E2:F8:97:BB:CD:7A:8C:B4
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "COMODO RSA Certification Authority"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\257\345\322\104\250\321\031\102\060\377\107\237\342\370\227\273
\315\172\214\264
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\033\061\260\161\100\066\314\024\066\221\255\304\076\375\354\030
END
CKA_ISSUER MULTILINE_OCTAL
\060\201\205\061\013\060\011\006\003\125\004\006\023\002\107\102
\061\033\060\031\006\003\125\004\010\023\022\107\162\145\141\164
\145\162\040\115\141\156\143\150\145\163\164\145\162\061\020\060
\016\006\003\125\004\007\023\007\123\141\154\146\157\162\144\061
\032\060\030\006\003\125\004\012\023\021\103\117\115\117\104\117
\040\103\101\040\114\151\155\151\164\145\144\061\053\060\051\006
\003\125\004\003\023\042\103\117\115\117\104\117\040\122\123\101
\040\103\145\162\164\151\146\151\143\141\164\151\157\156\040\101
\165\164\150\157\162\151\164\171
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\020\114\252\371\312\333\143\157\340\037\367\116\330\133\003
\206\235
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

```

```
#
# Certificate "USERTrust RSA Certification Authority"
#
# Issuer: CN=USERTrust RSA Certification Authority,O=The USERTRUST Network,L=Jersey City,ST=New
Jersey,C=US
# Serial Number:01:fd:6d:30:fc:a3:ca:51:a8:1b:bc:64:0e:35:03:2d
# Subject: CN=USERTrust RSA Certification Authority,O=The USERTRUST Network,L=Jersey City,ST=New
Jersey,C=US
# Not Valid Before: Mon
Feb 01 00:00:00 2010
# Not Valid After : Mon Jan 18 23:59:59 2038
# Fingerprint (SHA-256):
E7:93:C9:B0:2F:D8:AA:13:E2:1C:31:22:8A:CC:B0:81:19:64:3B:74:9C:89:89:64:B1:74:6D:46:C3:D4:CB:D2
# Fingerprint (SHA1): 2B:8F:1B:57:33:0D:BB:A2:D0:7A:6C:51:F7:0E:E9:0D:DA:B9:AD:8E
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "USERTrust RSA Certification Authority"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\201\210\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\023\060\021\006\003\125\004\010\023\012\116\145\167\040\112
\145\162\163\145\171\061\024\060\022\006\003\125\004\007\023\013
\112\145\162\163\145\171\040\103\151\164\171\061\036\060\034\006
\003\125\004\012\023\025\124\150\145\040\125\123\105\122\124\122
\125\123\124\040\116\145\164\167\157\162\153\061\056\060\054\006
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END
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\145\162\163\145\171\061\024\060\022\006\003\125\004\007\023\013
\112\145\162\163\145\171\040\103\151\164\171\061\036\060\034\006
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\003\125\004\003\023\045\125\123\105\122\124\162\165\163\164\040
\122\123\101\040\103\145\162\164\151\146\151\143\141\164\151\157
\156\040\101\165\164\150\157\162\151\164\171
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
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\003\055
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END

CKA\_VALUE MULTILINE\_OCTAL

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\060\021\006\003\125\004\010\023\012\116\145\167\040\112\145\162  
\163\145\171\061\024\060\022\006\003\125\004\007\023\013\112\145  
\162\163\145\171\040\103\151\164\171\061\036\060\034\006\003\125  
\004\012\023\025\124\150\145\040\125\123\105\122\124\122\125\123  
\124\040\116\145\164\167\157\162\153\061\056\060\054\006\003\125  
\004\003\023\045\125\123\105\122\124\162\165\163\164\040\122\123  
\101\040\103\145\162\164\151\146\151\143\141\164\151\157\156\040  
\101\165\164\150\157\162\151\164\171\060\036\027\015\061\060\060  
\062\060\061\060\060\060\060\060\132\027\015\063\070\060\061  
\061\070\062\063\065\071\065\071\132\060\201\210\061\013\060\011  
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\060\022\006\003\125\004\007\023\013\112\145\162\163\145\171\040  
\103\151\164\171\061\036\060\034\006\003\125\004\012\023\025\124  
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\123\105\122\124\162\165\163\164\040\122\123\101\040\103\145\162  
\164\151\146\151\143\141\164\151\157\156\040\101\165\164\150\157  
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\254\127\015\166\355\315\047\323\114\255\120\203\141\342\252\040  
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\031\264\137\246\275\175\235\243\143\102\266\166\362\251\073\053  
\221\370\342\157\320\354\026\040\220\011\076\342\350\164\311\030  
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\147\106\010\121\313\206\024\124\077\274\063\376\176\154\234\377  
\026\235\030\275\121\216\065\246\247\146\310\162\147\333\041\146  
\261\324\233\170\003\300\120\072\350\314\360\334\274\236\114\376  
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\123\233\063\140\367\224\276\123\067\220\163\103\363\062\303\123  
\357\333\252\376\164\116\151\307\153\214\140\223\336\304\307\014  
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\163\103\345\176\016\245\146\261\051\174\062\204\143\125\211\304  
\015\301\223\124\060\031\023\254\323\175\067\247\353\135\072\154  
\065\134\333\101\327\022\332\251\111\013\337\330\200\212\011\223  
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\002\236\353\022\114\225\174\363\153\005\251\136\026\203\314\270  
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\106\112\120\201\262\336\276\170\267\374\147\025\341\311\127\204  
\036\017\143\326\351\142\272\326\137\125\056\352\134\306\050\010  
\004\045\071\270\016\053\251\362\114\227\034\007\077\015\122\365  
\355\357\057\202\017\002\003\001\000\001\243\102\060\100\060\035  
\006\003\125\035\016\004\026\004\024\123\171\277\132\252\053\112  
\317\124\200\341\330\233\300\235\362\262\003\146\313\060\016\006  
\003\125\035\017\001\001\377\004\004\003\002\001\006\060\017\006  
\003\125\035\023\001\001\377\004\005\060\003\001\001\377\060\015  
\006\011\052\206\110\206\367\015\001\001\014\005\000\003\202\002  
\001\000\134\324\174\015\317\367\001\175\101\231\145\014\163\305  
\122\237\313\370\317\231\006\177\033\332\103\025\237\236\002\125  
\127\226\024\361\122\074\047\207\224\050\355\037\072\001\067\242  
\166\374\123\120\300\204\233\306\153\116\272\214\041\117\242\216  
\125\142\221\363\151\025\330\274\210\343\304\252\013\375\357\250  
\351\113\125\052\006\040\155\125\170\051\031\356\137\060\134\113  
\044\021\125\377\044\232\156\136\052\053\356\013\115\237\177\367  
\001\070\224\024\225\103\007\011\373\140\251\356\034\253\022\214  
\240\232\136\247\230\152\131\155\213\077\010\373\310\321\105\257  
\030\025\144\220\022\017\163\050\056\305\342\044\116\374\130\354  
\360\364\105\376\042\263\353\057\216\322\331\105\141\005\301\227  
\157\250\166\162\217\213\214\066\257\277\015\005\316\161\215\346  
\246\157\037\154\246\161\142\305\330\320\203\162\014\361\147\021  
\211\014\234\023\114\162\064\337\274\325\161\337\252\161\335\341  
\271\154\214\074\022\135\145\332\275\127\022\266\103\153\377\345  
\336\115\146\021\121\317\231\256\354\027\266\350\161\221\214\336  
\111\376\335\065\161\242\025\047\224\034\317\141\343\046\273\157  
\243\147\045\041\135\346\335\035\013\056\150\033\073\202\257\354  
\203\147\205\324\230\121\164\261\271\231\200\211\377\177\170\031  
\134\171\112\140\056\222\100\256\114\067\052\054\311\307\142\310  
\016\135\367\066\133\312\340\045\045\001\264\335\032\007\234\167  
\000\077\320\334\325\354\075\324\372\273\077\314\205\326\157\177  
\251\055\337\271\002\367\365\227\232\265\065\332\303\147\260\207  
\112\251\050\236\043\216\377\134\047\153\341\260\117\363\007\356  
\000\056\324\131\207\313\122\101\225\352\364\107\327\356\144\101  
\125\174\215\131\002\225\335\142\235\302\271\356\132\050\164\204  
\245\233\267\220\307\014\007\337\365\211\066\164\062\326\050\301  
\260\260\013\340\234\114\303\034\326\374\343\151\265\107\106\201  
\057\242\202\253\323\143\104\160\304\215\377\055\063\272\255\217  
\173\265\160\210\256\076\031\317\100\050\330\374\310\220\273\135  
\231\042\365\122\346\130\305\037\210\061\103\356\210\035\327\306  
\216\074\103\152\035\247\030\336\175\075\026\361\142\371\312\220

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\250\375
END
CKA_NSS_MOZILLA_CA_POLICY
CK_BBOOL CK_TRUE
CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE
CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

# Trust for "USERTrust RSA Certification Authority"
# Issuer: CN=USERTrust RSA Certification Authority,O=The USERTRUST Network,L=Jersey City,ST=New
Jersey,C=US
# Serial Number:01:fd:6d:30:fc:a3:ca:51:a8:1b:bc:64:0e:35:03:2d
# Subject: CN=USERTrust RSA Certification Authority,O=The USERTRUST Network,L=Jersey City,ST=New
Jersey,C=US
# Not Valid Before: Mon Feb 01 00:00:00 2010
# Not Valid After : Mon Jan 18 23:59:59 2038
# Fingerprint (SHA-256):
E7:93:C9:B0:2F:D8:AA:13:E2:1C:31:22:8A:CC:B0:81:19:64:3B:74:9C:89:89:64:B1:74:6D:46:C3:D4:CB:D2
# Fingerprint (SHA1): 2B:8F:1B:57:33:0D:BB:A2:D0:7A:6C:51:F7:0E:E9:0D:DA:B9:AD:8E
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "USERTrust RSA Certification Authority"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\053\217\033\127\063\015\273\242\320\172\154\121\367\016\351\015
\332\271\255\216
END
CKA_CERT_MD5_HASH
MULTILINE_OCTAL
\033\376\151\321\221\267\031\063\243\162\250\017\341\125\345\265
END
CKA_ISSUER MULTILINE_OCTAL
\060\201\210\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\023\060\021\006\003\125\004\010\023\012\116\145\167\040\112
\145\162\163\145\171\061\024\060\022\006\003\125\004\007\023\013
\112\145\162\163\145\171\040\103\151\164\171\061\036\060\034\006
\003\125\004\012\023\025\124\150\145\040\125\123\105\122\124\122
\125\123\124\040\116\145\164\167\157\162\153\061\056\060\054\006
\003\125\004\003\023\045\125\123\105\122\124\162\165\163\164\040
\122\123\101\040\103\145\162\164\151\146\151\143\141\164\151\157
\156\040\101\165\164\150\157\162\151\164\171
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\020\001\375\155\060\374\243\312\121\250\033\274\144\016\065
\003\055
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR

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CKA_TRUST_CODE_SIGNING
CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "USERTrust ECC Certification Authority"
#
# Issuer: CN=USERTrust ECC Certification Authority,O=The USERTRUST Network,L=Jersey City,ST=New
Jersey,C=US
# Serial Number:5c:8b:99:c5:5a:94:c5:d2:71:56:de:cd:89:80:cc:26
# Subject: CN=USERTrust ECC Certification Authority,O=The USERTRUST Network,L=Jersey City,ST=New
Jersey,C=US
# Not Valid Before: Mon Feb 01 00:00:00 2010
# Not Valid After : Mon Jan 18 23:59:59 2038
# Fingerprint (SHA-256):
4F:F4:60:D5:4B:9C:86:DA:BF:BC:FC:57:12:E0:40:0D:2B:ED:3F:BC:4D:4F:BD:AA:86:E0:6A:DC:D2:A9:AD:7A
# Fingerprint (SHA1): D1:CB:CA:5D:B2:D5:2A:7F:69:3B:67:4D:E5:F0:5A:1D:0C:95:7D:F0
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "USERTrust ECC Certification Authority"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\201\210\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\023\060\021\006\003\125\004\010\023\012\116\145\167\040\112
\145\162\163\145\171\061\024\060\022\006\003\125\004\007\023\013
\112\145\162\163\145\171\040\103\151\164\171\061\036\060\034\006
\003\125\004\012\023\025\124\150\145\040\125\123\105\122\124\122
\125\123\124\040\116\145\164\167\157\162\153\061\056\060\054\006
\003\125\004\003\023\045\125\123\105\122\124\162\165\163\164\040
\105\103\103\040\103\145\162\164\151\146\151\143\141\164\151\157
\156\040\101\165\164\150\157\162\151\164\171
END
CKA_ID
UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\201\210\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\023\060\021\006\003\125\004\010\023\012\116\145\167\040\112
\145\162\163\145\171\061\024\060\022\006\003\125\004\007\023\013
\112\145\162\163\145\171\040\103\151\164\171\061\036\060\034\006
\003\125\004\012\023\025\124\150\145\040\125\123\105\122\124\122
\125\123\124\040\116\145\164\167\157\162\153\061\056\060\054\006
\003\125\004\003\023\045\125\123\105\122\124\162\165\163\164\040
\105\103\103\040\103\145\162\164\151\146\151\143\141\164\151\157
\156\040\101\165\164\150\157\162\151\164\171
END
CKA_SERIAL_NUMBER

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MULTILINE\_OCTAL

\002\020\134\213\231\305\132\224\305\322\161\126\336\315\211\200  
\314\046

END

CKA\_VALUE MULTILINE\_OCTAL

\060\202\002\217\060\202\002\025\240\003\002\001\002\002\020\134  
\213\231\305\132\224\305\322\161\126\336\315\211\200\314\046\060  
\012\006\010\052\206\110\316\075\004\003\003\060\201\210\061\013  
\060\011\006\003\125\004\006\023\002\125\123\061\023\060\021\006  
\003\125\004\010\023\012\116\145\167\040\112\145\162\163\145\171  
\061\024\060\022\006\003\125\004\007\023\013\112\145\162\163\145  
\171\040\103\151\164\171\061\036\060\034\006\003\125\004\012\023  
\025\124\150\145\040\125\123\105\122\124\122\125\123\124\040\116  
\145\164\167\157\162\153\061\056\060\054\006\003\125\004\003\023  
\045\125\123\105\122\124\162\165\163\164\040\105\103\103\040\103  
\145\162\164\151\146\151\143\141\164\151\157\156\040\101\165\164  
\150\157\162\151\164\171\060\036\027\015\061\060\060\062\060\061  
\060\060\060\060\060\060\132\027\015\063\070\060\061\061\070\062  
\063\065\071\065\071\132\060\201\210\061\013\060\011\006\003\125  
\004\006\023\002\125\123\061\023\060\021\006\003\125\004\010\023  
\012\116\145\167\040\112\145\162\163\145\171\061\024\060\022\006  
\003\125\004\007\023\013\112\145\162\163\145\171\040\103\151\164  
\171\061\036\060\034\006\003\125\004\012\023\025\124\150\145\040  
\125\123\105\122\124\122\125\123\124\040\116\145\164\167\157\162  
\153\061\056\060\054\006\003\125\004\003\023\045\125\123\105\122  
\124\162\165\163\164\040\105\103\103\040\103\145\162\164\151\146  
\151\143\141\164\151\157\156\040\101\165\164\150\157\162\151\164  
\171\060\166\060\020\006\007\052\206\110\316\075\002\001\006\005  
\053\201\004\000\042\003\142\000\004\032\254\124\132\251\371\150  
\043\347\172\325\044\157\123\306\132\330\113\253\306\325\266\321  
\346\163\161\256\335\234\326\014\141\375\333\240\211\003\270\005  
\024\354\127\316\356\135\077\342\041\263\316\367\324\212\171\340  
\243\203\176\055\227\320\141\304\361\231\334\045\221\143\253\177  
\060\243\264\160\342\307\241\063\234\363\277\056\134\123\261\137  
\263\175\062\177\212\064\343\171\171\243\102\060\100\060\035\006  
\003\125\035\016\004\026\004\024\072\341\011\206\324\317\031\302  
\226\166\164\111\166\334\340\065\306\143\143\232\060\016\006\003  
\125\035\017\001\001\377\004\004\003\002\001\006\060\017\006\003  
\125\035\023\001\001\377\004\005\060\003\001\001\377\060\012\006  
\010\052\206\110\316\075\004\003\003\003\150\000\060\145\002\060  
\066\147\241\026\010\334\344\227\000\101\035\116\276\341\143\001  
\317\073\252\102\021\144\240\235\224\071\002\021\171\134\173\035  
\372\144\271\356\026\102\263\277\212\302\011\304\354\344\261\115  
\002\061\000\351\052\141\107\214\122\112\113\116\030\160\366\326  
\104\326\156\365\203\272\155\130\275\044\331\126\110\352\357\304  
\242\106\201\210\152\072\106\321\251\233\115\311\141\332\321\135  
\127\152\030

END

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CKA_NSS_MOZILLA_CA_POLICY
CK_BBOOL CK_TRUE
CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE
CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

# Trust for "USERTrust ECC Certification Authority"
# Issuer: CN=USERTrust ECC Certification Authority,O=The USERTRUST Network,L=Jersey City,ST=New
Jersey,C=US
# Serial Number:5c:8b:99:c5:5a:94:c5:d2:71:56:de:cd:89:80:cc:26
# Subject: CN=USERTrust ECC Certification Authority,O=The USERTRUST Network,L=Jersey City,ST=New
Jersey,C=US
# Not Valid Before: Mon Feb 01 00:00:00 2010
# Not Valid After : Mon Jan 18 23:59:59 2038
# Fingerprint (SHA-256):
4F:F4:60:D5:4B:9C:86:DA:BF:BC:FC:57:12:E0:40:0D:2B:ED:3F:BC:4D:4F:BD:AA:86:E0:6A:DC:D2:A9:AD:7A
# Fingerprint (SHA1): D1:CB:CA:5D:B2:D5:2A:7F:69:3B:67:4D:E5:F0:5A:1D:0C:95:7D:F0
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "USERTrust ECC Certification Authority"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\321\313\312\135\262\325\052\177\151\073\147\115\345\360\132\035
\014\225\175\360
END
CKA_CERT_MD5_HASH
MULTILINE_OCTAL
\372\150\274\331\265\177\255\375\311\035\006\203\050\314\044\301
END
CKA_ISSUER MULTILINE_OCTAL
\060\201\210\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\023\060\021\006\003\125\004\010\023\012\116\145\167\040\112
\145\162\163\145\171\061\024\060\022\006\003\125\004\007\023\013
\112\145\162\163\145\171\040\103\151\164\171\061\036\060\034\006
\003\125\004\012\023\025\124\150\145\040\125\123\105\122\124\122
\125\123\124\040\116\145\164\167\157\162\153\061\056\060\054\006
\003\125\004\003\023\045\125\123\105\122\124\162\165\163\164\040
\105\103\103\040\103\145\162\164\151\146\151\143\141\164\151\157
\156\040\101\165\164\150\157\162\151\164\171
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\020\134\213\231\305\132\224\305\322\161\126\336\315\211\200
\314\046
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING

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CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "GlobalSign ECC Root CA - R5"
#
# Issuer: CN=GlobalSign,O=GlobalSign,OU=GlobalSign ECC Root CA - R5
# Serial Number:60:59:49:e0:26:2e:bb:55:f9:0a:77:8a:71:f9:4a:d8:6c
# Subject: CN=GlobalSign,O=GlobalSign,OU=GlobalSign ECC Root CA - R5
# Not Valid Before: Tue Nov 13 00:00:00 2012
# Not Valid After : Tue Jan 19 03:14:07 2038
# Fingerprint (SHA-256):
17:9F:BC:14:8A:3D:D0:0F:D2:4E:A1:34:58:CC:43:BF:A7:F5:9C:81:82:D7:83:A5:13:F6:EB:EC:10:0C:89:24
# Fingerprint (SHA1): 1F:24:C6:30:CD:A4:18:EF:20:69:FF:AD:4F:DD:5F:46:3A:1B:69:AA
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "GlobalSign ECC Root CA - R5"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\120\061\044\060\042\006\003\125\004\013\023\033\107\154\157
\142\141\154\123\151\147\156\040\105\103\103\040\122\157\157\164
\040\103\101\040\055\040\122\065\061\023\060\021\006\003\125\004
\012\023\012\107\154\157\142\141\154\123\151\147\156\061\023\060
\021\006\003\125\004\003\023\012\107\154\157\142\141\154\123\151
\147\156
END
CKA_ID
UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\120\061\044\060\042\006\003\125\004\013\023\033\107\154\157
\142\141\154\123\151\147\156\040\105\103\103\040\122\157\157\164
\040\103\101\040\055\040\122\065\061\023\060\021\006\003\125\004
\012\023\012\107\154\157\142\141\154\123\151\147\156\061\023\060
\021\006\003\125\004\003\023\012\107\154\157\142\141\154\123\151
\147\156
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\021\140\131\111\340\046\056\273\125\371\012\167\212\161\371
\112\330\154
END
CKA_VALUE MULTILINE_OCTAL
\060\202\002\036\060\202\001\244\240\003\002\001\002\002\021\140
\131\111\340\046\056\273\125\371\012\167\212\161\371\112\330\154
\060\012\006\010\052\206\110\316\075\004\003\003\060\120\061\044
\060\042\006\003\125\004\013\023\033\107\154\157\142\141\154\123
\151\147\156\040\105\103\103\040\122\157\157\164\040\103\101\040

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\055\040\122\065\061\023\060\021\006\003\125\004\012\023\012\107  
\154\157\142\141\154\123\151\147\156\061\023\060\021\006\003\125  
\004\003\023\012\107\154\157\142\141\154\123\151\147\156\060\036  
\027\015\061\062\061\061\061\063\060\060\060\060\060\132\027  
\015\063\070\060\061\061\071\060\063\061\064\060\067\132\060\120  
\061\044\060\042\006\003\125\004\013\023\033\107\154\157\142\141  
\154\123\151\147\156\040\105\103\103\040\122\157\157\164\040\103  
\101\040\055\040\122\065\061\023\060\021\006\003\125\004\012\023  
\012\107\154\157\142\141\154\123\151\147\156\061\023\060\021\006  
\003\125\004\003\023\012\107\154\157\142\141\154\123\151\147\156  
\060\166\060\020\006\007\052\206\110\316\075\002\001\006\005\053  
\201\004\000\042\003\142\000\004\107\105\016\226\373\175\135\277  
\351\071\321\041\370\237\013\266\325\173\036\222\072\110\131\034  
\360\142\061\055\300\172\050\376\032\247\134\263\266\314\227\347  
\105\324\130\372\321\167\155\103\242\300\207\145\064\012\037\172  
\335\353\074\063\241\305\235\115\244\157\101\225\070\177\311\036  
\204\353\321\236\111\222\207\224\207\014\072\205\112\146\237\235  
\131\223\115\227\141\006\206\112\243\102\060\100\060\016\006\003  
\125\035\017\001\001\377\004\004\003\002\001\006\060\017\006\003  
\125\035\023\001\001\377\004\005\060\003\001\001\377\060\035\006  
\003\125\035\016\004\026\004\024\075\346\051\110\233\352\007\312  
\041\104\112\046\336\156\336\322\203\320\237\131\060\012\006\010  
\052\206\110\316\075\004\003\003\003\150\000\060\145\002\061\000  
\345\151\022\311\156\333\306\061\272\011\101\341\227\370\373\375  
\232\342\175\022\311\355\174\144\323\313\005\045\213\126\331\240  
\347\136\135\116\013\203\234\133\166\051\240\011\046\041\152\142  
\002\060\161\322\265\217\134\352\073\341\170\011\205\250\165\222  
\073\310\134\375\110\357\015\164\042\250\010\342\156\305\111\316  
\307\014\274\247\141\151\361\367\073\341\052\313\371\053\363\146  
\220\067

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "GlobalSign ECC Root CA - R5"

# Issuer: CN=GlobalSign,O=GlobalSign,OU=GlobalSign ECC Root CA - R5

# Serial Number:60:59:49:e0:26:2e:bb:55:f9:0a:77:8a:71:f9:4a:d8:6c

# Subject: CN=GlobalSign,O=GlobalSign,OU=GlobalSign ECC Root CA - R5

# Not Valid Before: Tue Nov 13 00:00:00 2012

# Not Valid After : Tue Jan 19 03:14:07 2038

# Fingerprint (SHA-256):

17:9F:BC:14:8A:3D:D0:0F:D2:4E:A1:34:58:CC:43:BF:A7:F5:9C:81:82:D7:83:A5:13:F6:EB:EC:10:0C:89:24

# Fingerprint (SHA1): 1F:24:C6:30:CD:A4:18:EF:20:69:FF:AD:4F:DD:5F:46:3A:1B:69:AA

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

```

CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "GlobalSign ECC Root CA - R5"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\037\044\306\060\315\244\030\357\040\151\377\255\117\335\137\106
\072\033\151\252
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\237\255\073\034\002\036\212\272\027\164\070\201\014\242\274\010
END
CKA_ISSUER
MULTILINE_OCTAL
\060\120\061\044\060\042\006\003\125\004\013\023\033\107\154\157
\142\141\154\123\151\147\156\040\105\103\103\040\122\157\157\164
\040\103\101\040\055\040\122\065\061\023\060\021\006\003\125\004
\012\023\012\107\154\157\142\141\154\123\151\147\156\061\023\060
\021\006\003\125\004\003\023\012\107\154\157\142\141\154\123\151
\147\156
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\021\140\131\111\340\046\056\273\125\371\012\167\212\161\371
\112\330\154
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "Staat der Nederlanden Root CA - G3"
#
# Issuer: CN=Staat der Nederlanden Root CA - G3,O=Staat der Nederlanden,C=NL
# Serial Number: 10003001 (0x98a239)
# Subject: CN=Staat der Nederlanden Root CA - G3,O=Staat der Nederlanden,C=NL
#
Not Valid Before: Thu Nov 14 11:28:42 2013
# Not Valid After : Mon Nov 13 23:00:00 2028
# Fingerprint (SHA-256):
3C:4F:B0:B9:5A:B8:B3:00:32:F4:32:B8:6F:53:5F:E1:72:C1:85:D0:FD:39:86:58:37:CF:36:18:7F:A6:F4:28
# Fingerprint (SHA1): D8:EB:6B:41:51:92:59:E0:F3:E7:85:00:C0:3D:B6:88:97:C9:EE:FC
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Staat der Nederlanden Root CA - G3"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\132\061\013\060\011\006\003\125\004\006\023\002\116\114\061
\036\060\034\006\003\125\004\012\014\025\123\164\141\141\164\040

```



\144\145\162\040\116\145\144\145\162\154\141\156\144\145\156\061  
\053\060\051\006\003\125\004\003\014\042\123\164\141\141\164\040  
\144\145\162\040\116\145\144\145\162\154\141\156\144\145\156\040  
\122\157\157\164\040\103\101\040\055\040\107\063

END

CKA\_ID UTF8 "0"

CKA\_ISSUER MULTILINE\_OCTAL

\060\132\061\013\060\011\006\003\125\004\006\023\002\116\114\061  
\036\060\034\006\003\125\004\012\014\025\123\164\141\141\164\040  
\144\145\162\040\116\145\144\145\162\154\141\156\144\145\156\061  
\053\060\051\006\003\125\004\003\014\042\123\164\141\141\164\040  
\144\145\162\040\116\145\144\145\162\154\141\156\144\145\156\040  
\122\157\157\164\040\103\101\040\055\040\107\063

END

CKA\_SERIAL\_NUMBER

MULTILINE\_OCTAL

\002\004\000\230\242\071

END

CKA\_VALUE MULTILINE\_OCTAL

\060\202\005\164\060\202\003\134\240\003\002\001\002\002\004\000  
\230\242\071\060\015\006\011\052\206\110\206\367\015\001\001\013  
\005\000\060\132\061\013\060\011\006\003\125\004\006\023\002\116  
\114\061\036\060\034\006\003\125\004\012\014\025\123\164\141\141  
\164\040\144\145\162\040\116\145\144\145\162\154\141\156\144\145  
\156\061\053\060\051\006\003\125\004\003\014\042\123\164\141\141  
\164\040\144\145\162\040\116\145\144\145\162\154\141\156\144\145  
\156\040\122\157\157\164\040\103\101\040\055\040\107\063\060\036  
\027\015\061\063\061\061\061\064\061\061\062\070\064\062\132\027  
\015\062\070\061\061\061\063\062\063\060\060\060\060\132\060\132  
\061\013\060\011\006\003\125\004\006\023\002\116\114\061\036\060  
\034\006\003\125\004\012\014\025\123\164\141\141\164\040\144\145  
\162\040\116\145\144\145\162\154\141\156\144\145\156\061\053\060  
\051\006\003\125\004\003\014\042\123\164\141\141\164\040\144\145  
\162\040\116\145\144\145\162\154\141\156\144\145\156\040\122\157  
\157\164\040\103\101\040\055\040\107\063\060\202\002\042\060\015  
\006\011\052\206\110\206\367\015\001\001\001\005\000\003\202\002  
\017\000\060\202\002\012\002\202\002\001\000\276\062\242\124\017  
\160\373\054\134\131\353\154\304\244\121\350\205\052\263\314\112  
\064\362\260\137\363\016\307\034\075\123\036\210\010\150\330\157  
\075\255\302\236\314\202\147\007\047\207\150\161\072\237\165\226  
\042\106\005\260\355\255\307\133\236\052\336\234\374\072\306\225  
\247\365\027\147\030\347\057\111\010\014\134\317\346\314\064\355  
\170\373\120\261\334\153\062\360\242\376\266\074\344\354\132\227  
\307\077\036\160\010\060\240\334\305\263\155\157\320\202\162\021  
\253\322\201\150\131\202\027\267\170\222\140\372\314\336\077\204  
\353\215\070\063\220\012\162\043\372\065\314\046\161\061\321\162  
\050\222\331\133\043\155\146\265\155\007\102\353\246\063\316\222  
\333\300\366\154\143\170\315\312\116\075\265\345\122\233\361\276

\073\346\124\140\260\146\036\011\253\007\376\124\211\021\102\321  
\367\044\272\140\170\032\230\367\311\021\375\026\301\065\032\124  
\165\357\103\323\345\256\116\316\347\173\303\306\116\141\121\113  
\253\232\105\113\241\037\101\275\110\123\025\161\144\013\206\263  
\345\056\276\316\244\033\301\051\204\242\265\313\010\043\166\103  
\042\044\037\027\004\324\156\234\306\374\177\053\146\032\354\212  
\345\326\317\115\365\143\011\267\025\071\326\173\254\353\343\174  
\351\116\374\165\102\310\355\130\225\014\006\102\242\234\367\344  
\160\263\337\162\157\132\067\100\211\330\205\244\327\361\013\336  
\103\031\324\112\130\054\214\212\071\236\277\204\207\361\026\073  
\066\014\351\323\264\312\154\031\101\122\011\241\035\260\152\277  
\202\357\160\121\041\062\334\005\166\214\313\367\144\344\003\120  
\257\214\221\147\253\305\362\356\130\330\336\276\367\347\061\317  
\154\311\073\161\301\325\210\265\145\274\300\350\027\027\007\022  
\265\134\322\253\040\223\264\346\202\203\160\066\305\315\243\215  
\255\213\354\243\301\103\207\346\103\342\064\276\225\213\065\355  
\007\071\332\250\035\172\237\066\236\022\260\014\145\022\220\025  
\140\331\046\100\104\343\126\140\245\020\324\152\074\375\101\334  
\016\132\107\266\357\227\141\165\117\331\376\307\262\035\324\355  
\135\111\263\251\152\313\146\204\023\325\134\240\334\337\156\167  
\006\321\161\165\310\127\157\257\017\167\133\002\003\001\000\001  
\243\102\060\100\060\017\006\003\125\035\023\001\001\377\004\005  
\060\003\001\001\377\060\016\006\003\125\035\017\001\001\377\004  
\004\003\002\001\006\060\035\006\003\125\035\016\004\026\004\024  
\124\255\372\307\222\127\256\312\065\234\056\022\373\344\272\135  
\040\334\224\127\060\015\006\011\052\206\110\206\367\015\001\001  
\013\005\000\003\202\002\001\000\060\231\235\005\062\310\136\016  
\073\230\001\072\212\244\347\007\367\172\370\347\232\337\120\103  
\123\227\052\075\312\074\107\230\056\341\025\173\361\222\363\141  
\332\220\045\026\145\300\237\124\135\016\003\073\133\167\002\234  
\204\266\015\230\137\064\335\073\143\302\303\050\201\302\234\051  
\056\051\342\310\303\001\362\063\352\052\252\314\011\010\367\145  
\147\306\315\337\323\266\053\247\275\314\321\016\160\137\270\043  
\321\313\221\116\012\364\310\172\345\331\143\066\301\324\337\374  
\042\227\367\140\135\352\051\057\130\262\275\130\275\215\226\117  
\020\165\277\110\173\075\121\207\241\074\164\042\302\374\007\177  
\200\334\304\254\376\152\301\160\060\260\351\216\151\342\054\151  
\201\224\011\272\335\376\115\300\203\214\224\130\300\106\040\257  
\234\037\002\370\065\125\111\057\106\324\300\360\240\226\002\017  
\063\305\161\363\236\043\175\224\267\375\072\323\011\203\006\041  
\375\140\075\256\062\300\322\356\215\246\360\347\264\202\174\012  
\314\160\311\171\200\370\376\114\367\065\204\031\212\061\373\012  
\331\327\177\233\360\242\232\153\303\005\112\355\101\140\024\060  
\321\252\021\102\156\323\043\002\004\013\306\145\335\335\122\167  
\332\201\153\262\250\372\001\070\271\226\352\052\154\147\227\211  
\224\236\274\341\124\325\344\152\170\357\112\275\053\232\075\100  
\176\306\300\165\322\156\373\150\060\354\354\213\235\371\111\065  
\232\032\054\331\263\225\071\325\036\222\367\246\271\145\057\345

```
\075\155\072\110\114\010\334\344\050\022\050\276\175\065\134\352
\340\026\176\023\033\152\327\076\327\236\374\055\165\262\301\024
\325\043\003\333\133\157\013\076\170\057\015\336\063\215\026\267
\110\347\203\232\201\017\173\301\103\115\125\004\027\070\112\121
\325\131\242\211\164\323\237\276\036\113\327\306\155\267\210\044
\157\140\221\244\202\205\133\126\101\274\320\104\253\152\023\276
\321\054\130\267\022\063\130\262\067\143\334\023\365\224\035\077
\100\121\365\117\365\072\355\310\305\353\302\036\035\026\225\172
\307\176\102\161\223\156\113\025\267\060\337\252\355\127\205\110
\254\035\152\335\071\151\344\341\171\170\276\316\005\277\241\014
\367\200\173\041\147\047\060\131
```

END

CKA\_NSS\_Mozilla\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "Staat der Nederlanden Root CA - G3"

# Issuer: CN=Staat der Nederlanden Root CA - G3,O=Staat der Nederlanden,C=NL

# Serial Number: 10003001 (0x98a239)

# Subject: CN=Staat der Nederlanden Root CA - G3,O=Staat der Nederlanden,C=NL

# Not Valid Before: Thu Nov 14 11:28:42 2013

# Not Valid After : Mon Nov 13 23:00:00 2028

# Fingerprint (SHA-256):

3C:4F:B0:B9:5A:B8:B3:00:32:F4:32:B8:6F:53:5F:E1:72:C1:85:D0:FD:39:86:58:37:CF:36:18:7F:A6:F4:28

# Fingerprint (SHA1): D8:EB:6B:41:51:92:59:E0:F3:E7:85:00:C0:3D:B6:88:97:C9:EE:FC

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "Staat der Nederlanden Root CA - G3"

CKA\_CERT\_SHA1\_HASH

MULTILINE\_OCTAL

```
\330\353\153\101\121\222\131\340\363\347\205\000\300\075\266\210
\227\311\356\374
```

END

CKA\_CERT\_MD5\_HASH MULTILINE\_OCTAL

```
\013\106\147\007\333\020\057\031\214\065\120\140\321\013\364\067
```

END

CKA\_ISSUER MULTILINE\_OCTAL

```
\060\132\061\013\060\011\006\003\125\004\006\023\002\116\114\061
\036\060\034\006\003\125\004\012\014\025\123\164\141\141\164\040
\144\145\162\040\116\145\144\145\162\154\141\156\144\145\156\061
\053\060\051\006\003\125\004\003\014\042\123\164\141\141\164\040
\144\145\162\040\116\145\144\145\162\154\141\156\144\145\156\040
\122\157\157\164\040\103\101\040\055\040\107\063
```

END

CKA\_SERIAL\_NUMBER MULTILINE\_OCTAL

\002\004\000\230\242\071

END

CKA\_TRUST\_SERVER\_AUTH CK\_TRUST CKT\_NSS\_MUST\_VERIFY\_TRUST  
CKA\_TRUST\_EMAIL\_PROTECTION CK\_TRUST CKT\_NSS\_TRUSTED\_DELEGATOR  
CKA\_TRUST\_CODE\_SIGNING CK\_TRUST CKT\_NSS\_MUST\_VERIFY\_TRUST  
CKA\_TRUST\_STEP\_UP\_APPROVED CK\_BBOOL CK\_FALSE

#

# Certificate "IdenTrust Commercial Root CA 1"

#

# Issuer: CN=IdenTrust Commercial Root CA

1,O=IdenTrust,C=US

# Serial Number:0a:01:42:80:00:00:01:45:23:c8:44:b5:00:00:00:02

# Subject: CN=IdenTrust Commercial Root CA 1,O=IdenTrust,C=US

# Not Valid Before: Thu Jan 16 18:12:23 2014

# Not Valid After : Mon Jan 16 18:12:23 2034

# Fingerprint (SHA-256):

5D:56:49:9B:E4:D2:E0:8B:CF:CA:D0:8A:3E:38:72:3D:50:50:3B:DE:70:69:48:E4:2F:55:60:30:19:E5:28:AE

# Fingerprint (SHA1): DF:71:7E:AA:4A:D9:4E:C9:55:84:99:60:2D:48:DE:5F:BC:F0:3A:25

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_CERTIFICATE

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "IdenTrust Commercial Root CA 1"

CKA\_CERTIFICATE\_TYPE CK\_CERTIFICATE\_TYPE CKC\_X\_509

CKA\_SUBJECT MULTILINE\_OCTAL

\060\112\061\013\060\011\006\003\125\004\006\023\002\125\123\061  
\022\060\020\006\003\125\004\012\023\011\111\144\145\156\124\162  
\165\163\164\061\047\060\045\006\003\125\004\003\023\036\111\144  
\145\156\124\162\165\163\164\040\103\157\155\155\145\162\143\151  
\141\154\040\122\157\157\164\040\103\101\040\061

END

CKA\_ID

UTF8 "0"

CKA\_ISSUER MULTILINE\_OCTAL

\060\112\061\013\060\011\006\003\125\004\006\023\002\125\123\061  
\022\060\020\006\003\125\004\012\023\011\111\144\145\156\124\162  
\165\163\164\061\047\060\045\006\003\125\004\003\023\036\111\144  
\145\156\124\162\165\163\164\040\103\157\155\155\145\162\143\151  
\141\154\040\122\157\157\164\040\103\101\040\061

END

CKA\_SERIAL\_NUMBER MULTILINE\_OCTAL

\002\020\012\001\102\200\000\000\001\105\043\310\104\265\000\000  
\000\002

END

CKA\_VALUE MULTILINE\_OCTAL

\060\202\005\140\060\202\003\110\240\003\002\001\002\002\020\012  
\001\102\200\000\000\001\105\043\310\104\265\000\000\000\002\060

\015\006\011\052\206\110\206\367\015\001\001\013\005\000\060\112  
\061\013\060\011\006\003\125\004\006\023\002\125\123\061\022\060  
\020\006\003\125\004\012\023\011\111\144\145\156\124\162\165\163  
\164\061\047\060\045\006\003\125\004\003\023\036\111\144\145\156  
\124\162\165\163\164\040\103\157\155\155\145\162\143\151\141\154  
\040\122\157\157\164\040\103\101\040\061\060\036\027\015\061\064  
\060\061\061\066\061\070\061\062\062\063\132\027\015\063\064\060  
\061\061\066\061\070\061\062\062\063\132\060\112\061\013\060\011  
\006\003\125\004\006\023\002\125\123\061\022\060\020\006\003\125  
\004\012\023\011\111\144\145\156\124\162\165\163\164\061\047\060  
\045\006\003\125\004\003\023\036\111\144\145\156\124\162\165\163  
\164\040\103\157\155\155\145\162\143\151\141\154\040\122\157\157  
\164\040\103\101\040\061\060\202\002\042\060\015\006\011\052\206  
\110\206\367\015\001\001\001\005\000\003\202\002\017\000\060\202  
\002\012\002\202\002\001\000\247\120\031\336\077\231\075\324\063  
\106\361\157\121\141\202\262\251\117\217\147\211\135\204\331\123  
\335\014\050\331\327\360\377\256\225\103\162\231\371\265\135\174  
\212\301\102\341\061\120\164\321\201\015\174\315\233\041\253\103  
\342\254\255\136\206\156\363\011\212\037\132\062\275\242\353\224  
\371\350\134\012\354\377\230\322\257\161\263\264\123\237\116\207  
\357\222\274\275\354\117\062\060\210\113\027\136\127\304\123\302  
\366\002\227\215\331\142\053\277\044\037\142\215\337\303\270\051  
\113\111\170\074\223\140\210\042\374\231\332\066\310\302\242\324  
\054\124\000\147\065\156\163\277\002\130\360\244\335\345\260\242  
\046\172\312\340\066\245\031\026\365\375\267\357\256\077\100\365  
\155\132\004\375\316\064\312\044\334\164\043\033\135\063\023\022  
\135\304\001\045\366\060\335\002\135\237\340\325\107\275\264\353  
\033\241\273\111\111\330\237\133\002\363\212\344\044\220\344\142  
\117\117\301\257\213\016\164\027\250\321\162\210\152\172\001\111  
\314\264\106\171\306\027\261\332\230\036\007\131\372\165\041\205  
\145\335\220\126\316\373\253\245\140\235\304\235\371\122\260\213  
\275\207\371\217\053\043\012\043\166\073\367\063\341\311\000\363  
\151\371\113\242\340\116\274\176\223\071\204\007\367\104\160\176  
\376\007\132\345\261\254\321\030\314\362\065\345\111\111\010\312  
\126\311\075\373\017\030\175\213\073\301\023\302\115\217\311\117  
\016\067\351\037\241\016\152\337\142\056\313\065\006\121\171\054  
\310\045\070\364\372\113\247\211\134\234\322\343\015\071\206\112  
\164\174\325\131\207\302\077\116\014\134\122\364\075\367\122\202  
\361\352\243\254\375\111\064\032\050\363\101\210\072\023\356\350  
\336\377\231\035\137\272\313\350\036\362\271\120\140\300\061\323  
\163\345\357\276\240\355\063\013\164\276\040\040\304\147\154\360  
\010\003\172\125\200\177\106\116\226\247\364\036\076\341\366\330  
\011\341\063\144\053\143\327\062\136\237\371\300\173\017\170\157  
\227\274\223\232\371\234\022\220\170\172\200\207\025\327\162\164  
\234\125\164\170\261\272\341\156\160\004\272\117\240\272\150\303  
\173\377\061\360\163\075\075\224\052\261\013\101\016\240\376\115  
\210\145\153\171\063\264\327\002\003\001\000\001\243\102\060\100  
\060\016\006\003\125\035\017\001\001\377\004\004\003\002\001\006

\060\017\006\003\125\035\023\001\001\377\004\005\060\003\001\001  
\377\060\035\006\003\125\035\016\004\026\004\024\355\104\031\300  
\323\360\006\213\356\244\173\276\102\347\046\124\310\216\066\166  
\060\015\006\011\052\206\110\206\367\015\001\001\013\005\000\003  
\202\002\001\000\015\256\220\062\366\246\113\174\104\166\031\141  
\036\047\050\315\136\124\357\045\274\343\010\220\371\051\327\256  
\150\010\341\224\000\130\357\056\056\176\123\122\214\266\134\007  
\352\210\272\231\213\120\224\327\202\200\337\141\011\000\223\255  
\015\024\346\316\301\362\067\224\170\260\137\234\263\242\163\270  
\217\005\223\070\315\215\076\260\270\373\300\317\261\362\354\055  
\055\033\314\354\252\232\263\252\140\202\033\055\073\303\204\075  
\127\212\226\036\234\165\270\323\060\315\140\010\203\220\323\216  
\124\361\115\146\300\135\164\003\100\243\356\205\176\302\037\167  
\234\006\350\301\247\030\135\122\225\355\311\335\045\236\155\372  
\251\355\243\072\064\320\131\173\332\355\120\363\065\277\355\353  
\024\115\061\307\140\364\332\361\207\234\342\110\342\306\305\067  
\373\006\020\372\165\131\146\061\107\051\332\166\232\034\351\202  
\256\357\232\271\121\367\210\043\232\151\225\142\074\345\125\200  
\066\327\124\002\377\361\271\135\316\324\043\157\330\105\204\112  
\133\145\357\211\014\335\024\247\040\313\030\245\045\264\015\371  
\001\360\242\322\364\000\310\164\216\241\052\110\216\145\333\023  
\304\342\045\027\175\353\276\207\133\027\040\124\121\223\112\123  
\003\013\354\135\312\063\355\142\375\105\307\057\133\334\130\240  
\200\071\346\372\327\376\023\024\246\355\075\224\112\102\164\324  
\303\167\131\163\315\217\106\276\125\070\357\372\350\221\062\352  
\227\130\004\042\336\070\303\314\274\155\311\063\072\152\012\151  
\077\240\310\352\162\217\214\143\206\043\275\155\074\226\236\225  
\340\111\114\252\242\271\052\033\234\066\201\170\355\303\350\106  
\342\046\131\104\165\036\331\165\211\121\315\020\204\235\141\140  
\313\135\371\227\042\115\216\230\346\343\177\366\133\273\256\315  
\312\112\201\153\136\013\363\121\341\164\053\351\176\047\247\331  
\231\111\116\370\245\200\333\045\017\034\143\142\212\311\063\147  
\153\074\020\203\306\255\336\250\315\026\216\215\360\007\067\161  
\237\362\253\374\101\365\301\213\354\000\067\135\011\345\116\200  
\357\372\261\134\070\006\245\033\112\341\334\070\055\074\334\253  
\037\220\032\325\112\234\356\321\160\154\314\356\364\127\370\030  
\272\204\156\207

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "IdenTrust Commercial Root CA 1"

# Issuer: CN=IdenTrust Commercial Root CA 1,O=IdenTrust,C=US

# Serial Number:0a:01:42:80:00:00:01:45:23:c8:44:b5:00:00:00:02

# Subject: CN=IdenTrust Commercial Root CA 1,O=IdenTrust,C=US

# Not Valid Before: Thu Jan 16 18:12:23 2014

```
# Not Valid After : Mon Jan 16 18:12:23 2034
# Fingerprint (SHA-256):
5D:56:49:9B:E4:D2:E0:8B:CF:CA:D0:8A:3E:38:72:3D:50:50:3B:DE:70:69:48:E4:2F:55:60:30:19:E5:28:AE
# Fingerprint (SHA1): DF:71:7E:AA:4A:D9:4E:C9:55:84:99:60:2D:48:DE:5F:BC:F0:3A:25
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "IdenTrust Commercial Root CA 1"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\337\161\176\252\112\331\116\311\125\204\231\140\055\110\336\137
\274\360\072\045
END
CKA_CERT_MD5_HASH
MULTILINE_OCTAL
\263\076\167\163\165\356\240\323\343\176\111\143\111\131\273\307
END
CKA_ISSUER MULTILINE_OCTAL
\060\112\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\022\060\020\006\003\125\004\012\023\011\111\144\145\156\124\162
\165\163\164\061\047\060\045\006\003\125\004\003\023\036\111\144
\145\156\124\162\165\163\164\040\103\157\155\155\145\162\143\151
\141\154\040\122\157\157\164\040\103\101\040\061
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\020\012\001\102\200\000\000\001\105\043\310\104\265\000\000
\000\002
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "IdenTrust Public Sector Root CA 1"
#
# Issuer: CN=IdenTrust Public Sector Root CA 1,O=IdenTrust,C=US
# Serial Number:0a:01:42:80:00:00:01:45:23:cf:46:7c:00:00:00:02
#
Subject: CN=IdenTrust Public Sector Root CA 1,O=IdenTrust,C=US
# Not Valid Before: Thu Jan 16 17:53:32 2014
# Not Valid After : Mon Jan 16 17:53:32 2034
# Fingerprint (SHA-256):
30:D0:89:5A:9A:44:8A:26:20:91:63:55:22:D1:F5:20:10:B5:86:7A:CA:E1:2C:78:EF:95:8F:D4:F4:38:9F:2F
# Fingerprint (SHA1): BA:29:41:60:77:98:3F:F4:F3:EF:F2:31:05:3B:2E:EA:6D:4D:45:FD
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
```

```
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "IdenTrust Public Sector Root CA 1"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\115\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\022\060\020\006\003\125\004\012\023\011\111\144\145\156\124\162
\165\163\164\061\052\060\050\006\003\125\004\003\023\041\111\144
\145\156\124\162\165\163\164\040\120\165\142\154\151\143\040\123
\145\143\164\157\162\040\122\157\157\164\040\103\101\040\061
END
CKA_ID UTF8 "0"
CKA_ISSUER
MULTILINE_OCTAL
\060\115\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\022\060\020\006\003\125\004\012\023\011\111\144\145\156\124\162
\165\163\164\061\052\060\050\006\003\125\004\003\023\041\111\144
\145\156\124\162\165\163\164\040\120\165\142\154\151\143\040\123
\145\143\164\157\162\040\122\157\157\164\040\103\101\040\061
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\020\012\001\102\200\000\000\001\105\043\317\106\174\000\000
\000\002
END
CKA_VALUE MULTILINE_OCTAL
\060\202\005\146\060\202\003\116\240\003\002\001\002\002\020\012
\001\102\200\000\000\001\105\043\317\106\174\000\000\000\002\060
\015\006\011\052\206\110\206\367\015\001\001\013\005\000\060\115
\061\013\060\011\006\003\125\004\006\023\002\125\123\061\022\060
\020\006\003\125\004\012\023\011\111\144\145\156\124\162\165\163
\164\061\052\060\050\006\003\125\004\003\023\041\111\144\145\156
\124\162\165\163\164\040\120\165\142\154\151\143\040\123\145\143
\164\157\162\040\122\157\157\164\040\103\101\040\061\060\036\027
\015\061\064\060\061\061\066\061\067\065\063\063\062\132\027\015
\063\064\060\061\061\066\061\067\065\063\063\062\132\060\115\061
\013\060\011\006\003\125\004\006\023\002\125\123\061\022\060\020
\006\003\125\004\012\023\011\111\144\145\156\124\162\165\163\164
\061\052\060\050\006\003\125\004\003\023\041\111\144\145\156\124
\162\165\163\164\040\120\165\142\154\151\143\040\123\145\143\164
\157\162\040\122\157\157\164\040\103\101\040\061\060\202\002\042
\060\015\006\011\052\206\110\206\367\015\001\001\001\005\000\003
\202\002\017\000\060\202\002\012\002\202\002\001\000\266\042\224
\374\244\110\257\350\107\153\012\373\047\166\344\362\077\212\073
\172\112\054\061\052\214\215\260\251\303\061\153\250\167\166\204
\046\266\254\201\102\015\010\353\125\130\273\172\370\274\145\175
\362\240\155\213\250\107\351\142\166\036\021\356\010\024\321\262
\104\026\364\352\320\372\036\057\136\333\313\163\101\256\274\000
\260\112\053\100\262\254\341\073\113\302\055\235\344\241\233\354
\032\072\036\360\010\263\320\344\044\065\007\237\234\264\311\122
```



\155\333\007\312\217\265\133\360\203\363\117\307\055\245\310\255  
\313\225\040\244\061\050\127\130\132\344\215\033\232\253\236\015  
\014\362\012\063\071\042\071\012\227\056\363\123\167\271\104\105  
\375\204\313\066\040\201\131\055\232\157\155\110\110\141\312\114  
\337\123\321\257\122\274\104\237\253\057\153\203\162\357\165\200  
\332\006\063\033\135\310\332\143\306\115\315\254\146\061\315\321  
\336\076\207\020\066\341\271\244\172\357\140\120\262\313\312\246  
\126\340\067\257\253\064\023\071\045\350\071\146\344\230\172\252  
\022\230\234\131\146\206\076\255\361\260\312\076\006\017\173\360  
\021\113\067\240\104\155\173\313\250\214\161\364\325\265\221\066  
\314\360\025\306\053\336\121\027\261\227\114\120\075\261\225\131  
\174\005\175\055\041\325\000\277\001\147\242\136\173\246\134\362  
\367\042\361\220\015\223\333\252\104\121\146\314\175\166\003\353  
\152\250\052\070\031\227\166\015\153\212\141\371\274\366\356\166  
\375\160\053\335\051\074\370\012\036\133\102\034\213\126\057\125  
\033\034\241\056\265\307\026\346\370\252\074\222\216\151\266\001  
\301\265\206\235\211\017\013\070\224\124\350\352\334\236\075\045  
\274\123\046\355\325\253\071\252\305\100\114\124\253\262\264\331  
\331\370\327\162\333\034\274\155\275\145\137\357\210\065\052\146  
\057\356\366\263\145\360\063\215\174\230\101\151\106\017\103\034  
\151\372\233\265\320\141\152\315\312\113\331\114\220\106\253\025  
\131\241\107\124\051\056\203\050\137\034\302\242\253\162\027\000  
\006\216\105\354\213\342\063\075\177\332\031\104\344\142\162\303  
\337\042\306\362\126\324\335\137\225\162\355\155\137\367\110\003  
\133\375\305\052\240\366\163\043\204\020\033\001\347\002\003\001  
\000\001\243\102\060\100\060\016\006\003\125\035\017\001\001\377  
\004\004\003\002\001\006\060\017\006\003\125\035\023\001\001\377  
\004\005\060\003\001\001\377\060\035\006\003\125\035\016\004\026  
\004\024\343\161\340\236\330\247\102\331\333\161\221\153\224\223  
\353\303\243\321\024\243\060\015\006\011\052\206\110\206\367\015  
\001\001\013\005\000\003\202\002\001\000\107\372\335\012\260\021  
\221\070\255\115\135\367\345\016\227\124\031\202\110\207\124\214  
\252\144\231\330\132\376\210\001\305\130\245\231\261\043\124\043  
\267\152\035\040\127\345\001\142\101\027\323\011\333\165\313\156  
\124\220\165\376\032\237\201\012\302\335\327\367\011\320\133\162  
\025\344\036\011\152\075\063\363\041\232\346\025\176\255\121\325  
\015\020\355\175\102\300\217\356\300\232\010\325\101\326\134\016  
\041\151\156\200\141\016\025\300\270\317\305\111\022\122\314\276  
\072\314\324\056\070\005\336\065\375\037\157\270\200\150\230\075  
\115\240\312\100\145\322\163\174\365\213\331\012\225\077\330\077  
\043\155\032\321\052\044\031\331\205\263\027\357\170\156\251\130  
\321\043\323\307\023\355\162\045\177\135\261\163\160\320\177\006  
\227\011\204\051\200\141\035\372\136\377\163\254\240\343\211\270  
\034\161\025\306\336\061\177\022\334\341\155\233\257\347\350\237  
\165\170\114\253\106\073\232\316\277\005\030\135\115\025\074\026  
\232\031\120\004\232\262\232\157\145\213\122\137\074\130\004\050  
\045\300\146\141\061\176\271\340\165\271\032\250\201\326\162\027  
\263\305\003\061\065\021\170\170\242\340\351\060\214\177\200\337

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\130\337\074\272\047\226\342\200\064\155\343\230\323\144\047\254
\110\176\050\167\134\306\045\141\045\370\205\014\145\372\304\062
\057\245\230\005\344\370\013\147\026\026\306\202\270\062\031\371
\371\271\171\334\037\315\353\257\253\016\335\033\333\105\344\172
\347\002\342\225\135\374\151\360\123\151\141\225\165\171\013\136
\125\346\070\034\224\251\131\063\236\310\161\164\171\177\121\211
\266\310\152\270\060\310\152\070\303\156\236\341\067\026\352\005
\142\114\133\022\107\355\247\264\263\130\126\307\111\363\177\022
\150\011\061\161\360\155\370\116\107\373\326\205\356\305\130\100
\031\244\035\247\371\113\103\067\334\150\132\117\317\353\302\144
\164\336\264\025\331\364\124\124\032\057\034\327\227\161\124\220
\216\331\040\235\123\053\177\253\217\342\352\060\274\120\067\357
\361\107\265\175\174\054\004\354\150\235\264\111\104\020\364\162
\113\034\144\347\374\346\153\220\335\151\175\151\375\000\126\245
\267\254\266\255\267\312\076\001\357\234
```

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "IdenTrust Public Sector Root CA 1"

# Issuer: CN=IdenTrust Public Sector Root CA 1,O=IdenTrust,C=US

# Serial Number:0a:01:42:80:00:00:01:45:23:cf:46:7c:00:00:00:02

# Subject: CN=IdenTrust Public Sector Root CA 1,O=IdenTrust,C=US

# Not Valid Before: Thu Jan 16 17:53:32 2014

# Not Valid After : Mon Jan 16 17:53:32 2034

# Fingerprint (SHA-256):

30:D0:89:5A:9A:44:8A:26:20:91:63:55:22:D1:F5:20:10:B5:86:7A:CA:E1:2C:78:EF:95:8F:D4:F4:38:9F:2F

# Fingerprint (SHA1): BA:29:41:60:77:98:3F:F4:F3:EF:F2:31:05:3B:2E:EA:6D:4D:45:FD

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "IdenTrust Public Sector Root CA 1"

CKA\_CERT\_SHA1\_HASH MULTILINE\_OCTAL

```
\272\051\101\140\167\230\077\364\363\357\362\061\005\073\056\352
```

```
\155\115\105\375
```

END

CKA\_CERT\_MD5\_HASH

MULTILINE\_OCTAL

```
\067\006\245\260\374\211\235\272\364\153\214\032\144\315\325\272
```

END

CKA\_ISSUER MULTILINE\_OCTAL

```
\060\115\061\013\060\011\006\003\125\004\006\023\002\125\123\061
```

```
\022\060\020\006\003\125\004\012\023\011\111\144\145\156\124\162
```

```
\165\163\164\061\052\060\050\006\003\125\004\003\023\041\111\144
```

```
\145\156\124\162\165\163\164\040\120\165\142\154\151\143\040\123
```

```
\145\143\164\157\162\040\122\157\157\164\040\103\101\040\061
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\020\012\001\102\200\000\000\001\105\043\317\106\174\000\000
\000\002
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "Entrust Root Certification Authority - G2"
#
# Issuer: CN=Entrust Root Certification Authority
- G2,OU="(c) 2009 Entrust, Inc. - for authorized use only",OU=See www.entrust.net/legal-terms,O="Entrust,
Inc.",C=US
# Serial Number: 1246989352 (0x4a538c28)
# Subject: CN=Entrust Root Certification Authority - G2,OU="(c) 2009 Entrust, Inc. - for authorized use
only",OU=See www.entrust.net/legal-terms,O="Entrust, Inc.",C=US
# Not Valid Before: Tue Jul 07 17:25:54 2009
# Not Valid After : Sat Dec 07 17:55:54 2030
# Fingerprint (SHA-256):
43:DF:57:74:B0:3E:7F:EF:5F:E4:0D:93:1A:7B:ED:F1:BB:2E:6B:42:73:8C:4E:6D:38:41:10:3D:3A:A7:F3:39
# Fingerprint (SHA1): 8C:F4:27:FD:79:0C:3A:D1:66:06:8D:E8:1E:57:EF:BB:93:22:72:D4
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Entrust Root Certification Authority - G2"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\201\276\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\026\060\024\006\003\125\004\012\023\015\105\156\164\162\165
\163\164\054\040\111\156\143\056\061\050\060\046\006\003\125\004
\013\023\037\123\145\145\040\167\167\167\056\145\156\164\162\165
\163\164\056\156\145\164\057\154\145\147\141\154\055\164\145\162
\155\163\061\071\060\067\006\003\125\004\013\023\060\050\143\051
\040\062\060\060\071\040\105\156\164\162\165\163\164\054\040\111
\156\143\056\040\055\040\146\157\162\040\141\165\164\150\157\162
\151\172\145\144\040\165\163\145\040\157\156\154\171\061\062\060
\060\006\003\125\004\003\023\051\105\156\164\162\165\163\164\040
\122\157\157\164\040\103\145\162\164\151\146\151\143\141\164\151
\157\156\040\101\165\164\150\157\162\151\164\171\040\055\040\107
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END
CKA_ID
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UTF8 "0"

CKA\_ISSUER MULTILINE\_OCTAL

\060\201\276\061\013\060\011\006\003\125\004\006\023\002\125\123  
\061\026\060\024\006\003\125\004\012\023\015\105\156\164\162\165  
\163\164\054\040\111\156\143\056\061\050\060\046\006\003\125\004  
\013\023\037\123\145\145\040\167\167\167\056\145\156\164\162\165  
\163\164\056\156\145\164\057\154\145\147\141\154\055\164\145\162  
\155\163\061\071\060\067\006\003\125\004\013\023\060\050\143\051  
\040\062\060\060\071\040\105\156\164\162\165\163\164\054\040\111  
\156\143\056\040\055\040\146\157\162\040\141\165\164\150\157\162  
\151\172\145\144\040\165\163\145\040\157\156\154\171\061\062\060  
\060\006\003\125\004\003\023\051\105\156\164\162\165\163\164\040  
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\062

END

CKA\_SERIAL\_NUMBER

MULTILINE\_OCTAL

\002\004\112\123\214\050

END

CKA\_VALUE MULTILINE\_OCTAL

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\162\165\163\164\054\040\111\156\143\056\061\050\060\046\006\003  
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\145\162\155\163\061\071\060\067\006\003\125\004\013\023\060\050  
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\040\111\156\143\056\040\055\040\146\157\162\040\141\165\164\150  
\157\162\151\172\145\144\040\165\163\145\040\157\156\154\171\061  
\062\060\060\006\003\125\004\003\023\051\105\156\164\162\165\163  
\164\040\122\157\157\164\040\103\145\162\164\151\146\151\143\141  
\164\151\157\156\040\101\165\164\150\157\162\151\164\171\040\055  
\040\107\062\060\036\027\015\060\071\060\067\060\067\061\067\062  
\065\065\064\132\027\015\063\060\061\062\060\067\061\067\065\065  
\065\064\132\060\201\276\061\013\060\011\006\003\125\004\006\023  
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\164\162\165\163\164\054\040\111\156\143\056\061\050\060\046\006  
\003\125\004\013\023\037\123\145\145\040\167\167\167\056\145\156  
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\050\143\051\040\062\060\060\071\040\105\156\164\162\165\163\164  
\054\040\111\156\143\056\040\055\040\146\157\162\040\141\165\164  
\150\157\162\151\172\145\144\040\165\163\145\040\157\156\154\171  
\061\062\060\060\006\003\125\004\003\023\051\105\156\164\162\165  
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\141\164\151\157\156\040\101\165\164\150\157\162\151\164\171\040  
\055\040\107\062\060\202\001\042\060\015\006\011\052\206\110\206  
\367\015\001\001\001\005\000\003\202\001\017\000\060\202\001\012  
\002\202\001\001\000\272\204\266\162\333\236\014\153\342\231\351  
\060\001\247\166\352\062\270\225\101\032\311\332\141\116\130\162  
\317\376\366\202\171\277\163\141\006\012\245\047\330\263\137\323  
\105\116\034\162\326\116\062\362\162\212\017\367\203\031\320\152  
\200\200\000\105\036\260\307\347\232\277\022\127\047\034\243\150  
\057\012\207\275\152\153\016\136\145\363\034\167\325\324\205\215  
\160\041\264\263\062\347\213\242\325\206\071\002\261\270\322\107  
\316\344\311\111\304\073\247\336\373\124\175\127\276\360\350\156  
\302\171\262\072\013\125\342\120\230\026\062\023\134\057\170\126  
\301\302\224\263\362\132\344\047\232\237\044\327\306\354\320\233  
\045\202\343\314\302\304\105\305\214\227\172\006\153\052\021\237  
\251\012\156\110\073\157\333\324\021\031\102\367\217\007\277\365  
\123\137\234\076\364\027\054\346\151\254\116\062\114\142\167\352  
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\261\063\042\345\155\317\160\074\032\372\342\233\147\266\203\364  
\215\245\257\142\114\115\340\130\254\144\064\022\003\370\266\215  
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\035\006\003\125\035\016\004\026\004\024\152\162\046\172\320\036  
\357\175\347\073\151\121\324\154\215\237\220\022\146\253\060\015  
\006\011\052\206\110\206\367\015\001\001\013\005\000\003\202\001  
\001\000\171\237\035\226\306\266\171\077\042\215\207\323\207\003  
\004\140\152\153\232\056\131\211\163\021\254\103\321\365\023\377  
\215\071\053\300\362\275\117\160\214\251\057\352\027\304\013\124  
\236\324\033\226\230\063\074\250\255\142\242\000\166\253\131\151  
\156\006\035\176\304\271\104\215\230\257\022\324\141\333\012\031  
\106\107\363\353\367\143\301\100\005\100\245\322\267\364\265\232  
\066\277\251\210\166\210\004\125\004\053\234\207\177\032\067\074  
\176\055\245\032\330\324\211\136\312\275\254\075\154\330\155\257  
\325\363\166\017\315\073\210\070\042\235\154\223\232\304\075\277  
\202\033\145\077\246\017\135\252\374\345\262\025\312\265\255\306  
\274\075\320\204\350\352\006\162\260\115\071\062\170\277\076\021  
\234\013\244\235\232\041\363\360\233\013\060\170\333\301\334\207  
\103\376\274\143\232\312\305\302\034\311\307\215\377\073\022\130  
\010\346\266\075\354\172\054\116\373\203\226\316\014\074\151\207  
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\261\211\241\177\164\203\232\111\327\334\116\173\212\110\157\213  
\105\366

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

```
# Trust for "Entrust Root Certification Authority - G2"
# Issuer: CN=Entrust Root Certification Authority - G2,OU="(c) 2009 Entrust, Inc. - for authorized use
only",OU=See www.entrust.net/legal-terms,O="Entrust, Inc.",C=US
# Serial Number: 1246989352 (0x4a538c28)
# Subject: CN=Entrust Root Certification Authority - G2,OU="(c) 2009 Entrust, Inc. - for authorized use
only",OU=See www.entrust.net/legal-terms,O="Entrust, Inc.",C=US
# Not Valid Before: Tue Jul 07 17:25:54 2009
# Not Valid After : Sat Dec 07 17:55:54 2030
# Fingerprint (SHA-256):
43:DF:57:74:B0:3E:7F:EF:5F:E4:0D:93:1A:7B:ED:F1:BB:2E:6B:42:73:8C:4E:6D:38:41:10:3D:3A:A7:F3:39
# Fingerprint (SHA1): 8C:F4:27:FD:79:0C:3A:D1:66:06:8D:E8:1E:57:EF:BB:93:22:72:D4
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE
CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Entrust Root Certification Authority - G2"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\214\364\047\375\171\014\072\321\146\006\215\350\036\127\357\273
\223\042\162\324
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\113\342\311\221\226\145\014\364\016\132\223\222\240\012\376\262
END
CKA_ISSUER MULTILINE_OCTAL
\060\201\276\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\026\060\024\006\003\125\004\012\023\015\105\156\164\162\165
\163\164\054\040\111\156\143\056\061\050\060\046\006\003\125\004
\013\023\037\123\145\145\040\167\167\167\056\145\156\164\162\165
\163\164\056\156\145\164\057\154\145\147\141\154\055\164\145\162
\155\163\061\071\060\067\006\003\125\004\013\023\060\050\143\051
\040\062\060\060\071\040\105\156\164\162\165\163\164\054\040\111
\156\143\056\040\055\040\146\157\162\040\141\165\164\150\157\162
\151\172\145\144\040\165\163\145\040\157\156\154\171\061\062\060
\060\006\003\125\004\003\023\051\105\156\164\162\165\163\164\040
\122\157\157\164\040\103\145\162\164\151\146\151\143\141\164\151
\157\156\040\101\165\164\150\157\162\151\164\171\040\055\040\107
\062
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\004\112\123\214\050
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE
```

```

#
# Certificate "Entrust Root Certification Authority - EC1"
#
# Issuer: CN=Entrust Root Certification Authority - EC1,OU="(c) 2012 Entrust, Inc. - for authorized use
only",OU=See www.entrust.net/legal-terms,O="Entrust, Inc.",C=US
# Serial Number:00:a6:8b:79:29:00:00:00:50:d0:91:f9
# Subject: CN=Entrust Root Certification Authority - EC1,OU="(c) 2012 Entrust, Inc. - for authorized use
only",OU=See www.entrust.net/legal-terms,O="Entrust, Inc.",C=US
# Not Valid Before: Tue Dec 18 15:25:36 2012
# Not Valid After : Fri Dec 18 15:55:36 2037
# Fingerprint (SHA-256):
02:ED:0E:B2:8C:14:DA:45:16:5C:56:67:91:70:0D:64:51:D7:FB:56:F0:B2:AB:1D:3B:8E:B0:70:E5:6E:DF:F5
#
Fingerprint (SHA1): 20:D8:06:40:DF:9B:25:F5:12:25:3A:11:EA:F7:59:8A:EB:14:B5:47
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Entrust Root Certification Authority - EC1"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\201\277\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\026\060\024\006\003\125\004\012\023\015\105\156\164\162\165
\163\164\054\040\111\156\143\056\061\050\060\046\006\003\125\004
\013\023\037\123\145\145\040\167\167\167\056\145\156\164\162\165
\163\164\056\156\145\164\057\154\145\147\141\154\055\164\145\162
\155\163\061\071\060\067\006\003\125\004\013\023\060\050\143\051
\040\062\060\061\062\040\105\156\164\162\165\163\164\054\040\111
\156\143\056\040\055\040\146\157\162\040\141\165\164\150\157\162
\151\172\145\144\040\165\163\145\040\157\156\154\171\061\063\060
\061\006\003\125\004\003\023\052\105\156\164\162\165\163\164\040
\122\157\157\164\040\103\145\162\164\151\146\151\143\141\164\151
\157\156\040\101\165\164\150\157\162\151\164\171\040\055\040\105
\103\061
END
CKA_ID
UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\201\277\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\026\060\024\006\003\125\004\012\023\015\105\156\164\162\165
\163\164\054\040\111\156\143\056\061\050\060\046\006\003\125\004
\013\023\037\123\145\145\040\167\167\167\056\145\156\164\162\165
\163\164\056\156\145\164\057\154\145\147\141\154\055\164\145\162
\155\163\061\071\060\067\006\003\125\004\013\023\060\050\143\051
\040\062\060\061\062\040\105\156\164\162\165\163\164\054\040\111
\156\143\056\040\055\040\146\157\162\040\141\165\164\150\157\162
\151\172\145\144\040\165\163\145\040\157\156\154\171\061\063\060
\061\006\003\125\004\003\023\052\105\156\164\162\165\163\164\040

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\122\157\157\164\040\103\145\162\164\151\146\151\143\141\164\151  
\157\156\040\101\165\164\150\157\162\151\164\171\040\055\040\105  
\103\061  
END  
CKA\_SERIAL\_NUMBER  
MULTILINE\_OCTAL  
\002\015\000\246\213\171\051\000\000\000\000\120\320\221\371  
END  
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\246\213\171\051\000\000\000\000\120\320\221\371\060\012\006\010  
\052\206\110\316\075\004\003\003\060\201\277\061\013\060\011\006  
\003\125\004\006\023\002\125\123\061\026\060\024\006\003\125\004  
\012\023\015\105\156\164\162\165\163\164\054\040\111\156\143\056  
\061\050\060\046\006\003\125\004\013\023\037\123\145\145\040\167  
\167\167\056\145\156\164\162\165\163\164\056\156\145\164\057\154  
\145\147\141\154\055\164\145\162\155\163\061\071\060\067\006\003  
\125\004\013\023\060\050\143\051\040\062\060\061\062\040\105\156  
\164\162\165\163\164\054\040\111\156\143\056\040\055\040\146\157  
\162\040\141\165\164\150\157\162\151\172\145\144\040\165\163\145  
\040\157\156\154\171\061\063\060\061\006\003\125\004\003\023\052  
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\162\151\164\171\040\055\040\105\103\061\060\036\027\015\061\062  
\061\062\061\070\061\065\062\065\063\066\132\027\015\063\067\061  
\062\061\070\061\065\065\065\063\066\132\060\201\277\061\013\060  
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\125\004\012\023\015\105\156\164\162\165\163\164\054\040\111\156  
\143\056\061\050\060\046\006\003\125\004\013\023\037\123\145\145  
\040\167\167\167\056\145\156\164\162\165\163\164\056\156\145\164  
\057\154\145\147\141\154\055\164\145\162\155\163\061\071\060\067  
\006\003\125\004\013\023\060\050\143\051\040\062\060\061\062\040  
\105\156\164\162\165\163\164\054\040\111\156\143\056\040\055\040  
\146\157\162\040\141\165\164\150\157\162\151\172\145\144\040\165  
\163\145\040\157\156\154\171\061\063\060\061\006\003\125\004\003  
\023\052\105\156\164\162\165\163\164\040\122\157\157\164\040\103  
\145\162\164\151\146\151\143\141\164\151\157\156\040\101\165\164  
\150\157\162\151\164\171\040\055\040\105\103\061\060\166\060\020  
\006\007\052\206\110\316\075\002\001\006\005\053\201\004\000\042  
\003\142\000\004\204\023\311\320\272\155\101\173\342\154\320\353  
\125\137\146\002\032\044\364\133\211\151\107\343\270\302\175\361  
\362\002\305\237\240\366\133\325\213\006\031\206\117\123\020\155  
\007\044\047\241\240\370\325\107\031\141\114\175\312\223\047\352  
\164\014\357\157\226\011\376\143\354\160\135\066\255\147\167\256  
\311\235\174\125\104\072\242\143\121\037\365\343\142\324\251\107  
\007\076\314\040\243\102\060\100\060\016\006\003\125\035\017\001  
\001\377\004\004\003\002\001\006\060\017\006\003\125\035\023\001  
\001\377\004\005\060\003\001\001\377\060\035\006\003\125\035\016



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\004\026\004\024\267\143\347\032\335\215\351\010\246\125\203\244
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\075\004\003\003\003\147\000\060\144\002\060\141\171\330\345\102
\107\337\034\256\123\231\027\266\157\034\175\341\277\021\224\321
\003\210\165\344\215\211\244\212\167\106\336\155\141\357\002\365
\373\265\337\314\376\116\377\376\251\346\247\002\060\133\231\327
\205\067\006\265\173\010\375\353\047\213\112\224\371\341\372\247
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```

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRUST\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRUST\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "Entrust Root Certification Authority - EC1"

# Issuer: CN=Entrust Root Certification Authority - EC1,OU="(c) 2012 Entrust, Inc. - for authorized use only",OU=See www.entrust.net/legal-terms,O="Entrust, Inc.",C=US

# Serial Number:00:a6:8b:79:29:00:00:00:00:50:d0:91:f9

# Subject: CN=Entrust Root Certification Authority - EC1,OU="(c) 2012 Entrust, Inc. - for authorized use only",OU=See www.entrust.net/legal-terms,O="Entrust, Inc.",C=US

# Not Valid Before: Tue Dec 18 15:25:36 2012

# Not Valid After : Fri Dec 18 15:55:36 2037

# Fingerprint (SHA-256):

02:ED:0E:B2:8C:14:DA:45:16:5C:56:67:91:70:0D:64:51:D7:FB:56:F0:B2:AB:1D:3B:8E:B0:70:E5:6E:DF:F5

# Fingerprint (SHA1): 20:D8:06:40:DF:9B:25:F5:12:25:3A:11:EA:F7:59:8A:EB:14:B5:47

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "Entrust Root Certification Authority - EC1"

CKA\_CERT\_SHA1\_HASH MULTILINE\_OCTAL

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\040\330\006\100\337\233\045\365\022\045\072\021\352\367\131\212
\353\024\265\107
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END

CKA\_CERT\_MD5\_HASH MULTILINE\_OCTAL

```
\266\176\035\360\130\305\111\154\044\073\075\355\230\030\355\274
```

END

CKA\_ISSUER MULTILINE\_OCTAL

```
\060\201\277\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\026\060\024\006\003\125\004\012\023\015\105\156\164\162\165
\163\164\054\040\111\156\143\056\061\050\060\046\006\003\125\004
\013\023\037\123\145\145\040\167\167\167\056\145\156\164\162\165
\163\164\056\156\145\164\057\154\145\147\141\154\055\164\145\162
\155\163\061\071\060\067\006\003\125\004\013\023\060\050\143\051
\040\062\060\061\062\040\105\156\164\162\165\163\164\054\040\111
\156\143\056\040\055\040\146\157\162\040\141\165\164\150\157\162
\151\172\145\144\040\165\163\145\040\157\156\154\171\061\063\060
```

```
\061\006\003\125\004\003\023\052\105\156\164\162\165\163\164\040
\122\157\157\164\040\103\145\162\164\151\146\151\143\141\164\151
\157\156\040\101\165\164\150\157\162\151\164\171\040\055\040\105
\103\061
```

END

CKA\_SERIAL\_NUMBER

MULTILINE\_OCTAL

```
\002\015\000\246\213\171\051\000\000\000\000\120\320\221\371
```

END

CKA\_TRUST\_SERVER\_AUTH CK\_TRUST CKT\_NSS\_TRUSTED\_DELEGATOR

CKA\_TRUST\_EMAIL\_PROTECTION CK\_TRUST CKT\_NSS\_TRUSTED\_DELEGATOR

CKA\_TRUST\_CODE\_SIGNING CK\_TRUST CKT\_NSS\_MUST\_VERIFY\_TRUST

CKA\_TRUST\_STEP\_UP\_APPROVED CK\_BBOOL CK\_FALSE

#

# Certificate "CFCA EV ROOT"

#

# Issuer: CN=CFCA EV ROOT,O=China Financial Certification Authority,C=CN

# Serial Number: 407555286 (0x184accd6)

# Subject: CN=CFCA EV ROOT,O=China Financial Certification Authority,C=CN

# Not Valid Before: Wed Aug 08 03:07:01 2012

#

Not Valid After : Mon Dec 31 03:07:01 2029

# Fingerprint (SHA-256):

5C:C3:D7:8E:4E:1D:5E:45:54:7A:04:E6:87:3E:64:F9:0C:F9:53:6D:1C:CC:2E:F8:00:F3:55:C4:C5:FD:70:FD

# Fingerprint (SHA1): E2:B8:29:4B:55:84:AB:6B:58:C2:90:46:6C:AC:3F:B8:39:8F:84:83

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_CERTIFICATE

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "CFCA EV ROOT"

CKA\_CERTIFICATE\_TYPE CK\_CERTIFICATE\_TYPE CKC\_X\_509

CKA\_SUBJECT MULTILINE\_OCTAL

```
\060\126\061\013\060\011\006\003\125\004\006\023\002\103\116\061
\060\060\056\006\003\125\004\012\014\047\103\150\151\156\141\040
\106\151\156\141\156\143\151\141\154\040\103\145\162\164\151\146
\151\143\141\164\151\157\156\040\101\165\164\150\157\162\151\164
\171\061\025\060\023\006\003\125\004\003\014\014\103\106\103\101
\040\105\126\040\122\117\117\124
```

END

CKA\_ID UTF8 "0"

CKA\_ISSUER MULTILINE\_OCTAL

```
\060\126\061\013\060\011\006\003\125\004\006\023\002\103\116\061
\060\060\056\006\003\125\004\012\014\047\103\150\151\156\141\040
\106\151\156\141\156\143\151\141\154\040\103\145\162\164\151\146
\151\143\141\164\151\157\156\040\101\165\164\150\157\162\151\164
\171\061\025\060\023\006\003\125\004\003\014\014\103\106\103\101
\040\105\126\040\122\117\117\124
```

END

CKA\_SERIAL\_NUMBER

MULTILINE\_OCTAL

\002\004\030\112\314\326

END

CKA\_VALUE MULTILINE\_OCTAL

\060\202\005\215\060\202\003\165\240\003\002\001\002\002\004\030  
\112\314\326\060\015\006\011\052\206\110\206\367\015\001\001\013  
\005\000\060\126\061\013\060\011\006\003\125\004\006\023\002\103  
\116\061\060\060\056\006\003\125\004\012\014\047\103\150\151\156  
\141\040\106\151\156\141\156\143\151\141\154\040\103\145\162\164  
\151\146\151\143\141\164\151\157\156\040\101\165\164\150\157\162  
\151\164\171\061\025\060\023\006\003\125\004\003\014\014\103\106  
\103\101\040\105\126\040\122\117\117\124\060\036\027\015\061\062  
\060\070\060\070\060\063\060\067\060\061\132\027\015\062\071\061  
\062\063\061\060\063\060\067\060\061\132\060\126\061\013\060\011  
\006\003\125\004\006\023\002\103\116\061\060\060\056\006\003\125  
\004\012\014\047\103\150\151\156\141\040\106\151\156\141\156\143  
\151\141\154\040\103\145\162\164\151\146\151\143\141\164\151\157  
\156\040\101\165\164\150\157\162\151\164\171\061\025\060\023\006  
\003\125\004\003\014\014\103\106\103\101\040\105\126\040\122\117  
\117\124\060\202\002\042\060\015\006\011\052\206\110\206\367\015  
\001\001\001\005\000\003\202\002\017\000\060\202\002\012\002\202  
\002\001\000\327\135\153\315\020\077\037\005\131\325\005\115\067  
\261\016\354\230\053\216\025\035\372\223\113\027\202\041\161\020  
\122\327\121\144\160\026\302\125\151\115\216\025\155\237\277\014  
\033\302\340\243\147\326\014\254\317\042\256\257\167\124\052\113  
\114\212\123\122\172\303\356\056\336\263\161\045\301\351\135\075  
\356\241\057\243\367\052\074\311\043\035\152\253\035\241\247\361  
\363\354\240\325\104\317\025\317\162\057\035\143\227\350\231\371  
\375\223\244\124\200\114\122\324\122\253\056\111\337\220\315\270  
\137\276\077\336\241\312\115\040\324\045\350\204\051\123\267\261  
\210\037\377\372\332\220\237\012\251\055\101\077\261\361\030\051  
\356\026\131\054\064\111\032\250\006\327\250\210\322\003\162\172  
\062\342\352\150\115\156\054\226\145\173\312\131\372\362\342\335  
\356\060\054\373\314\106\254\304\143\353\157\177\066\053\064\163  
\022\224\177\337\314\046\236\361\162\135\120\145\131\217\151\263  
\207\136\062\157\303\030\212\265\225\217\260\172\067\336\132\105  
\073\307\066\341\357\147\321\071\323\227\133\163\142\031\110\055  
\207\034\006\373\164\230\040\111\163\360\005\322\033\261\240\243  
\267\033\160\323\210\151\271\132\326\070\364\142\334\045\213\170  
\277\370\350\176\270\134\311\225\117\137\247\055\271\040\153\317  
\153\335\365\015\364\202\267\364\262\146\056\020\050\366\227\132  
\173\226\026\217\001\031\055\154\156\177\071\130\006\144\203\001  
\203\203\303\115\222\335\062\306\207\244\067\351\026\316\252\055  
\150\257\012\201\145\072\160\301\233\255\115\155\124\312\052\055  
\113\205\033\263\200\346\160\105\015\153\136\065\360\177\073\270  
\234\344\004\160\211\022\045\223\332\012\231\042\140\152\143\140

\116\166\006\230\116\275\203\255\035\130\212\045\205\322\307\145  
\036\055\216\306\337\266\306\341\177\212\004\041\025\051\164\360  
\076\234\220\235\014\056\361\212\076\132\252\014\011\036\307\325  
\074\243\355\227\303\036\064\372\070\371\010\016\343\300\135\053  
\203\321\126\152\311\266\250\124\123\056\170\062\147\075\202\177  
\164\320\373\341\266\005\140\271\160\333\216\013\371\023\130\157  
\161\140\020\122\020\271\301\101\011\357\162\037\147\061\170\377  
\226\005\215\002\003\001\000\001\243\143\060\141\060\037\006\003  
\125\035\043\004\030\060\026\200\024\343\376\055\375\050\320\013  
\265\272\266\242\304\277\006\252\005\214\223\373\057\060\017\006  
\003\125\035\023\001\001\377\004\005\060\003\001\001\377\060\016  
\006\003\125\035\017\001\001\377\004\004\003\002\001\006\060\035  
\006\003\125\035\016\004\026\004\024\343\376\055\375\050\320\013  
\265\272\266\242\304\277\006\252\005\214\223\373\057\060\015\006  
\011\052\206\110\206\367\015\001\001\013\005\000\003\202\002\001  
\000\045\306\272\153\353\207\313\336\202\071\226\075\360\104\247  
\153\204\163\003\336\235\053\117\272\040\177\274\170\262\317\227  
\260\033\234\363\327\171\056\365\110\266\322\373\027\210\346\323  
\172\077\355\123\023\320\342\057\152\171\313\000\043\050\346\036  
\067\127\065\211\204\302\166\117\064\066\255\147\303\316\101\006  
\210\305\367\356\330\032\270\326\013\177\120\377\223\252\027\113  
\214\354\355\122\140\262\244\006\352\116\353\364\153\031\375\353  
\365\032\340\045\052\232\334\307\101\066\367\310\164\005\204\071  
\225\071\326\013\073\244\047\372\010\330\134\036\370\004\140\122  
\021\050\050\003\377\357\123\146\000\245\112\064\026\146\174\375  
\011\244\256\236\147\032\157\101\013\153\006\023\233\217\206\161  
\005\264\057\215\211\146\063\051\166\124\232\021\370\047\372\262  
\077\221\340\316\015\033\363\060\032\255\277\042\135\033\323\277  
\045\005\115\341\222\032\177\231\237\074\104\223\312\324\100\111  
\154\200\207\327\004\072\303\062\122\065\016\126\370\245\335\175  
\304\213\015\021\037\123\313\036\262\027\266\150\167\132\340\324  
\313\310\007\256\365\072\056\216\067\267\320\001\113\103\051\167  
\214\071\227\217\202\132\370\121\345\211\240\030\347\150\177\135  
\012\056\373\243\107\016\075\246\043\172\306\001\307\217\310\136  
\277\155\200\126\276\212\044\272\063\352\237\341\062\021\236\361  
\322\117\200\366\033\100\257\070\236\021\120\171\163\022\022\315  
\346\154\235\054\210\162\074\060\201\006\221\042\352\131\255\332  
\031\056\042\302\215\271\214\207\340\146\274\163\043\137\041\144  
\143\200\110\365\240\074\030\075\224\310\110\101\035\100\272\136  
\376\376\126\071\241\310\317\136\236\031\144\106\020\332\027\221  
\267\005\200\254\213\231\222\175\347\242\330\007\013\066\047\347  
\110\171\140\212\303\327\023\134\370\162\100\337\112\313\317\231  
\000\012\000\013\021\225\332\126\105\003\210\012\237\147\320\325  
\171\261\250\215\100\155\015\302\172\100\372\363\137\144\107\222  
\313\123\271\273\131\316\117\375\320\025\123\001\330\337\353\331  
\346\166\357\320\043\273\073\251\171\263\325\002\051\315\211\243  
\226\017\112\065\347\116\102\300\165\315\007\317\346\054\353\173  
\056

```

END
CKA_NSS_MOZILLA_CA_POLICY
CK_BBOOL CK_TRUE
CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE
CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

# Trust for "CFCA EV ROOT"
# Issuer: CN=CFCA EV ROOT,O=China Financial Certification Authority,C=CN
# Serial Number: 407555286 (0x184accd6)
# Subject: CN=CFCA EV ROOT,O=China Financial Certification Authority,C=CN
# Not Valid Before: Wed Aug 08 03:07:01 2012
# Not Valid After : Mon Dec 31 03:07:01 2029
# Fingerprint (SHA-256):
5C:C3:D7:8E:4E:1D:5E:45:54:7A:04:E6:87:3E:64:F9:0C:F9:53:6D:1C:CC:2E:F8:00:F3:55:C4:C5:FD:70:FD
# Fingerprint (SHA1): E2:B8:29:4B:55:84:AB:6B:58:C2:90:46:6C:AC:3F:B8:39:8F:84:83
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "CFCA EV ROOT"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\342\270\051\113\125\204\253\153\130\302\220\106\154\254\077\270
\071\217\204\203
END
CKA_CERT_MD5_HASH
MULTILINE_OCTAL
\164\341\266\355\046\172\172\104\060\063\224\253\173\047\201\060
END
CKA_ISSUER MULTILINE_OCTAL
\060\126\061\013\060\011\006\003\125\004\006\023\002\103\116\061
\060\060\056\006\003\125\004\012\014\047\103\150\151\156\141\040
\106\151\156\141\156\143\151\141\154\040\103\145\162\164\151\146
\151\143\141\164\151\157\156\040\101\165\164\150\157\162\151\164
\171\061\025\060\023\006\003\125\004\003\014\014\103\106\103\101
\040\105\126\040\122\117\117\124
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\004\030\112\314\326
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "OISTE WISeKey Global Root GB CA"
#
# Issuer: CN=OISTE WISeKey Global Root GB CA,OU=OISTE Foundation Endorsed,O=WISeKey,C=CH

```

```
# Serial Number:76:b1:20:52:74:f0:85:87:46:b3:f8:23:1a:f6:c2:c0
#
Subject: CN=OISTE WISeKey Global Root GB CA,OU=OISTE Foundation Endorsed,O=WISeKey,C=CH
# Not Valid Before: Mon Dec 01 15:00:32 2014
# Not Valid After : Thu Dec 01 15:10:31 2039
# Fingerprint (SHA-256):
6B:9C:08:E8:6E:B0:F7:67:CF:AD:65:CD:98:B6:21:49:E5:49:4A:67:F5:84:5E:7B:D1:ED:01:9F:27:B8:6B:D6
# Fingerprint (SHA1): 0F:F9:40:76:18:D3:D7:6A:4B:98:F0:A8:35:9E:0C:FD:27:AC:CC:ED
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "OISTE WISeKey Global Root GB CA"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\155\061\013\060\011\006\003\125\004\006\023\002\103\110\061
\020\060\016\006\003\125\004\012\023\007\127\111\123\145\113\145
\171\061\042\060\040\006\003\125\004\013\023\031\117\111\123\124
\105\040\106\157\165\156\144\141\164\151\157\156\040\105\156\144
\157\162\163\145\144\061\050\060\046\006\003\125\004\003\023\037
\117\111\123\124\105\040\127\111\123\145\113\145\171\040\107\154
\157\142\141\154\040\122\157\157\164\040\107\102\040\103\101
END
CKA_ID
UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\155\061\013\060\011\006\003\125\004\006\023\002\103\110\061
\020\060\016\006\003\125\004\012\023\007\127\111\123\145\113\145
\171\061\042\060\040\006\003\125\004\013\023\031\117\111\123\124
\105\040\106\157\165\156\144\141\164\151\157\156\040\105\156\144
\157\162\163\145\144\061\050\060\046\006\003\125\004\003\023\037
\117\111\123\124\105\040\127\111\123\145\113\145\171\040\107\154
\157\142\141\154\040\122\157\157\164\040\107\102\040\103\101
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\020\166\261\040\122\164\360\205\207\106\263\370\043\032\366
\302\300
END
CKA_VALUE MULTILINE_OCTAL
\060\202\003\265\060\202\002\235\240\003\002\001\002\002\020\166
\261\040\122\164\360\205\207\106\263\370\043\032\366\302\300\060
\015\006\011\052\206\110\206\367\015\001\001\013\005\000\060\155
\061\013\060\011\006\003\125\004\006\023\002\103\110\061\020\060
\016\006\003\125\004\012\023\007\127\111\123\145\113\145\171\061
\042\060\040\006\003\125\004\013\023\031\117\111\123\124\105\040
\106\157\165\156\144\141\164\151\157\156\040\105\156\144\157\162
\163\145\144\061\050\060\046\006\003\125\004\003\023\037\117\111
\123\124\105\040\127\111\123\145\113\145\171\040\107\154\157\142
```

\141\154\040\122\157\157\164\040\107\102\040\103\101\060\036\027  
\015\061\064\061\062\060\061\061\065\060\060\063\062\132\027\015  
\063\071\061\062\060\061\061\065\061\060\063\061\132\060\155\061  
\013\060\011\006\003\125\004\006\023\002\103\110\061\020\060\016  
\006\003\125\004\012\023\007\127\111\123\145\113\145\171\061\042  
\060\040\006\003\125\004\013\023\031\117\111\123\124\105\040\106  
\157\165\156\144\141\164\151\157\156\040\105\156\144\157\162\163  
\145\144\061\050\060\046\006\003\125\004\003\023\037\117\111\123  
\124\105\040\127\111\123\145\113\145\171\040\107\154\157\142\141  
\154\040\122\157\157\164\040\107\102\040\103\101\060\202\001\042  
\060\015\006\011\052\206\110\206\367\015\001\001\001\005\000\003  
\202\001\017\000\060\202\001\012\002\202\001\001\000\330\027\267  
\034\112\044\052\326\227\261\312\342\036\373\175\070\357\230\365  
\262\071\230\116\047\270\021\135\173\322\045\224\210\202\025\046  
\152\033\061\273\250\133\041\041\053\330\017\116\237\132\361\261  
\132\344\171\326\062\043\053\341\123\314\231\105\134\173\117\255  
\274\277\207\112\013\113\227\132\250\366\110\354\175\173\015\315  
\041\006\337\236\025\375\101\212\110\267\040\364\241\172\033\127  
\324\135\120\377\272\147\330\043\231\037\310\077\343\336\377\157  
\133\167\261\153\156\270\311\144\367\341\312\101\106\016\051\161  
\320\271\043\374\311\201\137\116\367\157\337\277\204\255\163\144  
\273\267\102\216\151\366\324\166\035\176\235\247\270\127\212\121  
\147\162\327\324\250\270\225\124\100\163\003\366\352\364\353\376  
\050\102\167\077\235\043\033\262\266\075\200\024\007\114\056\117  
\367\325\012\026\015\275\146\103\067\176\043\103\171\303\100\206  
\365\114\051\332\216\232\255\015\245\004\207\210\036\205\343\351  
\123\325\233\310\213\003\143\170\353\340\031\112\156\273\057\153  
\063\144\130\223\255\151\277\217\033\357\202\110\307\002\003\001  
\000\001\243\121\060\117\060\013\006\003\125\035\017\004\004\003  
\002\001\206\060\017\006\003\125\035\023\001\001\377\004\005\060  
\003\001\001\377\060\035\006\003\125\035\016\004\026\004\024\065  
\017\310\066\143\136\342\243\354\371\073\146\025\316\121\122\343  
\221\232\075\060\020\006\011\053\006\001\004\001\202\067\025\001  
\004\003\002\001\000\060\015\006\011\052\206\110\206\367\015\001  
\001\013\005\000\003\202\001\001\000\100\114\373\207\262\231\201  
\220\176\235\305\260\260\046\315\210\173\053\062\215\156\270\041  
\161\130\227\175\256\067\024\257\076\347\367\232\342\175\366\161  
\230\231\004\252\103\164\170\243\343\111\141\076\163\214\115\224  
\340\371\161\304\266\026\016\123\170\037\326\242\207\057\002\071  
\201\051\074\257\025\230\041\060\376\050\220\000\214\321\341\313  
\372\136\310\375\370\020\106\073\242\170\102\221\027\164\125\012  
\336\120\147\115\146\321\247\377\375\331\300\265\250\243\212\316  
\146\365\017\103\315\247\053\127\173\143\106\152\252\056\122\330  
\364\355\341\155\255\051\220\170\110\272\341\043\252\243\211\354  
\265\253\226\300\264\113\242\035\227\236\172\362\156\100\161\337  
\150\361\145\115\316\174\005\337\123\145\251\245\360\261\227\004  
\160\025\106\003\230\324\322\277\124\264\240\130\175\122\157\332  
\126\046\142\324\330\333\211\061\157\034\360\042\302\323\142\034

```
\065\315\114\151\025\124\032\220\230\336\353\036\137\312\167\307
\313\216\075\103\151\234\232\130\320\044\073\337\033\100\226\176
\065\255\201\307\116\161\272\210\023
```

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "OISTE WISEKey Global Root GB CA"

# Issuer: CN=OISTE WISEKey Global Root GB CA,OU=OISTE Foundation Endorsed,O=WISEKey,C=CH

# Serial Number:76:b1:20:52:74:f0:85:87:46:b3:f8:23:1a:f6:c2:c0

# Subject:

CN=OISTE WISEKey Global Root GB CA,OU=OISTE Foundation Endorsed,O=WISEKey,C=CH

# Not Valid Before: Mon Dec 01 15:00:32 2014

# Not Valid After : Thu Dec 01 15:10:31 2039

# Fingerprint (SHA-256):

6B:9C:08:E8:6E:B0:F7:67:CF:AD:65:CD:98:B6:21:49:E5:49:4A:67:F5:84:5E:7B:D1:ED:01:9F:27:B8:6B:D6

# Fingerprint (SHA1): 0F:F9:40:76:18:D3:D7:6A:4B:98:F0:A8:35:9E:0C:FD:27:AC:CC:ED

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "OISTE WISEKey Global Root GB CA"

CKA\_CERT\_SHA1\_HASH MULTILINE\_OCTAL

```
\017\371\100\166\030\323\327\152\113\230\360\250\065\236\014\375
```

```
\047\254\314\355
```

END

CKA\_CERT\_MD5\_HASH MULTILINE\_OCTAL

```
\244\353\271\141\050\056\267\057\230\260\065\046\220\231\121\035
```

END

CKA\_ISSUER MULTILINE\_OCTAL

```
\060\155\061\013\060\011\006\003\125\004\006\023\002\103\110\061
```

```
\020\060\016\006\003\125\004\012\023\007\127\111\123\145\113\145
```

```
\171\061\042\060\040\006\003\125\004\013\023\031\117\111\123\124
```

```
\105\040\106\157\165\156\144\141\164\151\157\156\040\105\156\144
```

```
\157\162\163\145\144\061\050\060\046\006\003\125\004\003\023\037
```

```
\117\111\123\124\105\040\127\111\123\145\113\145\171\040\107\154
```

```
\157\142\141\154\040\122\157\157\164\040\107\102\040\103\101
```

END

CKA\_SERIAL\_NUMBER

MULTILINE\_OCTAL

```
\002\020\166\261\040\122\164\360\205\207\106\263\370\043\032\366
```

```
\302\300
```

END

CKA\_TRUST\_SERVER\_AUTH CK\_TRUST CKT\_NSS\_TRUSTED\_DELEGATOR

CKA\_TRUST\_EMAIL\_PROTECTION CK\_TRUST CKT\_NSS\_TRUSTED\_DELEGATOR

CKA\_TRUST\_CODE\_SIGNING CK\_TRUST CKT\_NSS\_MUST\_VERIFY\_TRUST



CKA\_TRUST\_STEP\_UP\_APPROVED CK\_BBOOL CK\_FALSE

#

# Certificate "SZAFIR ROOT CA2"

#

# Issuer: CN=SZAFIR ROOT CA2,O=Krajowa Izba Rozliczeniowa S.A.,C=PL

# Serial Number:3e:8a:5d:07:ec:55:d2:32:d5:b7:e3:b6:5f:01:eb:2d:dc:e4:d6:e4

# Subject: CN=SZAFIR ROOT CA2,O=Krajowa Izba Rozliczeniowa S.A.,C=PL

# Not Valid Before: Mon Oct 19 07:43:30 2015

# Not Valid After : Fri Oct 19 07:43:30 2035

# Fingerprint (SHA-256):

A1:33:9D:33:28:1A:0B:56:E5:57:D3:D3:2B:1C:E7:F9:36:7E:B0:94:BD:5F:A7:2A:7E:50:04:C8:DE:D7:CA:FE

#

Fingerprint (SHA1): E2:52:FA:95:3F:ED:DB:24:60:BD:6E:28:F3:9C:CC:CF:5E:B3:3F:DE

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_CERTIFICATE

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "SZAFIR ROOT CA2"

CKA\_CERTIFICATE\_TYPE CK\_CERTIFICATE\_TYPE CKC\_X\_509

CKA\_SUBJECT MULTILINE\_OCTAL

\060\121\061\013\060\011\006\003\125\004\006\023\002\120\114\061  
\050\060\046\006\003\125\004\012\014\037\113\162\141\152\157\167  
\141\040\111\172\142\141\040\122\157\172\154\151\143\172\145\156  
\151\157\167\141\040\123\056\101\056\061\030\060\026\006\003\125  
\004\003\014\017\123\132\101\106\111\122\040\122\117\117\124\040  
\103\101\062

END

CKA\_ID UTF8 "0"

CKA\_ISSUER MULTILINE\_OCTAL

\060\121\061\013\060\011\006\003\125\004\006\023\002\120\114\061  
\050\060\046\006\003\125\004\012\014\037\113\162\141\152\157\167  
\141\040\111\172\142\141\040\122\157\172\154\151\143\172\145\156  
\151\157\167\141\040\123\056\101\056\061\030\060\026\006\003\125  
\004\003\014\017\123\132\101\106\111\122\040\122\117\117\124\040  
\103\101\062

END

CKA\_SERIAL\_NUMBER

MULTILINE\_OCTAL

\002\024\076\212\135\007\354\125\322\062\325\267\343\266\137\001  
\353\055\334\344\326\344

END

CKA\_VALUE MULTILINE\_OCTAL

\060\202\003\162\060\202\002\132\240\003\002\001\002\002\024\076  
\212\135\007\354\125\322\062\325\267\343\266\137\001\353\055\334  
\344\326\344\060\015\006\011\052\206\110\206\367\015\001\001\013  
\005\000\060\121\061\013\060\011\006\003\125\004\006\023\002\120  
\114\061\050\060\046\006\003\125\004\012\014\037\113\162\141\152

\157\167\141\040\111\172\142\141\040\122\157\172\154\151\143\172  
\145\156\151\157\167\141\040\123\056\101\056\061\030\060\026\006  
\003\125\004\003\014\017\123\132\101\106\111\122\040\122\117\117  
\124\040\103\101\062\060\036\027\015\061\065\061\060\061\071\060  
\067\064\063\063\060\132\027\015\063\065\061\060\061\071\060\067  
\064\063\063\060\132\060\121\061\013\060\011\006\003\125\004\006  
\023\002\120\114\061\050\060\046\006\003\125\004\012\014\037\113  
\162\141\152\157\167\141\040\111\172\142\141\040\122\157\172\154  
\151\143\172\145\156\151\157\167\141\040\123\056\101\056\061\030  
\060\026\006\003\125\004\003\014\017\123\132\101\106\111\122\040  
\122\117\117\124\040\103\101\062\060\202\001\042\060\015\006\011  
\052\206\110\206\367\015\001\001\001\005\000\003\202\001\017\000  
\060\202\001\012\002\202\001\001\000\267\274\076\120\250\113\315  
\100\265\316\141\347\226\312\264\241\332\014\042\260\372\265\173  
\166\000\167\214\013\317\175\250\206\314\046\121\344\040\075\205  
\014\326\130\343\347\364\052\030\235\332\321\256\046\356\353\123  
\334\364\220\326\023\112\014\220\074\303\364\332\322\216\015\222  
\072\334\261\261\377\070\336\303\272\055\137\200\271\002\275\112  
\235\033\017\264\303\302\301\147\003\335\334\033\234\075\263\260  
\336\000\036\250\064\107\273\232\353\376\013\024\275\066\204\332  
\015\040\277\372\133\313\251\026\040\255\071\140\356\057\165\266  
\347\227\234\371\076\375\176\115\157\115\057\357\210\015\152\372  
\335\361\075\156\040\245\240\022\264\115\160\271\316\327\162\073  
\211\223\247\200\204\034\047\111\162\111\265\377\073\225\236\301  
\314\310\001\354\350\016\212\012\226\347\263\246\207\345\326\371  
\005\053\015\227\100\160\074\272\254\165\132\234\325\115\235\002  
\012\322\113\233\146\113\106\007\027\145\255\237\154\210\000\334  
\042\211\340\341\144\324\147\274\061\171\141\074\273\312\101\315  
\134\152\000\310\074\070\216\130\257\002\003\001\000\001\243\102  
\060\100\060\017\006\003\125\035\023\001\001\377\004\005\060\003  
\001\001\377\060\016\006\003\125\035\017\001\001\377\004\004\003  
\002\001\006\060\035\006\003\125\035\016\004\026\004\024\056\026  
\251\112\030\265\313\314\365\157\120\363\043\137\370\135\347\254  
\360\310\060\015\006\011\052\206\110\206\367\015\001\001\013\005  
\000\003\202\001\001\000\265\163\370\003\334\131\133\035\166\351  
\243\052\173\220\050\262\115\300\063\117\252\232\261\324\270\344  
\047\377\251\226\231\316\106\340\155\174\114\242\070\244\006\160  
\360\364\101\021\354\077\107\215\077\162\207\371\073\375\244\157  
\053\123\000\340\377\071\271\152\007\016\353\035\034\366\242\162  
\220\313\202\075\021\202\213\322\273\237\052\257\041\346\143\206  
\235\171\031\357\367\273\014\065\220\303\212\355\117\017\365\314  
\022\331\244\076\273\240\374\040\225\137\117\046\057\021\043\203  
\116\165\007\017\277\233\321\264\035\351\020\004\376\312\140\217  
\242\114\270\255\317\341\220\017\315\256\012\307\135\173\267\120  
\322\324\141\372\325\025\333\327\237\207\121\124\353\245\343\353  
\311\205\240\045\040\067\373\216\316\014\064\204\341\074\201\262  
\167\116\103\245\210\137\206\147\241\075\346\264\134\141\266\076  
\333\376\267\050\305\242\007\256\265\312\312\215\052\022\357\227

```
\355\302\060\244\311\052\172\373\363\115\043\033\231\063\064\240
\056\365\251\013\077\324\135\341\317\204\237\342\031\302\137\212
\326\040\036\343\163\267
```

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL

CK\_FALSE

# Trust for "SZAFIR ROOT CA2"

# Issuer: CN=SZAFIR ROOT CA2,O=Krajowa Izba Rozliczeniowa S.A.,C=PL

# Serial Number:3e:8a:5d:07:ec:55:d2:32:d5:b7:e3:b6:5f:01:eb:2d:dc:e4:d6:e4

# Subject: CN=SZAFIR ROOT CA2,O=Krajowa Izba Rozliczeniowa S.A.,C=PL

# Not Valid Before: Mon Oct 19 07:43:30 2015

# Not Valid After : Fri Oct 19 07:43:30 2035

# Fingerprint (SHA-256):

A1:33:9D:33:28:1A:0B:56:E5:57:D3:D3:2B:1C:E7:F9:36:7E:B0:94:BD:5F:A7:2A:7E:50:04:C8:DE:D7:CA:FE

# Fingerprint (SHA1): E2:52:FA:95:3F:ED:DB:24:60:BD:6E:28:F3:9C:CC:CF:5E:B3:3F:DE

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "SZAFIR ROOT CA2"

CKA\_CERT\_SHA1\_HASH MULTILINE\_OCTAL

```
\342\122\372\225\077\355\333\044\140\275\156\050\363\234\314\317
\136\263\077\336
```

END

CKA\_CERT\_MD5\_HASH MULTILINE\_OCTAL

```
\021\144\301\211\260\044\261\214\261\007\176\211\236\121\236\231
```

END

CKA\_ISSUER MULTILINE\_OCTAL

```
\060\121\061\013\060\011\006\003\125\004\006\023\002\120\114\061
\050\060\046\006\003\125\004\012\014\037\113\162\141\152\157\167
\141\040\111\172\142\141\040\122\157\172\154\151\143\172\145\156
\151\157\167\141\040\123\056\101\056\061\030\060\026\006\003\125
\004\003\014\017\123\132\101\106\111\122\040\122\117\117\124\040
\103\101\062
```

END

CKA\_SERIAL\_NUMBER

MULTILINE\_OCTAL

```
\002\024\076\212\135\007\354\125\322\062\325\267\343\266\137\001
\353\055\334\344\326\344
```

END

CKA\_TRUST\_SERVER\_AUTH CK\_TRUST CKT\_NSS\_TRUSTED\_DELEGATOR

CKA\_TRUST\_EMAIL\_PROTECTION CK\_TRUST CKT\_NSS\_TRUSTED\_DELEGATOR

CKA\_TRUST\_CODE\_SIGNING CK\_TRUST CKT\_NSS\_MUST\_VERIFY\_TRUST

CKA\_TRUST\_STEP\_UP\_APPROVED CK\_BBOOL CK\_FALSE

```
#
# Certificate "Certum Trusted Network CA 2"
#
# Issuer: CN=Certum Trusted Network CA 2,OU=Certum Certification Authority,O=Unizeto Technologies
S.A.,C=PL
# Serial Number:21:d6:d0:4a:4f:25:0f:c9:32:37:fc:aa:5e:12:8d:e9
# Subject: CN=Certum Trusted Network CA 2,OU=Certum Certification Authority,O=Unizeto Technologies
S.A.,C=PL
# Not Valid Before:
  Thu Oct 06 08:39:56 2011
# Not Valid After : Sat Oct 06 08:39:56 2046
# Fingerprint (SHA-256):
B6:76:F2:ED:DA:E8:77:5C:D3:6C:B0:F6:3C:D1:D4:60:39:61:F4:9E:62:65:BA:01:3A:2F:03:07:B6:D0:B8:04
# Fingerprint (SHA1): D3:DD:48:3E:2B:BF:4C:05:E8:AF:10:F5:FA:76:26:CF:D3:DC:30:92
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Certum Trusted Network CA 2"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\201\200\061\013\060\011\006\003\125\004\006\023\002\120\114
\061\042\060\040\006\003\125\004\012\023\031\125\156\151\172\145
\164\157\040\124\145\143\150\156\157\154\157\147\151\145\163\040
\123\056\101\056\061\047\060\045\006\003\125\004\013\023\036\103
\145\162\164\165\155\040\103\145\162\164\151\146\151\143\141\164
\151\157\156\040\101\165\164\150\157\162\151\164\171\061\044\060
\042\006\003\125\004\003\023\033\103\145\162\164\165\155\040\124
\162\165\163\164\145\144\040\116\145\164\167\157\162\153\040\103
\101\040\062
END
CKA_ID
  UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\201\200\061\013\060\011\006\003\125\004\006\023\002\120\114
\061\042\060\040\006\003\125\004\012\023\031\125\156\151\172\145
\164\157\040\124\145\143\150\156\157\154\157\147\151\145\163\040
\123\056\101\056\061\047\060\045\006\003\125\004\013\023\036\103
\145\162\164\165\155\040\103\145\162\164\151\146\151\143\141\164
\151\157\156\040\101\165\164\150\157\162\151\164\171\061\044\060
\042\006\003\125\004\003\023\033\103\145\162\164\165\155\040\124
\162\165\163\164\145\144\040\116\145\164\167\157\162\153\040\103
\101\040\062
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\020\041\326\320\112\117\045\017\311\062\067\374\252\136\022
\215\351
```

END

CKA\_VALUE MULTILINE\_OCTAL

\060\202\005\322\060\202\003\272\240\003\002\001\002\002\020\041  
\326\320\112\117\045\017\311\062\067\374\252\136\022\215\351\060  
\015\006\011\052\206\110\206\367\015\001\001\015\005\000\060\201  
\200\061\013\060\011\006\003\125\004\006\023\002\120\114\061\042  
\060\040\006\003\125\004\012\023\031\125\156\151\172\145\164\157  
\040\124\145\143\150\156\157\154\157\147\151\145\163\040\123\056  
\101\056\061\047\060\045\006\003\125\004\013\023\036\103\145\162  
\164\165\155\040\103\145\162\164\151\146\151\143\141\164\151\157  
\156\040\101\165\164\150\157\162\151\164\171\061\044\060\042\006  
\003\125\004\003\023\033\103\145\162\164\165\155\040\124\162\165  
\163\164\145\144\040\116\145\164\167\157\162\153\040\103\101\040  
\062\060\042\030\017\062\060\061\061\061\060\060\066\060\070\063  
\071\065\066\132\030\017\062\060\064\066\061\060\060\066\060\070  
\063\071\065\066\132\060\201\200\061\013\060\011\006\003\125\004  
\006\023\002\120\114\061\042\060\040\006\003\125\004\012\023\031  
\125\156\151\172\145\164\157\040\124\145\143\150\156\157\154\157  
\147\151\145\163\040\123\056\101\056\061\047\060\045\006\003\125  
\004\013\023\036\103\145\162\164\165\155\040\103\145\162\164\151  
\146\151\143\141\164\151\157\156\040\101\165\164\150\157\162\151  
\164\171\061\044\060\042\006\003\125\004\003\023\033\103\145\162  
\164\165\155\040\124\162\165\163\164\145\144\040\116\145\164\167  
\157\162\153\040\103\101\040\062\060\202\002\042\060\015\006\011  
\052\206\110\206\367\015\001\001\001\005\000\003\202\002\017\000  
\060\202\002\012\002\202\002\001\000\275\371\170\370\346\325\200  
\014\144\235\206\033\226\144\147\077\042\072\036\165\001\175\357  
\373\134\147\214\311\314\134\153\251\221\346\271\102\345\040\113  
\233\332\233\173\271\231\135\331\233\200\113\327\204\100\053\047  
\323\350\272\060\273\076\011\032\247\111\225\357\053\100\044\302  
\227\307\247\356\233\045\357\250\012\000\227\205\132\252\235\334  
\051\311\342\065\007\353\160\115\112\326\301\263\126\270\241\101  
\070\233\321\373\061\177\217\340\137\341\261\077\017\216\026\111  
\140\327\006\215\030\371\252\046\020\253\052\323\320\321\147\215  
\033\106\276\107\060\325\056\162\321\305\143\332\347\143\171\104  
\176\113\143\044\211\206\056\064\077\051\114\122\213\052\247\300  
\342\221\050\211\271\300\133\371\035\331\347\047\255\377\232\002  
\227\301\306\120\222\233\002\054\275\251\271\064\131\012\277\204  
\112\377\337\376\263\237\353\331\236\340\230\043\354\246\153\167  
\026\052\333\314\255\073\034\244\207\334\106\163\136\031\142\150  
\105\127\344\220\202\102\273\102\326\360\141\340\301\243\075\146  
\243\135\364\030\356\210\311\215\027\105\051\231\062\165\002\061  
\356\051\046\310\153\002\346\265\142\105\177\067\025\132\043\150  
\211\324\076\336\116\047\260\360\100\014\274\115\027\313\115\242  
\263\036\320\006\132\335\366\223\317\127\165\231\365\372\206\032  
\147\170\263\277\226\376\064\334\275\347\122\126\345\263\345\165  
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\071\225\173\154\200\132\117\023\162\306\327\175\051\172\104\272

\122\244\052\325\101\106\011\040\376\042\240\266\133\060\215\274  
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\116\376\320\011\332\160\357\230\372\126\346\155\333\265\127\113  
\334\345\054\045\025\310\236\056\170\116\370\332\234\236\206\054  
\312\127\363\032\345\310\222\213\032\202\226\172\303\274\120\022  
\151\330\016\132\106\213\072\353\046\372\043\311\266\260\201\276  
\102\000\244\370\326\376\060\056\307\322\106\366\345\216\165\375  
\362\314\271\320\207\133\314\006\020\140\273\203\065\267\136\147  
\336\107\354\231\110\361\244\241\025\376\255\214\142\216\071\125  
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\001\001\377\060\035\006\003\125\035\016\004\026\004\024\266\241  
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\016\375\060\016\006\003\125\035\017\001\001\377\004\004\003\002  
\001\006\060\015\006\011\052\206\110\206\367\015\001\001\015\005  
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\027\374\145\204\307\020\111\220\336\333\307\046\223\210\046\157  
\160\326\002\136\071\240\367\217\253\226\265\245\023\134\201\024  
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\034\353\063\320\317\206\140\311\332\373\200\057\236\114\140\204  
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\057\336\232\035\132\271\126\316\065\072\260\137\160\115\136\343  
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\132\074\306\035\144\330\265\061\344\246\074\172\250\127\013\333  
\355\141\032\313\361\316\163\167\143\244\207\157\114\121\070\326  
\344\137\307\237\266\201\052\344\205\110\171\130\136\073\370\333  
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\150\133\250\104\031\041\360\247\350\201\015\054\350\223\066\264  
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\361\344\017\264\304\114\245\141\223\370\227\020\007\052\060\045  
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\157\266\272\154\203\103\167\315\212\222\027\241\236\133\170\026  
\075\105\342\063\162\335\341\146\312\231\323\311\305\046\375\015  
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\134\002\312\054\330\157\112\007\331\311\065\332\100\165\362\304  
\247\031\157\236\102\020\230\165\346\225\213\140\274\355\305\022  
\327\212\316\325\230\134\126\226\003\305\356\167\006\065\377\317  
\344\356\077\023\141\356\333\332\055\205\360\315\256\235\262\030  
\011\105\303\222\241\162\027\374\107\266\240\013\054\361\304\336  
\103\150\010\152\137\073\360\166\143\373\314\006\054\246\306\342  
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```

END
CKA_NSS_MOZILLA_CA_POLICY
CK_BBOOL CK_TRUE
CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE
CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

#
Trust for "Certum Trusted Network CA 2"
# Issuer: CN=Certum Trusted Network CA 2,OU=Certum Certification Authority,O=Unizeto Technologies
S.A.,C=PL
# Serial Number:21:d6:d0:4a:4f:25:0f:c9:32:37:fc:aa:5e:12:8d:e9
# Subject: CN=Certum Trusted Network CA 2,OU=Certum Certification Authority,O=Unizeto Technologies
S.A.,C=PL
# Not Valid Before: Thu Oct 06 08:39:56 2011
# Not Valid After : Sat Oct 06 08:39:56 2046
# Fingerprint (SHA-256):
B6:76:F2:ED:DA:E8:77:5C:D3:6C:B0:F6:3C:D1:D4:60:39:61:F4:9E:62:65:BA:01:3A:2F:03:07:B6:D0:B8:04
# Fingerprint (SHA1): D3:DD:48:3E:2B:BF:4C:05:E8:AF:10:F5:FA:76:26:CF:D3:DC:30:92
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Certum Trusted Network CA 2"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\323\335\110\076\053\277\114\005\350\257\020\365\372\166\046\317
\323\334\060\222
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\155\106\236\331\045\155\010\043\133\136\164\175\036\047\333\362
END
CKA_ISSUER
MULTILINE_OCTAL
\060\201\200\061\013\060\011\006\003\125\004\006\023\002\120\114
\061\042\060\040\006\003\125\004\012\023\031\125\156\151\172\145
\164\157\040\124\145\143\150\156\157\154\157\147\151\145\163\040
\123\056\101\056\061\047\060\045\006\003\125\004\013\023\036\103
\145\162\164\165\155\040\103\145\162\164\151\146\151\143\141\164
\151\157\156\040\101\165\164\150\157\162\151\164\171\061\044\060
\042\006\003\125\004\003\023\033\103\145\162\164\165\155\040\124
\162\165\163\164\145\144\040\116\145\164\167\157\162\153\040\103
\101\040\062
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\020\041\326\320\112\117\045\017\311\062\067\374\252\136\022
\215\351
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR

```

CKA\_TRUST\_CODE\_SIGNING CK\_TRUST CKT\_NSS\_MUST\_VERIFY\_TRUST  
CKA\_TRUST\_STEP\_UP\_APPROVED CK\_BBOOL CK\_FALSE

#

# Certificate "Hellenic Academic and Research Institutions RootCA 2015"

#

# Issuer: CN=Hellenic

Academic and Research Institutions RootCA 2015,O=Hellenic Academic and Research Institutions Cert.  
Authority,L=Athens,C=GR

# Serial Number: 0 (0x0)

# Subject: CN=Hellenic Academic and Research Institutions RootCA 2015,O=Hellenic Academic and Research  
Institutions Cert. Authority,L=Athens,C=GR

# Not Valid Before: Tue Jul 07 10:11:21 2015

# Not Valid After : Sat Jun 30 10:11:21 2040

# Fingerprint (SHA-256):

A0:40:92:9A:02:CE:53:B4:AC:F4:F2:FF:C6:98:1C:E4:49:6F:75:5E:6D:45:FE:0B:2A:69:2B:CD:52:52:3F:36

# Fingerprint (SHA1): 01:0C:06:95:A6:98:19:14:FF:BF:5F:C6:B0:B6:95:EA:29:E9:12:A6

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_CERTIFICATE

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "Hellenic Academic and Research Institutions RootCA 2015"

CKA\_CERTIFICATE\_TYPE CK\_CERTIFICATE\_TYPE CKC\_X\_509

CKA\_SUBJECT MULTILINE\_OCTAL

\060\201\246\061\013\060\011\006\003\125\004\006\023\002\107\122  
\061\017\060\015\006\003\125\004\007\023\006\101\164\150\145\156  
\163\061\104\060\102\006\003\125\004\012\023\073\110\145\154\154  
\145\156\151\143\040\101\143\141\144\145\155\151\143\040\141\156  
\144\040\122\145\163\145\141\162\143\150\040\111\156\163\164\151  
\164\165\164\151\157\156\163\040\103\145\162\164\056\040\101\165  
\164\150\157\162\151\164\171\061\100\060\076\006\003\125\004\003  
\023\067\110\145\154\154\145\156\151\143\040\101\143\141\144\145  
\155\151\143\040\141\156\144\040\122\145\163\145\141\162\143\150  
\040\111\156\163\164\151\164\165\164\151\157\156\163\040\122\157  
\157\164\103\101\040\062\060\061\065

END

CKA\_ID

UTF8 "0"

CKA\_ISSUER MULTILINE\_OCTAL

\060\201\246\061\013\060\011\006\003\125\004\006\023\002\107\122  
\061\017\060\015\006\003\125\004\007\023\006\101\164\150\145\156  
\163\061\104\060\102\006\003\125\004\012\023\073\110\145\154\154  
\145\156\151\143\040\101\143\141\144\145\155\151\143\040\141\156  
\144\040\122\145\163\145\141\162\143\150\040\111\156\163\164\151  
\164\165\164\151\157\156\163\040\103\145\162\164\056\040\101\165  
\164\150\157\162\151\164\171\061\100\060\076\006\003\125\004\003  
\023\067\110\145\154\154\145\156\151\143\040\101\143\141\144\145  
\155\151\143\040\141\156\144\040\122\145\163\145\141\162\143\150



\040\111\156\163\164\151\164\165\164\151\157\156\163\040\122\157  
\157\164\103\101\040\062\060\061\065  
END  
CKA\_SERIAL\_NUMBER  
MULTILINE\_OCTAL  
\002\001\000  
END  
CKA\_VALUE MULTILINE\_OCTAL  
\060\202\006\013\060\202\003\363\240\003\002\001\002\002\001\000  
\060\015\006\011\052\206\110\206\367\015\001\001\013\005\000\060  
\201\246\061\013\060\011\006\003\125\004\006\023\002\107\122\061  
\017\060\015\006\003\125\004\007\023\006\101\164\150\145\156\163  
\061\104\060\102\006\003\125\004\012\023\073\110\145\154\154\145  
\156\151\143\040\101\143\141\144\145\155\151\143\040\141\156\144  
\040\122\145\163\145\141\162\143\150\040\111\156\163\164\151\164  
\165\164\151\157\156\163\040\103\145\162\164\056\040\101\165\164  
\150\157\162\151\164\171\061\100\060\076\006\003\125\004\003\023  
\067\110\145\154\154\145\156\151\143\040\101\143\141\144\145\155  
\151\143\040\141\156\144\040\122\145\163\145\141\162\143\150\040  
\111\156\163\164\151\164\165\164\151\157\156\163\040\122\157\157  
\164\103\101\040\062\060\061\065\060\036\027\015\061\065\060\067  
\060\067\061\060\061\061\062\061\132\027\015\064\060\060\066\063  
\060\061\060\061\061\062\061\132\060\201\246\061\013\060\011\006  
\003\125\004\006\023\002\107\122\061\017\060\015\006\003\125\004  
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\144\145\155\151\143\040\141\156\144\040\122\145\163\145\141\162  
\143\150\040\111\156\163\164\151\164\165\164\151\157\156\163\040  
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\330\216\243\226\136\072\331\062\333\076\350\360\020\145\355\164  
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\201\370\027\313\222\066\135\321\243\330\165\033\341\213\047\352  
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\125\035\017\001\001\377\004\004\003\002\001\006\060\035\006\003  
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\162\307\350\105\216\334\251\362\046\077\306\171\214\261\123\010  
\063\201\260\126\023\276\346\121\134\330\233\012\117\113\234\126  
\123\002\351\117\366\015\140\352\115\102\125\350\174\033\041\041  
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\364\277\311\365\105\033\316\070\020\052\067\212\171\243\264\343  
\011\154\205\206\223\377\211\226\047\170\201\217\147\343\106\164  
\124\216\331\015\151\342\112\364\115\164\003\377\262\167\355\225  
\147\227\344\261\305\253\277\152\043\350\324\224\342\104\050\142  
\304\113\342\360\330\342\051\153\032\160\176\044\141\223\173\117  
\003\062\045\015\105\044\053\226\264\106\152\277\112\013\367\232  
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\260\250\244\106\052\370\353\022\354\162\264\357\370\053\176\214  
\122\300\213\204\124\371\057\076\343\125\250\334\146\261\331\341  
\137\330\263\214\131\064\131\244\253\117\154\273\037\030\333\165  
\253\330\313\222\315\224\070\141\016\007\006\037\113\106\020\361  
\025\276\215\205\134\073\112\053\201\171\017\264\151\237\111\120  
\227\115\367\016\126\135\300\225\152\302\066\303\033\150\311\365  
\052\334\107\232\276\262\316\305\045\350\372\003\271\332\371\026  
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\157\072\004\274\315\170\211\013\216\017\057\243\252\117\242\033

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\022\075\026\010\100\017\361\106\114\327\252\173\010\301\012\365
\155\047\336\002\217\312\303\265\053\312\351\353\310\041\123\070
\245\314\073\330\167\067\060\242\117\331\157\321\362\100\255\101
\172\027\305\326\112\065\211\267\101\325\174\206\177\125\115\203
\112\245\163\040\300\072\257\220\361\232\044\216\331\216\161\312
\173\270\206\332\262\217\231\076\035\023\015\022\021\356\324\253
\360\351\025\166\002\344\340\337\252\040\036\133\141\205\144\100
\251\220\227\015\255\123\322\132\035\207\152\000\227\145\142\264
\276\157\152\247\365\054\102\355\062\255\266\041\236\276\274
```

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRUST\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRUST\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "Hellenic Academic and Research Institutions RootCA 2015"

# Issuer: CN=Hellenic Academic and Research Institutions RootCA 2015,O=Hellenic Academic and Research  
Institutions Cert. Authority,L=Athens,C=GR

# Serial Number: 0 (0x0)

# Subject: CN=Hellenic Academic and Research Institutions RootCA 2015,O=Hellenic Academic and Research  
Institutions Cert. Authority,L=Athens,C=GR

# Not Valid Before: Tue Jul 07 10:11:21 2015

# Not Valid After : Sat Jun 30 10:11:21 2040

# Fingerprint (SHA-256):

A0:40:92:9A:02:CE:53:B4:AC:F4:F2:FF:C6:98:1C:E4:49:6F:75:5E:6D:45:FE:0B:2A:69:2B:CD:52:52:3F:36

# Fingerprint (SHA1): 01:0C:06:95:A6:98:19:14:FF:BF:5F:C6:B0:B6:95:EA:29:E9:12:A6

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "Hellenic Academic and Research Institutions RootCA 2015"

CKA\_CERT\_SHA1\_HASH MULTILINE\_OCTAL

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\001\014\006\225\246\230\031\024\377\277\137\306\260\266\225\352
\051\351\022\246
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END

CKA\_CERT\_MD5\_HASH MULTILINE\_OCTAL

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\312\377\342\333\003\331\313\113\351\017\255\204\375\173\030\316
```

END

CKA\_ISSUER MULTILINE\_OCTAL

```
\060\201\246\061\013\060\011\006\003\125\004\006\023\002\107\122
\061\017\060\015\006\003\125\004\007\023\006\101\164\150\145\156
\163\061\104\060\102\006\003\125\004\012\023\073\110\145\154\154
\145\156\151\143\040\101\143\141\144\145\155\151\143\040\141\156
\144\040\122\145\163\145\141\162\143\150\040\111\156\163\164\151
\164\165\164\151\157\156\163\040\103\145\162\164\056\040\101\165
\164\150\157\162\151\164\171\061\100\060\076\006\003\125\004\003
\023\067\110\145\154\154\145\156\151\143\040\101\143\141\144\145
\155\151\143\040\141\156\144\040\122\145\163\145\141\162\143\150
```

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\040\111\156\163\164\151\164\165\164\151\157\156\163\040\122\157
\157\164\103\101\040\062\060\061\065
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\001\000
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "Hellenic Academic and Research Institutions ECC RootCA 2015"
#
#
# Issuer: CN=Hellenic Academic and Research Institutions ECC RootCA 2015,O=Hellenic Academic and Research
Institutions Cert. Authority,L=Athens,C=GR
# Serial Number: 0 (0x0)
# Subject: CN=Hellenic Academic and Research Institutions ECC RootCA 2015,O=Hellenic Academic and
Research Institutions Cert. Authority,L=Athens,C=GR
# Not Valid Before: Tue Jul 07 10:37:12 2015
# Not Valid After : Sat Jun 30 10:37:12 2040
# Fingerprint (SHA-256):
44:B5:45:AA:8A:25:E6:5A:73:CA:15:DC:27:FC:36:D2:4C:1C:B9:95:3A:06:65:39:B1:15:82:DC:48:7B:48:33
# Fingerprint (SHA1): 9F:F1:71:8D:92:D5:9A:F3:7D:74:97:B4:BC:6F:84:68:0B:BA:B6:66
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Hellenic Academic and Research Institutions ECC RootCA 2015"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\201\252\061\013\060\011\006\003\125\004\006\023\002\107\122
\061\017\060\015\006\003\125\004\007\023\006\101\164\150\145\156
\163\061\104\060\102\006\003\125\004\012\023\073\110\145\154\154
\145\156\151\143\040\101\143\141\144\145\155\151\143\040\141\156
\144\040\122\145\163\145\141\162\143\150\040\111\156\163\164\151
\164\165\164\151\157\156\163\040\103\145\162\164\056\040\101\165
\164\150\157\162\151\164\171\061\104\060\102\006\003\125\004\003
\023\073\110\145\154\154\145\156\151\143\040\101\143\141\144\145
\155\151\143\040\141\156\144\040\122\145\163\145\141\162\143\150
\040\111\156\163\164\151\164\165\164\151\157\156\163\040\105\103
\103\040\122\157\157\164\103\101\040\062\060\061\065
END
CKA_ID
UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL

```

\060\201\252\061\013\060\011\006\003\125\004\006\023\002\107\122  
\061\017\060\015\006\003\125\004\007\023\006\101\164\150\145\156  
\163\061\104\060\102\006\003\125\004\012\023\073\110\145\154\154  
\145\156\151\143\040\101\143\141\144\145\155\151\143\040\141\156  
\144\040\122\145\163\145\141\162\143\150\040\111\156\163\164\151  
\164\165\164\151\157\156\163\040\103\145\162\164\056\040\101\165  
\164\150\157\162\151\164\171\061\104\060\102\006\003\125\004\003  
\023\073\110\145\154\154\145\156\151\143\040\101\143\141\144\145  
\155\151\143\040\141\156\144\040\122\145\163\145\141\162\143\150  
\040\111\156\163\164\151\164\165\164\151\157\156\163\040\105\103  
\103\040\122\157\157\164\103\101\040\062\060\061\065

END

CKA\_SERIAL\_NUMBER

MULTILINE\_OCTAL

\002\001\000

END

CKA\_VALUE MULTILINE\_OCTAL

\060\202\002\303\060\202\002\112\240\003\002\001\002\002\001\000  
\060\012\006\010\052\206\110\316\075\004\003\002\060\201\252\061  
\013\060\011\006\003\125\004\006\023\002\107\122\061\017\060\015  
\006\003\125\004\007\023\006\101\164\150\145\156\163\061\104\060  
\102\006\003\125\004\012\023\073\110\145\154\154\145\156\151\143  
\040\101\143\141\144\145\155\151\143\040\141\156\144\040\122\145  
\163\145\141\162\143\150\040\111\156\163\164\151\164\165\164\151  
\157\156\163\040\103\145\162\164\056\040\101\165\164\150\157\162  
\151\164\171\061\104\060\102\006\003\125\004\003\023\073\110\145  
\154\154\145\156\151\143\040\101\143\141\144\145\155\151\143\040  
\141\156\144\040\122\145\163\145\141\162\143\150\040\111\156\163  
\164\151\164\165\164\151\157\156\163\040\105\103\103\040\122\157  
\157\164\103\101\040\062\060\061\065\060\036\027\015\061\065\060  
\067\060\067\061\060\063\067\061\062\132\027\015\064\060\060\066  
\063\060\061\060\063\067\061\062\132\060\201\252\061\013\060\011  
\006\003\125\004\006\023\002\107\122\061\017\060\015\006\003\125  
\004\007\023\006\101\164\150\145\156\163\061\104\060\102\006\003  
\125\004\012\023\073\110\145\154\154\145\156\151\143\040\101\143  
\141\144\145\155\151\143\040\141\156\144\040\122\145\163\145\141  
\162\143\150\040\111\156\163\164\151\164\165\164\151\157\156\163  
\040\103\145\162\164\056\040\101\165\164\150\157\162\151\164\171  
\061\104\060\102\006\003\125\004\003\023\073\110\145\154\154\145  
\156\151\143\040\101\143\141\144\145\155\151\143\040\141\156\144  
\040\122\145\163\145\141\162\143\150\040\111\156\163\164\151\164  
\165\164\151\157\156\163\040\105\103\103\040\122\157\157\164\103  
\101\040\062\060\061\065\060\166\060\020\006\007\052\206\110\316  
\075\002\001\006\005\053\201\004\000\042\003\142\000\004\222\240  
\101\350\113\202\204\134\342\370\061\021\231\206\144\116\011\045  
\057\235\101\057\012\256\065\117\164\225\262\121\144\153\215\153  
\346\077\160\225\360\005\104\107\246\162\070\120\166\225\002\132  
\216\256\050\236\371\055\116\231\357\054\110\157\114\045\051\350

```
\321\161\133\337\035\301\165\067\264\327\372\173\172\102\234\152
\012\126\132\174\151\013\252\200\011\044\154\176\301\106\243\102
\060\100\060\017\006\003\125\035\023\001\001\377\004\005\060\003
\001\001\377\060\016\006\003\125\035\017\001\001\377\004\004\003
\002\001\006\060\035\006\003\125\035\016\004\026\004\024\264\042
\013\202\231\044\001\016\234\273\344\016\375\277\373\227\040\223
\231\052\060\012\006\010\052\206\110\316\075\004\003\002\003\147
\000\060\144\002\060\147\316\026\142\070\242\254\142\105\247\251
\225\044\300\032\047\234\062\073\300\300\325\272\251\347\370\004
\103\123\205\356\122\041\336\235\365\045\203\076\236\130\113\057
\327\147\023\016\041\002\060\005\341\165\001\336\150\355\052\037
\115\114\011\010\015\354\113\255\144\027\050\347\165\316\105\145
\162\041\027\313\042\101\016\214\023\230\070\232\124\155\233\312
\342\174\352\002\130\042\221
```

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "Hellenic Academic and Research Institutions ECC RootCA 2015"

# Issuer: CN=Hellenic Academic and Research Institutions ECC RootCA 2015,O=Hellenic Academic and Research Institutions Cert. Authority,L=Athens,C=GR

# Serial Number: 0 (0x0)

# Subject: CN=Hellenic Academic and Research Institutions ECC RootCA 2015,O=Hellenic Academic and Research Institutions Cert. Authority,L=Athens,C=GR

# Not Valid Before: Tue Jul 07 10:37:12 2015

# Not Valid After : Sat Jun 30 10:37:12 2040

# Fingerprint (SHA-256):

44:B5:45:AA:8A:25:E6:5A:73:CA:15:DC:27:FC:36:D2:4C:1C:B9:95:3A:06:65:39:B1:15:82:DC:48:7B:48:33

#

Fingerprint (SHA1): 9F:F1:71:8D:92:D5:9A:F3:7D:74:97:B4:BC:6F:84:68:0B:BA:B6:66

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "Hellenic Academic and Research Institutions ECC RootCA 2015"

CKA\_CERT\_SHA1\_HASH MULTILINE\_OCTAL

```
\237\361\161\215\222\325\232\363\175\164\227\264\274\157\204\150
\013\272\266\146
```

END

CKA\_CERT\_MD5\_HASH MULTILINE\_OCTAL

```
\201\345\264\027\353\302\365\341\113\015\101\173\111\222\376\357
```

END

CKA\_ISSUER MULTILINE\_OCTAL

```
\060\201\252\061\013\060\011\006\003\125\004\006\023\002\107\122
\061\017\060\015\006\003\125\004\007\023\006\101\164\150\145\156
\163\061\104\060\102\006\003\125\004\012\023\073\110\145\154\154
```

```
\145\156\151\143\040\101\143\141\144\145\155\151\143\040\141\156
\144\040\122\145\163\145\141\162\143\150\040\111\156\163\164\151
\164\165\164\151\157\156\163\040\103\145\162\164\056\040\101\165
\164\150\157\162\151\164\171\061\104\060\102\006\003\125\004\003
\023\073\110\145\154\154\145\156\151\143\040\101\143\141\144\145
\155\151\143\040\141\156\144\040\122\145\163\145\141\162\143\150
\040\111\156\163\164\151\164\165\164\151\157\156\163\040\105\103
\103\040\122\157\157\164\103\101\040\062\060\061\065
```

END

CKA\_SERIAL\_NUMBER

MULTILINE\_OCTAL

```
\002\001\000
```

END

CKA\_TRUST\_SERVER\_AUTH CK\_TRUST CKT\_NSS\_TRUSTED\_DELEGATOR

CKA\_TRUST\_EMAIL\_PROTECTION CK\_TRUST CKT\_NSS\_TRUSTED\_DELEGATOR

CKA\_TRUST\_CODE\_SIGNING CK\_TRUST CKT\_NSS\_MUST\_VERIFY\_TRUST

CKA\_TRUST\_STEP\_UP\_APPROVED CK\_BBOOL CK\_FALSE

#

# Certificate "ISRG Root X1"

#

# Issuer: CN=ISRG Root X1,O=Internet Security Research Group,C=US

# Serial Number:00:82:10:cf:b0:d2:40:e3:59:44:63:e0:bb:63:82:8b:00

# Subject: CN=ISRG Root X1,O=Internet Security Research Group,C=US

# Not Valid Before: Thu Jun 04 11:04:38 2015

# Not Valid After : Mon Jun 04 11:04:38 2035

# Fingerprint (SHA-256):

96:BC:EC:06:26:49:76:F3:74:60:77:9A:CF:28:C5:A7:CF:E8:A3:C0:AA:E1:1A:8F:FC:EE:05:C0:BD:DF:08:C6

#

Fingerprint (SHA1): CA:BD:2A:79:A1:07:6A:31:F2:1D:25:36:35:CB:03:9D:43:29:A5:E8

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_CERTIFICATE

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "ISRG Root X1"

CKA\_CERTIFICATE\_TYPE CK\_CERTIFICATE\_TYPE CKC\_X\_509

CKA\_SUBJECT MULTILINE\_OCTAL

```
\060\117\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\051\060\047\006\003\125\004\012\023\040\111\156\164\145\162\156
\145\164\040\123\145\143\165\162\151\164\171\040\122\145\163\145
\141\162\143\150\040\107\162\157\165\160\061\025\060\023\006\003
\125\004\003\023\014\111\123\122\107\040\122\157\157\164\040\130
\061
```

END

CKA\_ID UTF8 "0"

CKA\_ISSUER MULTILINE\_OCTAL

```
\060\117\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\051\060\047\006\003\125\004\012\023\040\111\156\164\145\162\156
```

\145\164\040\123\145\143\165\162\151\164\171\040\122\145\163\145  
\141\162\143\150\040\107\162\157\165\160\061\025\060\023\006\003  
\125\004\003\023\014\111\123\122\107\040\122\157\157\164\040\130  
\061

END

CKA\_SERIAL\_NUMBER

MULTILINE\_OCTAL

\002\021\000\202\020\317\260\322\100\343\131\104\143\340\273\143  
\202\213\000

END

CKA\_VALUE MULTILINE\_OCTAL

\060\202\005\153\060\202\003\123\240\003\002\001\002\002\021\000  
\202\020\317\260\322\100\343\131\104\143\340\273\143\202\213\000  
\060\015\006\011\052\206\110\206\367\015\001\001\013\005\000\060  
\117\061\013\060\011\006\003\125\004\006\023\002\125\123\061\051  
\060\047\006\003\125\004\012\023\040\111\156\164\145\162\156\145  
\164\040\123\145\143\165\162\151\164\171\040\122\145\163\145\141  
\162\143\150\040\107\162\157\165\160\061\025\060\023\006\003\125  
\004\003\023\014\111\123\122\107\040\122\157\157\164\040\130\061  
\060\036\027\015\061\065\060\066\060\064\061\061\060\064\063\070  
\132\027\015\063\065\060\066\060\064\061\061\060\064\063\070\132  
\060\117\061\013\060\011\006\003\125\004\006\023\002\125\123\061  
\051\060\047\006\003\125\004\012\023\040\111\156\164\145\162\156  
\145\164\040\123\145\143\165\162\151\164\171\040\122\145\163\145  
\141\162\143\150\040\107\162\157\165\160\061\025\060\023\006\003  
\125\004\003\023\014\111\123\122\107\040\122\157\157\164\040\130  
\061\060\202\002\042\060\015\006\011\052\206\110\206\367\015\001  
\001\001\005\000\003\202\002\017\000\060\202\002\012\002\202\002  
\001\000\255\350\044\163\364\024\067\363\233\236\053\127\050\034  
\207\276\334\267\337\070\220\214\156\074\346\127\240\170\367\165  
\302\242\376\365\152\156\366\000\117\050\333\336\150\206\154\104  
\223\266\261\143\375\024\022\153\277\037\322\352\061\233\041\176  
\321\063\074\272\110\365\335\171\337\263\270\377\022\361\041\232  
\113\301\212\206\161\151\112\146\146\154\217\176\074\160\277\255  
\051\042\006\363\344\300\346\200\256\342\113\217\267\231\176\224  
\003\237\323\107\227\174\231\110\043\123\350\070\256\117\012\157  
\203\056\321\111\127\214\200\164\266\332\057\320\070\215\173\003  
\160\041\033\165\362\060\074\372\217\256\335\332\143\253\353\026  
\117\302\216\021\113\176\317\013\350\377\265\167\056\364\262\173  
\112\340\114\022\045\014\160\215\003\051\240\341\123\044\354\023  
\331\356\031\277\020\263\112\214\077\211\243\141\121\336\254\207  
\007\224\364\143\161\354\056\342\157\133\230\201\341\211\134\064  
\171\154\166\357\073\220\142\171\346\333\244\232\057\046\305\320  
\020\341\016\336\331\020\216\026\373\267\367\250\367\307\345\002  
\007\230\217\066\010\225\347\342\067\226\015\066\165\236\373\016  
\162\261\035\233\274\003\371\111\005\330\201\335\005\264\052\326  
\101\351\254\001\166\225\012\017\330\337\325\275\022\037\065\057  
\050\027\154\322\230\301\250\011\144\167\156\107\067\272\316\254



\131\136\150\235\177\162\326\211\305\006\101\051\076\131\076\335  
\046\365\044\311\021\247\132\243\114\100\037\106\241\231\265\247  
\072\121\156\206\073\236\175\162\247\022\005\170\131\355\076\121  
\170\025\013\003\217\215\320\057\005\262\076\173\112\034\113\163  
\005\022\374\306\352\340\120\023\174\103\223\164\263\312\164\347  
\216\037\001\010\320\060\324\133\161\066\264\007\272\301\060\060  
\134\110\267\202\073\230\246\175\140\212\242\243\051\202\314\272  
\275\203\004\033\242\203\003\101\241\326\005\361\033\302\266\360  
\250\174\206\073\106\250\110\052\210\334\166\232\166\277\037\152  
\245\075\031\217\353\070\363\144\336\310\053\015\012\050\377\367  
\333\342\025\102\324\042\320\047\135\341\171\376\030\347\160\210  
\255\116\346\331\213\072\306\335\047\121\156\377\274\144\365\063  
\103\117\002\003\001\000\001\243\102\060\100\060\016\006\003\125  
\035\017\001\001\377\004\004\003\002\001\006\060\017\006\003\125  
\035\023\001\001\377\004\005\060\003\001\001\377\060\035\006\003  
\125\035\016\004\026\004\024\171\264\131\346\173\266\345\344\001  
\163\200\010\210\310\032\130\366\351\233\156\060\015\006\011\052  
\206\110\206\367\015\001\001\013\005\000\003\202\002\001\000\125  
\037\130\251\274\262\250\120\320\014\261\330\032\151\040\047\051  
\010\254\141\165\134\212\156\370\202\345\151\057\325\366\126\113  
\271\270\163\020\131\323\041\227\176\347\114\161\373\262\322\140  
\255\071\250\013\352\027\041\126\205\361\120\016\131\353\316\340  
\131\351\272\311\025\357\206\235\217\204\200\366\344\351\221\220  
\334\027\233\142\033\105\360\146\225\322\174\157\302\352\073\357  
\037\317\313\326\256\047\361\251\260\310\256\375\175\176\232\372  
\042\004\353\377\331\177\352\221\053\042\261\027\016\217\362\212  
\064\133\130\330\374\001\311\124\271\270\046\314\212\210\063\211  
\114\055\204\074\202\337\356\226\127\005\272\054\273\367\304\267  
\307\116\073\202\276\061\310\042\163\163\222\321\302\200\244\071  
\071\020\063\043\202\114\074\237\206\262\125\230\035\276\051\206  
\214\042\233\236\342\153\073\127\072\202\160\115\334\011\307\211  
\313\012\007\115\154\350\135\216\311\357\316\253\307\273\265\053  
\116\105\326\112\320\046\314\345\162\312\010\152\245\225\343\025  
\241\367\244\355\311\054\137\245\373\377\254\050\002\056\276\327  
\173\273\343\161\173\220\026\323\007\136\106\123\174\067\007\102  
\214\323\304\226\234\325\231\265\052\340\225\032\200\110\256\114  
\071\007\316\314\107\244\122\225\053\272\270\373\255\322\063\123  
\175\345\035\115\155\325\241\261\307\102\157\346\100\047\065\134  
\243\050\267\007\215\347\215\063\220\347\043\237\373\120\234\171  
\154\106\325\264\025\263\226\156\176\233\014\226\072\270\122\055  
\077\326\133\341\373\010\302\204\376\044\250\243\211\332\254\152  
\341\030\052\261\250\103\141\133\323\037\334\073\215\166\362\055  
\350\215\165\337\027\063\154\075\123\373\173\313\101\137\377\334  
\242\320\141\070\341\226\270\254\135\213\067\327\165\325\063\300  
\231\021\256\235\101\301\162\165\204\276\002\101\102\137\147\044  
\110\224\321\233\047\276\007\077\271\270\117\201\164\121\341\172  
\267\355\235\043\342\276\340\325\050\004\023\074\061\003\236\335  
\172\154\217\306\007\030\306\177\336\107\216\077\050\236\004\006

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\317\245\124\064\167\275\354\211\233\351\027\103\337\133\333\137
\376\216\036\127\242\315\100\235\176\142\042\332\336\030\047
END
CKA_NSS_MOZILLA_CA_POLICY
CK_BBOOL CK_TRUE
CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE
CKA_NSS_EMAIL_DISTRICT_AFTER
CK_BBOOL CK_FALSE

# Trust for "ISRG Root X1"
# Issuer: CN=ISRG Root X1,O=Internet Security Research Group,C=US
# Serial Number:00:82:10:cf:b0:d2:40:e3:59:44:63:e0:bb:63:82:8b:00
# Subject: CN=ISRG Root X1,O=Internet Security Research Group,C=US
# Not Valid Before: Thu Jun 04 11:04:38 2015
# Not Valid After : Mon Jun 04 11:04:38 2035
# Fingerprint (SHA-256):
96:BC:EC:06:26:49:76:F3:74:60:77:9A:CF:28:C5:A7:CF:E8:A3:C0:AA:E1:1A:8F:FC:EE:05:C0:BD:DF:08:C6
# Fingerprint (SHA1): CA:BD:2A:79:A1:07:6A:31:F2:1D:25:36:35:CB:03:9D:43:29:A5:E8
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "ISRG Root X1"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\312\275\052\171\241\007\152\061\362\035\045\066\065\313\003\235
\103\051\245\350
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\014\322\371\340\332\027\163\351\355\206\115\245\343\160\347\116
END
CKA_ISSUER MULTILINE_OCTAL
\060\117\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\051\060\047\006\003\125\004\012\023\040\111\156\164\145\162\156
\145\164\040\123\145\143\165\162\151\164\171\040\122\145\163\145
\141\162\143\150\040\107\162\157\165\160\061\025\060\023\006\003
\125\004\003\023\014\111\123\122\107\040\122\157\157\164\040\130
\061
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\021\000\202\020\317\260\322\100\343\131\104\143\340\273\143
\202\213\000
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

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#
# Certificate "AC RAIZ FNMT-RCM"
#
# Issuer: OU=AC RAIZ FNMT-RCM,O=FNMT-RCM,C=ES
# Serial Number:5d:93:8d:30:67:36:c8:06:1d:1a:c7:54:84:69:07
# Subject: OU=AC RAIZ FNMT-RCM,O=FNMT-RCM,C=ES
# Not Valid Before: Wed Oct 29 15:59:56 2008
# Not Valid After : Tue Jan 01 00:00:00 2030
# Fingerprint (SHA-256):
EB:C5:57:0C:29:01:8C:4D:67:B1:AA:12:7B:AF:12:F7:03:B4:61:1E:BC:17:B7:DA:B5:57:38:94:17:9B:93:FA
#
Fingerprint (SHA1): EC:50:35:07:B2:15:C4:95:62:19:E2:A8:9A:5B:42:99:2C:4C:2C:20
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "AC RAIZ FNMT-RCM"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\073\061\013\060\011\006\003\125\004\006\023\002\105\123\061
\021\060\017\006\003\125\004\012\014\010\106\116\115\124\055\122
\103\115\061\031\060\027\006\003\125\004\013\014\020\101\103\040
\122\101\111\132\040\106\116\115\124\055\122\103\115
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\073\061\013\060\011\006\003\125\004\006\023\002\105\123\061
\021\060\017\006\003\125\004\012\014\010\106\116\115\124\055\122
\103\115\061\031\060\027\006\003\125\004\013\014\020\101\103\040
\122\101\111\132\040\106\116\115\124\055\122\103\115
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\017\135\223\215\060\147\066\310\006\035\032\307\124\204\151
\007
END
CKA_VALUE
MULTILINE_OCTAL
\060\202\005\203\060\202\003\153\240\003\002\001\002\002\017\135
\223\215\060\147\066\310\006\035\032\307\124\204\151\007\060\015
\006\011\052\206\110\206\367\015\001\001\013\005\000\060\073\061
\013\060\011\006\003\125\004\006\023\002\105\123\061\021\060\017
\006\003\125\004\012\014\010\106\116\115\124\055\122\103\115\061
\031\060\027\006\003\125\004\013\014\020\101\103\040\122\101\111
\132\040\106\116\115\124\055\122\103\115\060\036\027\015\060\070
\061\060\062\071\061\065\065\071\065\066\132\027\015\063\060\060
\061\060\061\060\060\060\060\060\132\060\073\061\013\060\011
\006\003\125\004\006\023\002\105\123\061\021\060\017\006\003\125
\004\012\014\010\106\116\115\124\055\122\103\115\061\031\060\027

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\006\003\125\004\013\014\020\101\103\040\122\101\111\132\040\106  
\116\115\124\055\122\103\115\060\202\002\042\060\015\006\011\052  
\206\110\206\367\015\001\001\001\005\000\003\202\002\017\000\060  
\202\002\012\002\202\002\001\000\272\161\200\172\114\206\156\177  
\310\023\155\300\306\175\034\000\227\217\054\014\043\273\020\232  
\100\251\032\267\207\210\370\233\126\152\373\346\173\216\213\222  
\216\247\045\135\131\021\333\066\056\267\121\027\037\251\010\037  
\004\027\044\130\252\067\112\030\337\345\071\324\127\375\327\301  
\054\221\001\221\342\042\324\003\300\130\374\167\107\354\217\076  
\164\103\272\254\064\215\115\070\166\147\216\260\310\157\060\063  
\130\161\134\264\365\153\156\324\001\120\270\023\176\154\112\243  
\111\321\040\031\356\274\300\051\030\145\247\336\376\357\335\012  
\220\041\347\032\147\222\102\020\230\137\117\060\274\076\034\105  
\264\020\327\150\100\024\300\100\372\347\167\027\172\346\013\217  
\145\133\074\331\232\122\333\265\275\236\106\317\075\353\221\005  
\002\300\226\262\166\114\115\020\226\073\222\372\234\177\017\231  
\337\276\043\065\105\036\002\134\376\265\250\233\231\045\332\136  
\363\042\303\071\365\344\052\056\323\306\037\304\154\252\305\034  
\152\001\005\112\057\322\305\301\250\064\046\135\146\245\322\002  
\041\371\030\267\006\365\116\231\157\250\253\114\121\350\317\120  
\030\305\167\310\071\011\054\111\222\062\231\250\273\027\027\171  
\260\132\305\346\243\304\131\145\107\065\203\136\251\350\065\013  
\231\273\344\315\040\306\233\112\006\071\265\150\374\042\272\356  
\125\214\053\116\352\363\261\343\374\266\231\232\325\102\372\161  
\115\010\317\207\036\152\161\175\371\323\264\351\245\161\201\173  
\302\116\107\226\245\366\166\205\243\050\217\351\200\156\201\123  
\245\155\137\270\110\371\302\371\066\246\056\111\377\270\226\302  
\214\007\263\233\210\130\374\353\033\034\336\055\160\342\227\222  
\060\241\211\343\274\125\250\047\326\113\355\220\255\213\372\143  
\045\131\055\250\065\335\312\227\063\274\345\315\307\235\321\354  
\357\136\016\112\220\006\046\143\255\271\331\065\055\007\272\166  
\145\054\254\127\217\175\364\007\224\327\201\002\226\135\243\007  
\111\325\172\320\127\371\033\347\123\106\165\252\260\171\102\313  
\150\161\010\351\140\275\071\151\316\364\257\303\126\100\307\255  
\122\242\011\344\157\206\107\212\037\353\050\047\135\203\040\257  
\004\311\154\126\232\213\106\365\002\003\001\000\001\243\201\203  
\060\201\200\060\017\006\003\125\035\023\001\001\377\004\005\060  
\003\001\001\377\060\016\006\003\125\035\017\001\001\377\004\004  
\003\002\001\006\060\035\006\003\125\035\016\004\026\004\024\367  
\175\305\375\304\350\232\033\167\144\247\365\035\240\314\277\207  
\140\232\155\060\076\006\003\125\035\040\004\067\060\065\060\063  
\006\004\125\035\040\000\060\053\060\051\006\010\053\006\001\005  
\005\007\002\001\026\035\150\164\164\160\072\057\057\167\167\167  
\056\143\145\162\164\056\146\156\155\164\056\145\163\057\144\160  
\143\163\057\060\015\006\011\052\206\110\206\367\015\001\001\013  
\005\000\003\202\002\001\000\007\220\112\337\363\043\116\360\303  
\234\121\145\233\234\042\242\212\014\205\363\163\051\153\115\376  
\001\342\251\014\143\001\277\004\147\245\235\230\137\375\001\023

\372\354\232\142\351\206\376\266\142\322\156\114\224\373\300\165  
\105\174\145\014\370\262\067\317\254\017\317\215\157\371\031\367  
\217\354\036\362\160\236\360\312\270\357\267\377\166\067\166\133  
\366\156\210\363\257\142\062\042\223\015\072\152\216\024\146\014  
\055\123\164\127\145\036\325\262\335\043\201\073\245\146\043\047  
\147\011\217\341\167\252\103\315\145\121\010\355\121\130\376\346  
\071\371\313\107\204\244\025\361\166\273\244\356\244\073\304\137  
\357\262\063\226\021\030\267\311\145\276\030\341\243\244\334\372  
\030\371\323\274\023\233\071\172\064\272\323\101\373\372\062\212  
\052\267\053\206\013\151\203\070\276\315\212\056\013\160\255\215  
\046\222\356\036\365\001\053\012\331\326\227\233\156\340\250\031  
\034\072\041\213\014\036\100\255\003\347\335\146\176\365\271\040  
\015\003\350\226\371\202\105\324\071\340\240\000\135\327\230\346  
\175\236\147\163\303\232\052\367\253\213\241\072\024\357\064\274  
\122\016\211\230\232\004\100\204\035\176\105\151\223\127\316\353  
\316\370\120\174\117\034\156\004\103\233\371\326\073\043\030\351  
\352\216\321\115\106\215\361\073\344\152\312\272\373\043\267\233  
\372\231\001\051\132\130\132\055\343\371\324\155\016\046\255\301  
\156\064\274\062\370\014\005\372\145\243\333\073\067\203\042\351  
\326\334\162\063\375\135\362\040\275\166\074\043\332\050\367\371  
\033\353\131\144\325\334\137\162\176\040\374\315\211\265\220\147  
\115\142\172\077\116\255\035\303\071\376\172\364\050\026\337\101  
\366\110\200\005\327\017\121\171\254\020\253\324\354\003\146\346  
\152\260\272\061\222\102\100\152\276\072\323\162\341\152\067\125  
\274\254\035\225\267\151\141\362\103\221\164\346\240\323\012\044  
\106\241\010\257\326\332\105\031\226\324\123\035\133\204\171\360  
\300\367\107\357\213\217\305\006\256\235\114\142\235\377\106\004  
\370\323\311\266\020\045\100\165\376\026\252\311\112\140\206\057  
\272\357\060\167\344\124\342\270\204\231\130\200\252\023\213\121  
\072\117\110\366\213\266\263

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "AC RAIZ FNMT-RCM"

# Issuer: OU=AC RAIZ FNMT-RCM,O=FNMT-RCM,C=ES

#

Serial Number:5d:93:8d:30:67:36:c8:06:1d:1a:c7:54:84:69:07

# Subject: OU=AC RAIZ FNMT-RCM,O=FNMT-RCM,C=ES

# Not Valid Before: Wed Oct 29 15:59:56 2008

# Not Valid After : Tue Jan 01 00:00:00 2030

# Fingerprint (SHA-256):

EB:C5:57:0C:29:01:8C:4D:67:B1:AA:12:7B:AF:12:F7:03:B4:61:1E:BC:17:B7:DA:B5:57:38:94:17:9B:93:FA

# Fingerprint (SHA1): EC:50:35:07:B2:15:C4:95:62:19:E2:A8:9A:5B:42:99:2C:4C:2C:20

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

```

CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "AC RAIZ FNMT-RCM"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\354\120\065\007\262\025\304\225\142\031\342\250\232\133\102\231
\054\114\054\040
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\342\011\004\264\323\275\321\240\024\375\032\322\107\304\127\035
END
CKA_ISSUER MULTILINE_OCTAL
\060\073\061\013\060\011\006\003\125\004\006\023\002\105\123\061
\021\060\017\006\003\125\004\012\014\010\106\116\115\124\055\122
\103\115\061\031\060\027\006\003\125\004\013\014\020\101\103\040
\122\101\111\132\040\106\116\115\124\055\122\103\115
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\017\135\223\215\060\147\066\310\006\035\032\307\124\204\151
\007
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "Amazon Root CA 1"
#
# Issuer: CN=Amazon Root CA 1,O=Amazon,C=US
# Serial Number:06:6c:9f:cf:99:bf:8c:0a:39:e2:f0:78:8a:43:e6:96:36:5b:ca
# Subject: CN=Amazon Root CA 1,O=Amazon,C=US
# Not Valid Before: Tue May 26 00:00:00 2015
# Not Valid After : Sun Jan 17 00:00:00 2038
# Fingerprint (SHA-256):
8E:CD:E6:88:4F:3D:87:B1:12:5B:A3:1A:C3:FC:B1:3D:70:16:DE:7F:57:CC:90:4F:E1:CB:97:C6:AE:98:19:6E
# Fingerprint (SHA1): 8D:A7:F9:65:EC:5E:FC:37:91:0F:1C:6E:59:FD:C1:CC:6A:6E:DE:16
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE
CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Amazon Root CA 1"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\071\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\017\060\015\006\003\125\004\012\023\006\101\155\141\172\157\156
\061\031\060\027\006\003\125\004\003\023\020\101\155\141\172\157

```

\156\040\122\157\157\164\040\103\101\040\061  
END  
CKA\_ID UTF8 "0"  
CKA\_ISSUER MULTILINE\_OCTAL  
\060\071\061\013\060\011\006\003\125\004\006\023\002\125\123\061  
\017\060\015\006\003\125\004\012\023\006\101\155\141\172\157\156  
\061\031\060\027\006\003\125\004\003\023\020\101\155\141\172\157  
\156\040\122\157\157\164\040\103\101\040\061  
END  
CKA\_SERIAL\_NUMBER MULTILINE\_OCTAL  
\002\023\006\154\237\317\231\277\214\012\071\342\360\170\212\103  
\346\226\066\133\312  
END  
CKA\_VALUE MULTILINE\_OCTAL  
\060\202\003\101\060\202\002\051\240\003\002\001\002\002\023\006  
\154\237\317\231\277\214\012\071\342\360\170\212\103\346\226\066  
\133\312\060\015\006\011\052\206\110\206\367\015\001\001\013\005  
\000\060\071\061\013\060\011\006\003\125\004\006\023\002\125\123  
\061\017\060\015\006\003\125\004\012\023\006\101\155\141\172\157  
\156\061\031\060\027\006\003\125\004\003\023\020\101\155\141\172  
\157\156\040\122\157\157\164\040\103\101\040\061\060\036\027\015  
\061\065\060\065\062\066\060\060\060\060\060\060\132\027\015\063  
\070\060\061\061\067\060\060\060\060\060\060\132\060\071\061\013  
\060\011\006\003\125\004\006\023\002\125\123\061\017\060\015\006  
\003\125\004\012\023\006\101\155\141\172\157\156\061\031\060\027  
\006\003\125\004\003\023\020\101\155\141\172\157\156\040\122\157  
\157\164\040\103\101\040\061\060\202\001\042\060\015\006\011\052  
\206\110\206\367\015\001\001\001\005\000\003\202\001\017\000\060  
\202\001\012\002\202\001\001\000\262\170\200\161\312\170\325\343  
\161\257\107\200\120\164\175\156\330\327\210\166\364\231\150\367  
\130\041\140\371\164\204\001\057\254\002\055\206\323\240\103\172  
\116\262\244\320\066\272\001\276\215\333\110\310\007\027\066\114  
\364\356\210\043\307\076\353\067\365\265\031\370\111\150\260\336  
\327\271\166\070\035\141\236\244\376\202\066\245\345\112\126\344  
\105\341\371\375\264\026\372\164\332\234\233\065\071\057\372\260  
\040\120\006\154\172\320\200\262\246\371\257\354\107\031\217\120  
\070\007\334\242\207\071\130\370\272\325\251\371\110\147\060\226  
\356\224\170\136\157\211\243\121\300\060\206\146\241\105\146\272  
\124\353\243\303\221\371\110\334\377\321\350\060\055\175\055\164  
\160\065\327\210\044\367\236\304\131\156\273\163\207\027\362\062  
\106\050\270\103\372\267\035\252\312\264\362\237\044\016\055\113  
\367\161\134\136\151\377\352\225\002\313\070\212\256\120\070\157  
\333\373\055\142\033\305\307\036\124\341\167\340\147\310\017\234  
\207\043\326\077\100\040\177\040\200\304\200\114\076\073\044\046  
\216\004\256\154\232\310\252\015\002\003\001\000\001\243\102\060  
\100\060\017\006\003\125\035\023\001\001\377\004\005\060\003\001  
\001\377\060\016\006\003\125\035\017\001\001\377\004\004\003\002  
\001\206\060\035\006\003\125\035\016\004\026\004\024\204\030\314

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\205\064\354\274\014\224\224\056\010\131\234\307\262\020\116\012
\010\060\015\006\011\052\206\110\206\367\015\001\001\013\005\000
\003\202\001\001\000\230\362\067\132\101\220\241\032\305\166\121
\050\040\066\043\016\256\346\050\273\252\370\224\256\110\244\060
\177\033\374\044\215\113\264\310\241\227\366\266\361\172\160\310
\123\223\314\010\050\343\230\045\317\043\244\371\336\041\323\174
\205\011\255\116\232\165\072\302\013\152\211\170\166\104\107\030
\145\154\215\101\216\073\177\232\313\364\265\247\120\327\005\054
\067\350\003\113\255\351\141\240\002\156\365\362\360\305\262\355
\133\267\334\372\224\134\167\236\023\245\177\122\255\225\362\370
\223\073\336\213\134\133\312\132\122\133\140\257\024\367\113\357
\243\373\237\100\225\155\061\124\374\102\323\307\106\037\043\255
\331\017\110\160\232\331\165\170\161\321\162\103\064\165\156\127
\131\302\002\134\046\140\051\317\043\031\026\216\210\103\245\324
\344\313\010\373\043\021\103\350\103\051\162\142\241\251\135\136
\010\324\220\256\270\330\316\024\302\320\125\362\206\366\304\223
\103\167\146\141\300\271\350\101\327\227\170\140\003\156\112\162
\256\245\321\175\272\020\236\206\154\033\212\271\131\063\370\353
\304\220\276\361\271
```

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "Amazon Root CA 1"

# Issuer: CN=Amazon Root CA 1,O=Amazon,C=US

# Serial Number:06:6c:9f:cf:99:bf:8c:0a:39:e2:f0:78:8a:43:e6:96:36:5b:ca

# Subject: CN=Amazon Root CA 1,O=Amazon,C=US

# Not Valid Before: Tue May 26 00:00:00 2015

# Not Valid After : Sun Jan 17 00:00:00 2038

# Fingerprint (SHA-256):

8E:CD:E6:88:4F:3D:87:B1:12:5B:A3:1A:C3:FC:B1:3D:70:16:DE:7F:57:CC:90:4F:E1:CB:97:C6:AE:98:19:6E

# Fingerprint (SHA1): 8D:A7:F9:65:EC:5E:FC:37:91:0F:1C:6E:59:FD:C1:CC:6A:6E:DE:16

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "Amazon

Root CA 1"

CKA\_CERT\_SHA1\_HASH MULTILINE\_OCTAL

```
\215\247\371\145\354\136\374\067\221\017\034\156\131\375\301\314
\152\156\336\026
```

END

CKA\_CERT\_MD5\_HASH MULTILINE\_OCTAL

```
\103\306\277\256\354\376\255\057\030\306\210\150\060\374\310\346
```

END

CKA\_ISSUER MULTILINE\_OCTAL



```
\060\071\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\017\060\015\006\003\125\004\012\023\006\101\155\141\172\157\156
\061\031\060\027\006\003\125\004\003\023\020\101\155\141\172\157
\156\040\122\157\157\164\040\103\101\040\061
```

END

CKA\_SERIAL\_NUMBER MULTILINE\_OCTAL

```
\002\023\006\154\237\317\231\277\214\012\071\342\360\170\212\103
\346\226\066\133\312
```

END

CKA\_TRUST\_SERVER\_AUTH CK\_TRUST CKT\_NSS\_TRUSTED\_DELEGATOR

CKA\_TRUST\_EMAIL\_PROTECTION CK\_TRUST CKT\_NSS\_TRUSTED\_DELEGATOR

CKA\_TRUST\_CODE\_SIGNING CK\_TRUST CKT\_NSS\_MUST\_VERIFY\_TRUST

CKA\_TRUST\_STEP\_UP\_APPROVED CK\_BBOOL CK\_FALSE

#

# Certificate "Amazon Root CA 2"

#

# Issuer: CN=Amazon Root CA 2,O=Amazon,C=US

# Serial Number:06:6c:9f:d2:96:35:86:9f:0a:0f:e5:86:78:f8:5b:26:bb:8a:37

#

Subject: CN=Amazon Root CA 2,O=Amazon,C=US

# Not Valid Before: Tue May 26 00:00:00 2015

# Not Valid After : Sat May 26 00:00:00 2040

# Fingerprint (SHA-256):

1B:A5:B2:AA:8C:65:40:1A:82:96:01:18:F8:0B:EC:4F:62:30:4D:83:CE:C4:71:3A:19:C3:9C:01:1E:A4:6D:B4

# Fingerprint (SHA1): 5A:8C:EF:45:D7:A6:98:59:76:7A:8C:8B:44:96:B5:78:CF:47:4B:1A

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_CERTIFICATE

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "Amazon Root CA 2"

CKA\_CERTIFICATE\_TYPE CK\_CERTIFICATE\_TYPE CKC\_X\_509

CKA\_SUBJECT MULTILINE\_OCTAL

```
\060\071\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\017\060\015\006\003\125\004\012\023\006\101\155\141\172\157\156
\061\031\060\027\006\003\125\004\003\023\020\101\155\141\172\157
\156\040\122\157\157\164\040\103\101\040\062
```

END

CKA\_ID UTF8 "0"

CKA\_ISSUER MULTILINE\_OCTAL

```
\060\071\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\017\060\015\006\003\125\004\012\023\006\101\155\141\172\157\156
\061\031\060\027\006\003\125\004\003\023\020\101\155\141\172\157
\156\040\122\157\157\164\040\103\101\040\062
```

END

CKA\_SERIAL\_NUMBER

MULTILINE\_OCTAL

```
\002\023\006\154\237\322\226\065\206\237\012\017\345\206\170\370
```

\133\046\273\212\067

END

CKA\_VALUE MULTILINE\_OCTAL

\060\202\005\101\060\202\003\051\240\003\002\001\002\002\023\006  
\154\237\322\226\065\206\237\012\017\345\206\170\370\133\046\273  
\212\067\060\015\006\011\052\206\110\206\367\015\001\001\014\005  
\000\060\071\061\013\060\011\006\003\125\004\006\023\002\125\123  
\061\017\060\015\006\003\125\004\012\023\006\101\155\141\172\157  
\156\061\031\060\027\006\003\125\004\003\023\020\101\155\141\172  
\157\156\040\122\157\157\164\040\103\101\040\062\060\036\027\015  
\061\065\060\065\062\066\060\060\060\060\060\060\132\027\015\064  
\060\060\065\062\066\060\060\060\060\060\132\060\071\061\013  
\060\011\006\003\125\004\006\023\002\125\123\061\017\060\015\006  
\003\125\004\012\023\006\101\155\141\172\157\156\061\031\060\027  
\006\003\125\004\003\023\020\101\155\141\172\157\156\040\122\157  
\157\164\040\103\101\040\062\060\202\002\042\060\015\006\011\052  
\206\110\206\367\015\001\001\001\005\000\003\202\002\017\000\060  
\202\002\012\002\202\002\001\000\255\226\237\055\234\112\114\112  
\201\171\121\231\354\212\313\153\140\121\023\274\115\155\006\374  
\260\010\215\335\031\020\152\307\046\014\065\330\300\157\040\204  
\351\224\261\233\205\003\303\133\333\112\350\310\370\220\166\331  
\133\117\343\114\350\006\066\115\314\232\254\075\014\220\053\222  
\324\006\031\140\254\067\104\171\205\201\202\255\132\067\340\015  
\314\235\246\114\122\166\352\103\235\267\004\321\120\366\125\340  
\325\322\246\111\205\351\067\351\312\176\256\134\225\115\110\232  
\077\256\040\132\155\210\225\331\064\270\122\032\103\220\260\277  
\154\005\271\266\170\267\352\320\344\072\074\022\123\142\377\112  
\362\173\276\065\005\251\022\064\343\363\144\164\142\054\075\000  
\111\132\050\376\062\104\273\207\335\145\047\002\161\073\332\112  
\367\037\332\315\367\041\125\220\117\017\354\256\202\341\237\153  
\331\105\323\273\360\137\207\355\074\054\071\206\332\077\336\354  
\162\125\353\171\243\255\333\335\174\260\272\034\316\374\336\117  
\065\166\317\017\370\170\037\152\066\121\106\047\141\133\351\236  
\317\360\242\125\175\174\045\212\157\057\264\305\317\204\056\053  
\375\015\121\020\154\373\137\033\274\033\176\305\256\073\230\001  
\061\222\377\013\127\364\232\262\271\127\351\253\357\015\166\321  
\360\356\364\316\206\247\340\156\351\264\151\241\337\151\366\063  
\306\151\056\227\023\236\245\207\260\127\020\201\067\311\123\263  
\273\177\366\222\321\234\320\030\364\222\156\332\203\117\246\143  
\231\114\245\373\136\357\041\144\172\040\137\154\144\205\025\313  
\067\351\142\014\013\052\026\334\001\056\062\332\076\113\365\236  
\072\366\027\100\224\357\236\221\010\206\372\276\143\250\132\063  
\354\313\164\103\225\371\154\151\122\066\307\051\157\374\125\003  
\134\037\373\237\275\107\353\347\111\107\225\013\116\211\042\011  
\111\340\365\141\036\361\277\056\212\162\156\200\131\377\127\072  
\371\165\062\243\116\137\354\355\050\142\331\115\163\362\314\201  
\027\140\355\315\353\334\333\247\312\305\176\002\275\362\124\010  
\124\375\264\055\011\054\027\124\112\230\321\124\341\121\147\010

\322\355\156\176\157\077\322\055\201\131\051\146\313\220\071\225  
\021\036\164\047\376\335\353\257\002\003\001\000\001\243\102\060  
\100\060\017\006\003\125\035\023\001\001\377\004\005\060\003\001  
\001\377\060\016\006\003\125\035\017\001\001\377\004\004\003\002  
\001\206\060\035\006\003\125\035\016\004\026\004\024\260\014\360  
\114\060\364\005\130\002\110\375\063\345\122\257\113\204\343\146  
\122\060\015\006\011\052\206\110\206\367\015\001\001\014\005\000  
\003\202\002\001\000\252\250\200\217\016\170\243\340\242\324\315  
\346\365\230\172\073\352\000\003\260\227\016\223\274\132\250\366  
\054\214\162\207\251\261\374\177\163\375\143\161\170\245\207\131  
\317\060\341\015\020\262\023\132\155\202\365\152\346\200\237\240  
\005\013\150\344\107\153\307\152\337\266\375\167\062\162\345\030  
\372\011\364\240\223\054\135\322\214\165\205\166\145\220\014\003  
\171\267\061\043\143\255\170\203\011\206\150\204\312\377\371\317  
\046\232\222\171\347\315\113\305\347\141\247\027\313\363\251\022  
\223\223\153\247\350\057\123\222\304\140\130\260\314\002\121\030  
\133\205\215\142\131\143\266\255\264\336\232\373\046\367\000\047  
\300\135\125\067\164\231\311\120\177\343\131\056\104\343\054\045  
\356\354\114\062\167\264\237\032\351\113\135\040\305\332\375\034  
\207\026\306\103\350\324\273\046\232\105\160\136\251\013\067\123  
\342\106\173\047\375\340\106\362\211\267\314\102\266\313\050\046  
\156\331\245\311\072\310\101\023\140\367\120\214\025\256\262\155  
\032\025\032\127\170\346\222\052\331\145\220\202\077\154\002\257  
\256\022\072\047\226\066\004\327\035\242\200\143\251\233\361\345  
\272\264\174\024\260\116\311\261\037\164\137\070\366\121\352\233  
\372\054\242\021\324\251\055\047\032\105\261\257\262\116\161\015  
\300\130\106\326\151\006\313\123\313\263\376\153\101\315\101\176  
\175\114\017\174\162\171\172\131\315\136\112\016\254\233\251\230  
\163\171\174\264\364\314\271\270\007\014\262\164\134\270\307\157  
\210\241\220\247\364\252\371\277\147\072\364\032\025\142\036\267  
\237\276\075\261\051\257\147\241\022\362\130\020\031\123\003\060  
\033\270\032\211\366\234\275\227\003\216\243\011\363\035\213\041  
\361\264\337\344\034\321\237\145\002\006\352\134\326\023\263\204  
\357\242\245\134\214\167\051\247\150\300\153\256\100\322\250\264  
\352\315\360\215\113\070\234\031\232\033\050\124\270\211\220\357  
\312\165\201\076\036\362\144\044\307\030\257\116\377\107\236\007  
\366\065\145\244\323\012\126\377\365\027\144\154\357\250\042\045  
\111\223\266\337\000\027\332\130\176\135\356\305\033\260\321\321  
\137\041\020\307\371\363\272\002\012\047\007\305\361\326\307\323  
\340\373\011\140\154

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRUST\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRUST\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "Amazon Root CA 2"

# Issuer: CN=Amazon Root CA 2,O=Amazon,C=US

```
# Serial Number:06:6c:9f:d2:96:35:86:9f:0a:0f:e5:86:78:f8:5b:26:bb:8a:37
#
Subject: CN=Amazon Root CA 2,O=Amazon,C=US
# Not Valid Before: Tue May 26 00:00:00 2015
# Not Valid After : Sat May 26 00:00:00 2040
# Fingerprint (SHA-256):
1B:A5:B2:AA:8C:65:40:1A:82:96:01:18:F8:0B:EC:4F:62:30:4D:83:CE:C4:71:3A:19:C3:9C:01:1E:A4:6D:B4
# Fingerprint (SHA1): 5A:8C:EF:45:D7:A6:98:59:76:7A:8C:8B:44:96:B5:78:CF:47:4B:1A
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Amazon Root CA 2"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\132\214\357\105\327\246\230\131\166\172\214\213\104\226\265\170
\317\107\113\032
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\310\345\215\316\250\102\342\172\300\052\134\174\236\046\277\146
END
CKA_ISSUER MULTILINE_OCTAL
\060\071\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\017\060\015\006\003\125\004\012\023\006\101\155\141\172\157\156
\061\031\060\027\006\003\125\004\003\023\020\101\155\141\172\157
\156\040\122\157\157\164\040\103\101\040\062
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\023\006\154\237\322\226\065\206\237\012\017\345\206\170\370
\133\046\273\212\067
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "Amazon Root CA 3"
#
# Issuer: CN=Amazon Root CA 3,O=Amazon,C=US
# Serial Number:06:6c:9f:d5:74:97:36:66:3f:3b:0b:9a:d9:e8:9e:76:03:f2:4a
# Subject: CN=Amazon Root CA 3,O=Amazon,C=US
# Not Valid Before: Tue May 26 00:00:00 2015
# Not Valid After : Sat May 26 00:00:00 2040
# Fingerprint (SHA-256):
18:CE:6C:FE:7B:F1:4E:60:B2:E3:47:B8:DF:E8:68:CB:31:D0:2E:BB:3A:DA:27:15:69:F5:03:43:B4:6D:B3:A4
# Fingerprint (SHA1): 0D:44:DD:8C:3C:8C:1A:1A:58:75:64:81:E9:0F:2E:2A:FF:B3:D2:6E
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
```

```
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL
CK_FALSE
CKA_LABEL UTF8 "Amazon Root CA 3"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\071\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\017\060\015\006\003\125\004\012\023\006\101\155\141\172\157\156
\061\031\060\027\006\003\125\004\003\023\020\101\155\141\172\157
\156\040\122\157\157\164\040\103\101\040\063
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\071\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\017\060\015\006\003\125\004\012\023\006\101\155\141\172\157\156
\061\031\060\027\006\003\125\004\003\023\020\101\155\141\172\157
\156\040\122\157\157\164\040\103\101\040\063
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\023\006\154\237\325\164\227\066\146\077\073\013\232\331\350
\236\166\003\362\112
END
CKA_VALUE MULTILINE_OCTAL
\060\202\001\266\060\202\001\133\240\003\002\001\002\002\023\006
\154\237\325\164\227\066\146\077\073\013\232\331\350\236\166\003
\362\112\060\012\006\010\052\206\110\316\075\004\003\002\060\071
\061\013\060\011\006\003\125\004\006\023\002\125\123\061\017\060
\015\006\003\125\004\012\023\006\101\155\141\172\157\156\061\031
\060\027\006\003\125\004\003\023\020\101\155\141\172\157\156\040
\122\157\157\164\040\103\101\040\063\060\036\027\015\061\065\060
\065\062\066\060\060\060\060\060\132\027\015\064\060\060\065
\062\066\060\060\060\060\060\060\132\060\071\061\013\060\011\006
\003\125\004\006\023\002\125\123\061\017\060\015\006\003\125\004
\012\023\006\101\155\141\172\157\156\061\031\060\027\006\003\125
\004\003\023\020\101\155\141\172\157\156\040\122\157\157\164\040
\103\101\040\063\060\131\060\023\006\007\052\206\110\316\075\002
\001\006\010\052\206\110\316\075\003\001\007\003\102\000\004\051
\227\247\306\101\177\300\015\233\350\001\033\126\306\362\122\245
\272\055\262\022\350\322\056\327\372\311\305\330\252\155\037\163
\201\073\073\230\153\071\174\063\245\305\116\206\216\200\027\150
\142\105\127\175\104\130\035\263\067\345\147\010\353\146\336\243
\102\060\100\060\017\006\003\125\035\023\001\001\377\004\005\060
\003\001\001\377\060\016\006\003\125\035\017\001\001\377\004\004
\003\002\001\206\060\035\006\003\125\035\016\004\026\004\024\253
\266\333\327\006\236\067\254\060\206\007\221\160\307\234\304\031
\261\170\300\060\012\006\010\052\206\110\316\075\004\003\002\003
\111\000\060\106\002\041\000\340\205\222\243\027\267\215\371\053
```

```
\006\245\223\254\032\230\150\141\162\372\341\241\320\373\034\170
\140\246\103\231\305\270\304\002\041\000\234\002\357\361\224\234
\263\226\371\353\306\052\370\266\054\376\072\220\024\026\327\214
\143\044\110\034\337\060\175\325\150\073
```

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "Amazon Root CA 3"

# Issuer: CN=Amazon Root CA 3,O=Amazon,C=US

# Serial Number:06:6c:9f:d5:74:97:36:66:3f:3b:0b:9a:d9:e8:9e:76:03:f2:4a

# Subject: CN=Amazon Root CA 3,O=Amazon,C=US

# Not Valid Before: Tue May 26 00:00:00 2015

# Not Valid After

: Sat May 26 00:00:00 2040

# Fingerprint (SHA-256):

18:CE:6C:FE:7B:F1:4E:60:B2:E3:47:B8:DF:E8:68:CB:31:D0:2E:BB:3A:DA:27:15:69:F5:03:43:B4:6D:B3:A4

# Fingerprint (SHA1): 0D:44:DD:8C:3C:8C:1A:1A:58:75:64:81:E9:0F:2E:2A:FF:B3:D2:6E

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "Amazon Root CA 3"

CKA\_CERT\_SHA1\_HASH MULTILINE\_OCTAL

```
\015\104\335\214\074\214\032\032\130\165\144\201\351\017\056\052
\377\263\322\156
```

END

CKA\_CERT\_MD5\_HASH MULTILINE\_OCTAL

```
\240\324\357\013\367\265\330\111\225\052\354\365\304\374\201\207
```

END

CKA\_ISSUER MULTILINE\_OCTAL

```
\060\071\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\017\060\015\006\003\125\004\012\023\006\101\155\141\172\157\156
\061\031\060\027\006\003\125\004\003\023\020\101\155\141\172\157
\156\040\122\157\157\164\040\103\101\040\063
```

END

CKA\_SERIAL\_NUMBER MULTILINE\_OCTAL

```
\002\023\006\154\237\325\164\227\066\146\077\073\013\232\331\350
\236\166\003\362\112
```

END

CKA\_TRUST\_SERVER\_AUTH

CK\_TRUST CKT\_NSS\_TRUSTED\_DELEGATOR

CKA\_TRUST\_EMAIL\_PROTECTION CK\_TRUST CKT\_NSS\_TRUSTED\_DELEGATOR

CKA\_TRUST\_CODE\_SIGNING CK\_TRUST CKT\_NSS\_MUST\_VERIFY\_TRUST

CKA\_TRUST\_STEP\_UP\_APPROVED CK\_BBOOL CK\_FALSE

```

#
# Certificate "Amazon Root CA 4"
#
# Issuer: CN=Amazon Root CA 4,O=Amazon,C=US
# Serial Number:06:6c:9f:d7:c1:bb:10:4c:29:43:e5:71:7b:7b:2c:c8:1a:c1:0e
# Subject: CN=Amazon Root CA 4,O=Amazon,C=US
# Not Valid Before: Tue May 26 00:00:00 2015
# Not Valid After : Sat May 26 00:00:00 2040
# Fingerprint (SHA-256):
E3:5D:28:41:9E:D0:20:25:CF:A6:90:38:CD:62:39:62:45:8D:A5:C6:95:FB:DE:A3:C2:2B:0B:FB:25:89:70:92
# Fingerprint (SHA1): F6:10:84:07:D6:F8:BB:67:98:0C:C2:E2:44:C2:EB:AE:1C:EF:63:BE
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Amazon Root CA 4"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\071\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\017\060\015\006\003\125\004\012\023\006\101\155\141\172\157\156
\061\031\060\027\006\003\125\004\003\023\020\101\155\141\172\157
\156\040\122\157\157\164\040\103\101\040\064
END
CKA_ID
UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\071\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\017\060\015\006\003\125\004\012\023\006\101\155\141\172\157\156
\061\031\060\027\006\003\125\004\003\023\020\101\155\141\172\157
\156\040\122\157\157\164\040\103\101\040\064
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\023\006\154\237\327\301\273\020\114\051\103\345\161\173\173
\054\310\032\301\016
END
CKA_VALUE MULTILINE_OCTAL
\060\202\001\362\060\202\001\170\240\003\002\001\002\002\023\006
\154\237\327\301\273\020\114\051\103\345\161\173\173\054\310\032
\301\016\060\012\006\010\052\206\110\316\075\004\003\003\060\071
\061\013\060\011\006\003\125\004\006\023\002\125\123\061\017\060
\015\006\003\125\004\012\023\006\101\155\141\172\157\156\061\031
\060\027\006\003\125\004\003\023\020\101\155\141\172\157\156\040
\122\157\157\164\040\103\101\040\064\060\036\027\015\061\065\060
\065\062\066\060\060\060\060\060\132\027\015\064\060\060\065
\062\066\060\060\060\060\060\060\132\060\071\061\013\060\011\006
\003\125\004\006\023\002\125\123\061\017\060\015\006\003\125\004
\012\023\006\101\155\141\172\157\156\061\031\060\027\006\003\125
\004\003\023\020\101\155\141\172\157\156\040\122\157\157\164\040

```

```
\103\101\040\064\060\166\060\020\006\007\052\206\110\316\075\002
\001\006\005\053\201\004\000\042\003\142\000\004\322\253\212\067
\117\243\123\015\376\301\212\173\113\250\173\106\113\143\260\142
\366\055\033\333\010\161\041\322\000\350\143\275\232\047\373\360
\071\156\135\352\075\245\311\201\252\243\133\040\230\105\135\026
\333\375\350\020\155\343\234\340\343\275\137\204\142\363\160\144
\063\240\313\044\057\160\272\210\241\052\240\165\370\201\256\142
\006\304\201\333\071\156\051\260\036\372\056\134\243\102\060\100
\060\017\006\003\125\035\023\001\001\377\004\005\060\003\001\001
\377\060\016\006\003\125\035\017\001\001\377\004\004\003\002\001
\206\060\035\006\003\125\035\016\004\026\004\024\323\354\307\072
\145\156\314\341\332\166\232\126\373\234\363\206\155\127\345\201
\060\012\006\010\052\206\110\316\075\004\003\003\003\150\000\060
\145\002\060\072\213\041\361\275\176\021\255\320\357\130\226\057
\326\353\235\176\220\215\053\317\146\125\303\054\343\050\251\160
\012\107\016\360\067\131\022\377\055\231\224\050\116\052\117\065
\115\063\132\002\061\000\352\165\000\116\073\304\072\224\022\221
\311\130\106\235\041\023\162\247\210\234\212\344\114\112\333\226
\324\254\213\153\153\111\022\123\063\255\327\344\276\044\374\265
\012\166\324\245\274\020
```

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "Amazon Root CA 4"

# Issuer: CN=Amazon Root CA 4,O=Amazon,C=US

# Serial Number:06:6c:9f:d7:c1:bb:10:4c:29:43:e5:71:7b:7b:2c:c8:1a:c1:0e

# Subject:

CN=Amazon Root CA 4,O=Amazon,C=US

# Not Valid Before: Tue May 26 00:00:00 2015

# Not Valid After : Sat May 26 00:00:00 2040

# Fingerprint (SHA-256):

E3:5D:28:41:9E:D0:20:25:CF:A6:90:38:CD:62:39:62:45:8D:A5:C6:95:FB:DE:A3:C2:2B:0B:FB:25:89:70:92

# Fingerprint (SHA1): F6:10:84:07:D6:F8:BB:67:98:0C:C2:E2:44:C2:EB:AE:1C:EF:63:BE

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "Amazon Root CA 4"

CKA\_CERT\_SHA1\_HASH MULTILINE\_OCTAL

```
\366\020\204\007\326\370\273\147\230\014\302\342\104\302\353\256
\034\357\143\276
```

END

CKA\_CERT\_MD5\_HASH MULTILINE\_OCTAL

```
\211\274\047\325\353\027\215\006\152\151\325\375\211\107\264\315
```

END



```

CKA_ISSUER MULTILINE_OCTAL
\060\071\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\017\060\015\006\003\125\004\012\023\006\101\155\141\172\157\156
\061\031\060\027\006\003\125\004\003\023\020\101\155\141\172\157
\156\040\122\157\157\164\040\103\101\040\064
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\023\006\154\237\327\301\273\020\114\051\103\345\161\173\173
\054\310\032\301\016
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "Symantec Class 1 Public Primary Certification Authority - G6"
#
# Issuer: CN=Symantec Class 1 Public Primary Certification Authority - G6,OU=Symantec Trust
Network,O=Symantec Corporation,C=US
# Serial Number:24:32:75:f2:1d:2f:d2:09:33:f7:b4:6a:ca:d0:f3:98
# Subject: CN=Symantec Class 1 Public Primary Certification Authority - G6,OU=Symantec Trust
Network,O=Symantec Corporation,C=US
# Not Valid Before: Tue Oct 18 00:00:00 2011
# Not Valid After : Tue Dec 01 23:59:59 2037
# Fingerprint (SHA-256):
9D:19:0B:2E:31:45:66:68:5B:E8:A8:89:E2:7A:A8:C7:D7:AE:1D:8A:AD:DB:A3:C1:EC:F9:D2:48:63:CD:34:B9
# Fingerprint (SHA1): 51:7F:61:1E:29:91:6B:53:82:FB:72:E7:44:D9:8D:C3:CC:53:6D:64
CKA_CLASS
CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Symantec Class 1 Public Primary Certification Authority - G6"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\201\224\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\035\060\033\006\003\125\004\012\023\024\123\171\155\141\156
\164\145\143\040\103\157\162\160\157\162\141\164\151\157\156\061
\037\060\035\006\003\125\004\013\023\026\123\171\155\141\156\164
\145\143\040\124\162\165\163\164\040\116\145\164\167\157\162\153
\061\105\060\103\006\003\125\004\003\023\074\123\171\155\141\156
\164\145\143\040\103\154\141\163\163\040\061\040\120\165\142\154
\151\143\040\120\162\151\155\141\162\171\040\103\145\162\164\151
\146\151\143\141\164\151\157\156\040\101\165\164\150\157\162\151
\164\171\040\055\040\107\066
END

```

CKA\_ID UTF8 "0"

CKA\_ISSUER MULTILINE\_OCTAL

\060\201\224\061\013\060\011\006\003\125\004\006\023\002\125\123  
\061\035\060\033\006\003\125\004\012\023\024\123\171\155\141\156  
\164\145\143\040\103\157\162\160\157\162\141\164\151\157\156\061  
\037\060\035\006\003\125\004\013\023\026\123\171\155\141\156\164  
\145\143\040\124\162\165\163\164\040\116\145\164\167\157\162\153  
\061\105\060\103\006\003\125\004\003\023\074\123\171\155\141\156  
\164\145\143\040\103\154\141\163\163\040\061\040\120\165\142\154  
\151\143\040\120\162\151\155\141\162\171\040\103\145\162\164\151  
\146\151\143\141\164\151\157\156\040\101\165\164\150\157\162\151  
\164\171\040\055\040\107\066

END

CKA\_SERIAL\_NUMBER

MULTILINE\_OCTAL

\002\020\044\062\165\362\035\057\322\011\063\367\264\152\312\320  
\363\230

END

CKA\_VALUE MULTILINE\_OCTAL

\060\202\003\366\060\202\002\336\240\003\002\001\002\002\020\044  
\062\165\362\035\057\322\011\063\367\264\152\312\320\363\230\060  
\015\006\011\052\206\110\206\367\015\001\001\013\005\000\060\201  
\224\061\013\060\011\006\003\125\004\006\023\002\125\123\061\035  
\060\033\006\003\125\004\012\023\024\123\171\155\141\156\164\145  
\143\040\103\157\162\160\157\162\141\164\151\157\156\061\037\060  
\035\006\003\125\004\013\023\026\123\171\155\141\156\164\145\143  
\040\124\162\165\163\164\040\116\145\164\167\157\162\153\061\105  
\060\103\006\003\125\004\003\023\074\123\171\155\141\156\164\145  
\143\040\103\154\141\163\163\040\061\040\120\165\142\154\151\143  
\040\120\162\151\155\141\162\171\040\103\145\162\164\151\146\151  
\143\141\164\151\157\156\040\101\165\164\150\157\162\151\164\171  
\040\055\040\107\066\060\036\027\015\061\061\061\060\061\070\060  
\060\060\060\060\060\132\027\015\063\067\061\062\060\061\062\063  
\065\071\065\071\132\060\201\224\061\013\060\011\006\003\125\004  
\006\023\002\125\123\061\035\060\033\006\003\125\004\012\023\024  
\123\171\155\141\156\164\145\143\040\103\157\162\160\157\162\141  
\164\151\157\156\061\037\060\035\006\003\125\004\013\023\026\123  
\171\155\141\156\164\145\143\040\124\162\165\163\164\040\116\145  
\164\167\157\162\153\061\105\060\103\006\003\125\004\003\023\074  
\123\171\155\141\156\164\145\143\040\103\154\141\163\163\040\061  
\040\120\165\142\154\151\143\040\120\162\151\155\141\162\171\040  
\103\145\162\164\151\146\151\143\141\164\151\157\156\040\101\165  
\164\150\157\162\151\164\171\040\055\040\107\066\060\202\001\042  
\060\015\006\011\052\206\110\206\367\015\001\001\001\005\000\003  
\202\001\017\000\060\202\001\012\002\202\001\001\000\307\071\327  
\111\144\251\231\202\042\114\352\105\331\007\026\343\173\364\203  
\350\231\163\372\153\261\066\340\232\167\240\100\302\201\215\001  
\307\314\214\275\217\175\367\171\343\172\114\003\115\331\373\375

\207\070\050\054\335\232\213\124\010\333\147\373\033\214\376\050  
\222\057\276\267\262\110\247\201\241\330\136\210\303\314\071\100  
\101\132\321\334\345\332\020\237\057\332\001\115\375\056\106\174  
\371\056\047\012\151\067\356\221\243\033\152\314\104\277\033\307  
\303\324\021\262\120\140\227\011\275\056\042\365\101\204\146\237  
\315\100\246\251\000\200\301\037\225\222\237\336\363\110\357\333  
\035\167\141\374\177\337\356\226\244\162\320\266\076\377\170\047  
\257\313\222\025\151\010\333\143\020\342\346\227\254\156\334\254  
\366\242\316\036\107\231\271\211\267\022\346\241\324\315\131\021  
\147\303\157\205\330\102\116\050\276\131\125\131\004\225\253\217  
\067\200\277\015\360\374\037\072\144\061\130\201\170\327\342\065  
\366\040\077\051\270\217\026\156\076\110\334\265\114\007\341\362  
\032\352\176\012\171\326\250\275\353\135\206\053\115\002\003\001  
\000\001\243\102\060\100\060\016\006\003\125\035\017\001\001\377  
\004\004\003\002\001\006\060\017\006\003\125\035\023\001\001\377  
\004\005\060\003\001\001\377\060\035\006\003\125\035\016\004\026  
\004\024\063\101\350\310\071\022\025\223\110\362\226\062\056\132  
\365\332\224\137\123\140\060\015\006\011\052\206\110\206\367\015  
\001\001\013\005\000\003\202\001\001\000\025\343\163\127\261\027  
\266\137\111\151\104\246\366\136\172\147\254\322\336\165\111\253  
\376\045\125\307\072\311\104\025\020\156\277\061\153\313\331\007  
\223\177\034\205\143\000\343\062\022\340\314\313\373\071\154\217  
\342\123\342\074\100\063\331\244\214\107\346\255\130\373\211\257  
\343\336\206\051\126\064\054\105\270\022\372\104\211\156\055\024  
\045\050\044\001\145\326\352\122\254\005\156\126\022\011\075\320  
\164\364\327\275\006\312\250\072\215\126\102\372\215\162\076\164  
\361\003\162\337\207\033\136\016\172\125\226\054\070\267\230\205  
\315\115\063\104\311\224\217\132\061\060\067\113\243\072\022\263  
\347\066\321\041\150\113\055\070\346\123\256\034\045\126\010\126  
\003\147\204\235\306\303\316\044\142\307\114\066\317\260\006\104  
\267\365\137\002\335\331\124\351\057\220\116\172\310\116\203\100  
\014\232\227\074\067\277\277\354\366\360\264\205\167\050\301\013  
\310\147\202\020\027\070\242\267\006\352\233\277\072\370\351\043  
\007\277\164\340\230\070\025\125\170\356\162\000\134\031\243\364  
\322\063\340\377\275\321\124\071\051\017

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# For Email Distrust After: Wed Aug

31 00:00:00 2022

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER MULTILINE\_OCTAL

\062\062\060\070\063\061\060\060\060\060\060\060\132

END

# Trust for "Symantec Class 1 Public Primary Certification Authority - G6"

# Issuer: CN=Symantec Class 1 Public Primary Certification Authority - G6,OU=Symantec Trust

Network,O=Symantec Corporation,C=US

```
# Serial Number:24:32:75:f2:1d:2f:d2:09:33:f7:b4:6a:ca:d0:f3:98
# Subject: CN=Symantec Class 1 Public Primary Certification Authority - G6,OU=Symantec Trust
Network,O=Symantec Corporation,C=US
# Not Valid Before: Tue Oct 18 00:00:00 2011
# Not Valid After : Tue Dec 01 23:59:59 2037
# Fingerprint (SHA-256):
9D:19:0B:2E:31:45:66:68:5B:E8:A8:89:E2:7A:A8:C7:D7:AE:1D:8A:AD:DB:A3:C1:EC:F9:D2:48:63:CD:34:B9
# Fingerprint (SHA1): 51:7F:61:1E:29:91:6B:53:82:FB:72:E7:44:D9:8D:C3:CC:53:6D:64
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Symantec Class 1 Public Primary Certification
Authority - G6"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\121\177\141\036\051\221\153\123\202\373\162\347\104\331\215\303
\314\123\155\144
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\057\250\264\332\366\144\113\036\202\371\106\075\124\032\174\260
END
CKA_ISSUER MULTILINE_OCTAL
\060\201\224\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\035\060\033\006\003\125\004\012\023\024\123\171\155\141\156
\164\145\143\040\103\157\162\160\157\162\141\164\151\157\156\061
\037\060\035\006\003\125\004\013\023\026\123\171\155\141\156\164
\145\143\040\124\162\165\163\164\040\116\145\164\167\157\162\153
\061\105\060\103\006\003\125\004\003\023\074\123\171\155\141\156
\164\145\143\040\103\154\141\163\163\040\061\040\120\165\142\154
\151\143\040\120\162\151\155\141\162\171\040\103\145\162\164\151
\146\151\143\141\164\151\157\156\040\101\165\164\150\157\162\151
\164\171\040\055\040\107\066
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\020\044\062\165\362\035\057\322\011\063\367\264\152\312\320
\363\230
END
CKA_TRUST_SERVER_AUTH
CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "Symantec Class 2 Public Primary Certification Authority - G6"
#
# Issuer: CN=Symantec Class 2 Public Primary Certification Authority - G6,OU=Symantec Trust
Network,O=Symantec Corporation,C=US
```

```
# Serial Number:64:82:9e:fc:37:1e:74:5d:fc:97:ff:97:c8:b1:ff:41
# Subject: CN=Symantec Class 2 Public Primary Certification Authority - G6,OU=Symantec Trust
Network,O=Symantec Corporation,C=US
# Not Valid Before: Tue Oct 18 00:00:00 2011
# Not Valid After : Tue Dec 01 23:59:59 2037
# Fingerprint (SHA-256):
CB:62:7D:18:B5:8A:D5:6D:DE:33:1A:30:45:6B:C6:5C:60:1A:4E:9B:18:DE:DC:EA:08:E7:DA:AA:07:81:5F:F0
# Fingerprint (SHA1): 40:B3:31:A0:E9:BF:E8:55:BC:39:93:CA:70:4F:4E:C2:51:D4:1D:8F
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL
CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Symantec Class 2 Public Primary Certification Authority - G6"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\201\224\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\035\060\033\006\003\125\004\012\023\024\123\171\155\141\156
\164\145\143\040\103\157\162\160\157\162\141\164\151\157\156\061
\037\060\035\006\003\125\004\013\023\026\123\171\155\141\156\164
\145\143\040\124\162\165\163\164\040\116\145\164\167\157\162\153
\061\105\060\103\006\003\125\004\003\023\074\123\171\155\141\156
\164\145\143\040\103\154\141\163\163\040\062\040\120\165\142\154
\151\143\040\120\162\151\155\141\162\171\040\103\145\162\164\151
\146\151\143\141\164\151\157\156\040\101\165\164\150\157\162\151
\164\171\040\055\040\107\066
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\201\224\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\035\060\033\006\003\125\004\012\023\024\123\171\155\141\156
\164\145\143\040\103\157\162\160\157\162\141\164\151\157\156\061
\037\060\035\006\003\125\004\013\023\026\123\171\155\141\156\164
\145\143\040\124\162\165\163\164\040\116\145\164\167\157\162\153
\061\105\060\103\006\003\125\004\003\023\074\123\171\155\141\156
\164\145\143\040\103\154\141\163\163\040\062\040\120\165\142\154
\151\143\040\120\162\151\155\141\162\171\040\103\145\162\164\151
\146\151\143\141\164\151\157\156\040\101\165\164\150\157\162\151
\164\171\040\055\040\107\066
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\020\144\202\236\374\067\036\164\135\374\227\377\227\310\261
\377\101
END
CKA_VALUE MULTILINE_OCTAL
\060\202\003\366\060\202\002\336\240\003\002\001\002\002\020\144
\202\236\374\067\036\164\135\374\227\377\227\310\261\377\101\060
```

\015\006\011\052\206\110\206\367\015\001\001\013\005\000\060\201  
\224\061\013\060\011\006\003\125\004\006\023\002\125\123\061\035  
\060\033\006\003\125\004\012\023\024\123\171\155\141\156\164\145  
\143\040\103\157\162\160\157\162\141\164\151\157\156\061\037\060  
\035\006\003\125\004\013\023\026\123\171\155\141\156\164\145\143  
\040\124\162\165\163\164\040\116\145\164\167\157\162\153\061\105  
\060\103\006\003\125\004\003\023\074\123\171\155\141\156\164\145  
\143\040\103\154\141\163\163\040\062\040\120\165\142\154\151\143  
\040\120\162\151\155\141\162\171\040\103\145\162\164\151\146\151  
\143\141\164\151\157\156\040\101\165\164\150\157\162\151\164\171  
\040\055\040\107\066\060\036\027\015\061\061\061\060\061\070\060  
\060\060\060\060\060\132\027\015\063\067\061\062\060\061\062\063  
\065\071\065\071\132\060\201\224\061\013\060\011\006\003\125\004  
\006\023\002\125\123\061\035\060\033\006\003\125\004\012\023\024  
\123\171\155\141\156\164\145\143\040\103\157\162\160\157\162\141  
\164\151\157\156\061\037\060\035\006\003\125\004\013\023\026\123  
\171\155\141\156\164\145\143\040\124\162\165\163\164\040\116\145  
\164\167\157\162\153\061\105\060\103\006\003\125\004\003\023\074  
\123\171\155\141\156\164\145\143\040\103\154\141\163\163\040\062  
\040\120\165\142\154\151\143\040\120\162\151\155\141\162\171\040  
\103\145\162\164\151\146\151\143\141\164\151\157\156\040\101\165  
\164\150\157\162\151\164\171\040\055\040\107\066\060\202\001\042  
\060\015\006\011\052\206\110\206\367\015\001\001\001\005\000\003  
\202\001\017\000\060\202\001\012\002\202\001\001\000\315\314\351  
\005\310\143\205\313\077\100\143\027\275\030\372\065\346\004\147  
\127\145\230\051\244\117\311\134\217\017\064\322\370\332\250\023  
\142\252\270\036\120\147\170\260\026\114\240\071\251\025\172\256  
\355\322\242\300\360\220\067\051\030\046\134\350\015\074\266\154  
\111\077\301\340\334\331\113\266\024\031\013\246\323\226\341\326  
\011\343\031\046\034\371\037\145\113\371\032\103\034\000\203\326  
\320\252\111\242\324\333\346\142\070\272\120\024\103\155\371\061  
\370\126\026\331\070\002\221\317\353\154\335\273\071\116\231\341  
\060\147\105\361\324\360\215\303\337\376\362\070\007\041\175\000  
\136\126\104\263\344\140\275\221\053\234\253\133\004\162\017\262  
\050\331\162\253\005\040\102\045\251\133\003\152\040\020\314\061  
\360\053\332\065\054\320\373\232\227\116\360\202\113\053\330\137  
\066\243\013\055\257\143\015\035\045\177\241\156\134\142\241\215  
\050\076\241\374\034\040\370\001\057\272\125\232\021\260\031\322  
\310\120\171\153\016\152\005\327\252\004\066\262\243\362\341\137  
\167\247\167\234\345\036\334\351\337\152\301\145\135\002\003\001  
\000\001\243\102\060\100\060\016\006\003\125\035\017\001\001\377  
\004\004\003\002\001\006\060\017\006\003\125\035\023\001\001\377  
\004\005\060\003\001\001\377\060\035\006\003\125\035\016\004\026  
\004\024\207\214\040\225\310\230\112\321\326\200\006\112\220\064  
\104\337\034\115\277\260\060\015\006\011\052\206\110\206\367\015  
\001\001\013\005\000\003\202\001\001\000\201\216\262\245\146\226  
\267\041\245\266\357\157\043\132\137\333\201\305\102\245\170\301  
\151\375\364\074\327\371\134\153\160\162\032\374\132\227\115\000

```
\200\210\210\202\212\303\161\015\216\305\211\233\054\355\215\013
\322\162\124\365\175\324\134\103\127\351\363\256\245\002\021\366
\166\053\201\127\335\175\332\164\060\375\124\107\366\340\026\156
\246\264\012\110\346\347\165\007\017\051\031\071\316\171\364\266
\154\305\137\231\325\037\113\372\337\155\054\074\015\124\200\160
\360\210\013\200\317\306\150\242\270\035\160\331\166\214\374\356
\245\311\317\255\035\317\231\045\127\132\142\105\313\026\153\275
\111\315\245\243\214\151\171\045\256\270\114\154\213\100\146\113
\026\077\317\002\032\335\341\154\153\007\141\152\166\025\051\231
\177\033\335\210\200\301\277\265\217\163\305\246\226\043\204\246
\050\206\044\063\152\001\056\127\163\045\266\136\277\217\346\035
\141\250\100\051\147\035\207\233\035\177\233\237\231\315\061\326
\124\276\142\273\071\254\150\022\110\221\040\245\313\261\335\376
\157\374\132\344\202\125\131\257\061\251
```

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# For Email Distrust After: Wed Aug 31 00:00:00 2022

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER MULTILINE\_OCTAL

```
\062\062\060\070\063\061\060\060\060\060\060\060\132
```

END

#

Trust for "Symantec Class 2 Public Primary Certification Authority - G6"

# Issuer: CN=Symantec Class 2 Public Primary Certification Authority - G6,OU=Symantec Trust Network,O=Symantec Corporation,C=US

# Serial Number:64:82:9e:fc:37:1e:74:5d:fc:97:ff:97:c8:b1:ff:41

# Subject: CN=Symantec Class 2 Public Primary Certification Authority - G6,OU=Symantec Trust Network,O=Symantec Corporation,C=US

# Not Valid Before: Tue Oct 18 00:00:00 2011

# Not Valid After : Tue Dec 01 23:59:59 2037

# Fingerprint (SHA-256):

CB:62:7D:18:B5:8A:D5:6D:DE:33:1A:30:45:6B:C6:5C:60:1A:4E:9B:18:DE:DC:EA:08:E7:DA:AA:07:81:5F:F0

# Fingerprint (SHA1): 40:B3:31:A0:E9:BF:E8:55:BC:39:93:CA:70:4F:4E:C2:51:D4:1D:8F

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "Symantec Class 2 Public Primary Certification Authority - G6"

CKA\_CERT\_SHA1\_HASH MULTILINE\_OCTAL

```
\100\263\061\240\351\277\350\125\274\071\223\312\160\117\116\302
\121\324\035\217
```

END

CKA\_CERT\_MD5\_HASH

MULTILINE\_OCTAL

```
\175\013\203\345\373\174\255\007\117\040\251\265\337\143\355\171
```

END

CKA\_ISSUER MULTILINE\_OCTAL

\060\201\224\061\013\060\011\006\003\125\004\006\023\002\125\123  
\061\035\060\033\006\003\125\004\012\023\024\123\171\155\141\156  
\164\145\143\040\103\157\162\160\157\162\141\164\151\157\156\061  
\037\060\035\006\003\125\004\013\023\026\123\171\155\141\156\164  
\145\143\040\124\162\165\163\164\040\116\145\164\167\157\162\153  
\061\105\060\103\006\003\125\004\003\023\074\123\171\155\141\156  
\164\145\143\040\103\154\141\163\163\040\062\040\120\165\142\154  
\151\143\040\120\162\151\155\141\162\171\040\103\145\162\164\151  
\146\151\143\141\164\151\157\156\040\101\165\164\150\157\162\151  
\164\171\040\055\040\107\066

END

CKA\_SERIAL\_NUMBER MULTILINE\_OCTAL

\002\020\144\202\236\374\067\036\164\135\374\227\377\227\310\261  
\377\101

END

CKA\_TRUST\_SERVER\_AUTH CK\_TRUST CKT\_NSS\_MUST\_VERIFY\_TRUST

CKA\_TRUST\_EMAIL\_PROTECTION CK\_TRUST CKT\_NSS\_TRUSTED\_DELEGATOR

CKA\_TRUST\_CODE\_SIGNING

CK\_TRUST CKT\_NSS\_MUST\_VERIFY\_TRUST

CKA\_TRUST\_STEP\_UP\_APPROVED CK\_BBOOL CK\_FALSE

#

# Certificate "D-TRUST Root CA 3 2013"

#

# Issuer: CN=D-TRUST Root CA 3 2013,O=D-Trust GmbH,C=DE

# Serial Number: 1039788 (0xfddac)

# Subject: CN=D-TRUST Root CA 3 2013,O=D-Trust GmbH,C=DE

# Not Valid Before: Fri Sep 20 08:25:51 2013

# Not Valid After : Wed Sep 20 08:25:51 2028

# Fingerprint (SHA-256):

A1:A8:6D:04:12:1E:B8:7F:02:7C:66:F5:33:03:C2:8E:57:39:F9:43:FC:84:B3:8A:D6:AF:00:90:35:DD:94:57

# Fingerprint (SHA1): 6C:7C:CC:E7:D4:AE:51:5F:99:08:CD:3F:F6:E8:C3:78:DF:6F:EF:97

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_CERTIFICATE

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "D-TRUST Root CA 3 2013"

CKA\_CERTIFICATE\_TYPE CK\_CERTIFICATE\_TYPE CKC\_X\_509

CKA\_SUBJECT MULTILINE\_OCTAL

\060\105\061\013\060\011\006\003\125\004\006\023\002\104\105\061  
\025\060\023\006\003\125\004\012\014\014\104\055\124\162\165\163  
\164\040\107\155\142\110\061\037\060\035\006\003\125\004\003\014  
\026\104\055\124\122\125\123\124\040\122\157\157\164\040\103\101  
\040\063\040\062\060\061\063

END

CKA\_ID



UTF8 "0"

CKA\_ISSUER MULTILINE\_OCTAL

\060\105\061\013\060\011\006\003\125\004\006\023\002\104\105\061  
\025\060\023\006\003\125\004\012\014\014\104\055\124\162\165\163  
\164\040\107\155\142\110\061\037\060\035\006\003\125\004\003\014  
\026\104\055\124\122\125\123\124\040\122\157\157\164\040\103\101  
\040\063\040\062\060\061\063

END

CKA\_SERIAL\_NUMBER MULTILINE\_OCTAL

\002\003\017\335\254

END

CKA\_VALUE MULTILINE\_OCTAL

\060\202\004\016\060\202\002\366\240\003\002\001\002\002\003\017  
\335\254\060\015\006\011\052\206\110\206\367\015\001\001\013\005  
\000\060\105\061\013\060\011\006\003\125\004\006\023\002\104\105  
\061\025\060\023\006\003\125\004\012\014\014\104\055\124\162\165  
\163\164\040\107\155\142\110\061\037\060\035\006\003\125\004\003  
\014\026\104\055\124\122\125\123\124\040\122\157\157\164\040\103  
\101\040\063\040\062\060\061\063\060\036\027\015\061\063\060\071  
\062\060\060\070\062\065\065\061\132\027\015\062\070\060\071\062  
\060\060\070\062\065\065\061\132\060\105\061\013\060\011\006\003  
\125\004\006\023\002\104\105\061\025\060\023\006\003\125\004\012  
\014\014\104\055\124\162\165\163\164\040\107\155\142\110\061\037  
\060\035\006\003\125\004\003\014\026\104\055\124\122\125\123\124  
\040\122\157\157\164\040\103\101\040\063\040\062\060\061\063\060  
\202\001\042\060\015\006\011\052\206\110\206\367\015\001\001\001  
\005\000\003\202\001\017\000\060\202\001\012\002\202\001\001\000  
\304\173\102\222\202\037\354\355\124\230\216\022\300\312\011\337  
\223\156\072\223\134\033\344\020\167\236\116\151\210\154\366\341  
\151\362\366\233\242\141\261\275\007\040\164\230\145\361\214\046  
\010\315\250\065\312\200\066\321\143\155\350\104\172\202\303\154  
\136\336\273\350\066\322\304\150\066\214\237\062\275\204\042\340  
\334\302\356\020\106\071\155\257\223\071\256\207\346\303\274\011  
\311\054\153\147\133\331\233\166\165\114\013\340\273\305\327\274  
\076\171\362\137\276\321\220\127\371\256\366\146\137\061\277\323  
\155\217\247\272\112\363\043\145\273\267\357\243\045\327\012\352  
\130\266\357\210\372\372\171\262\122\130\325\360\254\214\241\121  
\164\051\225\252\121\073\220\062\003\237\034\162\164\220\336\075  
\355\141\322\345\343\375\144\107\345\271\267\112\251\367\037\256  
\226\206\004\254\057\343\244\201\167\267\132\026\377\330\017\077  
\366\267\170\314\244\257\372\133\074\022\133\250\122\211\162\357  
\210\363\325\104\201\206\225\043\237\173\335\274\331\064\357\174  
\224\074\252\300\101\302\343\235\120\032\300\344\031\042\374\263  
\002\003\001\000\001\243\202\001\005\060\202\001\001\060\017\006  
\003\125\035\023\001\001\377\004\005\060\003\001\001\377\060\035  
\006\003\125\035\016\004\026\004\024\077\220\310\175\307\025\157  
\363\044\217\251\303\057\113\242\017\041\262\057\347\060\016\006  
\003\125\035\017\001\001\377\004\004\003\002\001\006\060\201\276

\006\003\125\035\037\004\201\266\060\201\263\060\164\240\162\240  
\160\206\156\154\144\141\160\072\057\057\144\151\162\145\143\164  
\157\162\171\056\144\055\164\162\165\163\164\056\156\145\164\057  
\103\116\075\104\055\124\122\125\123\124\045\062\060\122\157\157  
\164\045\062\060\103\101\045\062\060\063\045\062\060\062\060\061  
\063\054\117\075\104\055\124\162\165\163\164\045\062\060\107\155  
\142\110\054\103\075\104\105\077\143\145\162\164\151\146\151\143  
\141\164\145\162\145\166\157\143\141\164\151\157\156\154\151\163  
\164\060\073\240\071\240\067\206\065\150\164\164\160\072\057\057  
\143\162\154\056\144\055\164\162\165\163\164\056\156\145\164\057  
\143\162\154\057\144\055\164\162\165\163\164\137\162\157\157\164  
\137\143\141\137\063\137\062\060\061\063\056\143\162\154\060\015  
\006\011\052\206\110\206\367\015\001\001\013\005\000\003\202\001  
\001\000\016\131\016\130\344\164\110\043\104\317\064\041\265\234  
\024\032\255\232\113\267\263\210\155\134\251\027\160\360\052\237  
\215\173\371\173\205\372\307\071\350\020\010\260\065\053\137\317  
\002\322\323\234\310\013\036\356\005\124\256\067\223\004\011\175  
\154\217\302\164\274\370\034\224\276\061\001\100\055\363\044\040  
\267\204\125\054\134\310\365\164\112\020\031\213\243\307\355\065  
\326\011\110\323\016\300\272\071\250\260\106\002\260\333\306\210  
\131\302\276\374\173\261\053\317\176\142\207\125\226\314\001\157  
\233\147\041\225\065\213\370\020\374\161\033\267\113\067\151\246  
\073\326\354\213\356\301\260\363\045\311\217\222\175\241\352\303  
\312\104\277\046\245\164\222\234\343\164\353\235\164\331\313\115  
\207\330\374\264\151\154\213\240\103\007\140\170\227\351\331\223  
\174\302\106\274\233\067\122\243\355\212\074\023\251\173\123\113  
\111\232\021\005\054\013\156\126\254\037\056\202\154\340\151\147  
\265\016\155\055\331\344\300\025\361\077\372\030\162\341\025\155  
\047\133\055\060\050\053\237\110\232\144\053\231\357\362\165\111  
\137\134

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "D-TRUST Root CA 3 2013"

# Issuer: CN=D-TRUST Root

CA 3 2013,O=D-Trust GmbH,C=DE

# Serial Number: 1039788 (0xfddac)

# Subject: CN=D-TRUST Root CA 3 2013,O=D-Trust GmbH,C=DE

# Not Valid Before: Fri Sep 20 08:25:51 2013

# Not Valid After : Wed Sep 20 08:25:51 2028

# Fingerprint (SHA-256):

A1:A8:6D:04:12:1E:B8:7F:02:7C:66:F5:33:03:C2:8E:57:39:F9:43:FC:84:B3:8A:D6:AF:00:90:35:DD:94:57

# Fingerprint (SHA1): 6C:7C:CC:E7:D4:AE:51:5F:99:08:CD:3F:F6:E8:C3:78:DF:6F:EF:97

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

```

CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "D-TRUST Root CA 3 2013"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\154\174\314\347\324\256\121\137\231\010\315\077\366\350\303\170
\337\157\357\227
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\267\042\146\230\176\326\003\340\301\161\346\165\315\126\105\277
END
CKA_ISSUER MULTILINE_OCTAL
\060\105\061\013\060\011\006\003\125\004\006\023\002\104\105\061
\025\060\023\006\003\125\004\012\014\014\104\055\124\162\165\163
\164\040\107\155\142\110\061\037\060\035\006\003\125\004\003\014
\026\104\055\124\122\125\123\124\040\122\157\157\164\040\103\101
\040\063\040\062\060\061\063
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\003\017\335\254
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "TUBITAK Kamu SM SSL Kok Sertifikasi - Surum 1"
#
# Issuer: CN=TUBITAK Kamu SM SSL Kok Sertifikasi - Surum 1,OU=Kamu Sertifikasyon Merkezi - Kamu
SM,O=Turkiye Bilimsel ve Teknolojik Arastirma Kurumu - TUBITAK,L=Gebze - Kocaeli,C=TR
# Serial Number: 1 (0x1)
# Subject: CN=TUBITAK Kamu SM SSL Kok Sertifikasi - Surum 1,OU=Kamu Sertifikasyon Merkezi - Kamu
SM,O=Turkiye Bilimsel ve Teknolojik Arastirma Kurumu - TUBITAK,L=Gebze - Kocaeli,C=TR
# Not Valid Before: Mon Nov 25 08:25:55 2013
# Not Valid After : Sun Oct 25 08:25:55 2043
# Fingerprint (SHA-256):
46:ED:C3:68:90:46:D5:3A:45:3F:B3:10:4A:B8:0D:CA:EC:65:8B:26:60:EA:16:29:DD:7E:86:79:90:64:87:16
#
Fingerprint (SHA1): 31:43:64:9B:EC:CE:27:EC:ED:3A:3F:0B:8F:0D:E4:E8:91:DD:EE:CA
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "TUBITAK Kamu SM SSL Kok Sertifikasi - Surum 1"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\201\322\061\013\060\011\006\003\125\004\006\023\002\124\122

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\061\030\060\026\006\003\125\004\007\023\017\107\145\142\172\145  
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\125\004\012\023\071\124\165\162\153\151\171\145\040\102\151\154  
\151\155\163\145\154\040\166\145\040\124\145\153\156\157\154\157  
\152\151\153\040\101\162\141\163\164\151\162\155\141\040\113\165  
\162\165\155\165\040\055\040\124\125\102\111\124\101\113\061\055  
\060\053\006\003\125\004\013\023\044\113\141\155\165\040\123\145  
\162\164\151\146\151\153\141\163\171\157\156\040\115\145\162\153  
\145\172\151\040\055\040\113\141\155\165\040\123\115\061\066\060  
\064\006\003\125\004\003\023\055\124\125\102\111\124\101\113\040  
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\123\145\162\164\151\146\151\153\141\163\151\040\055\040\123\165  
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END

CKA\_ID

UTF8 "0"

CKA\_ISSUER MULTILINE\_OCTAL

\060\201\322\061\013\060\011\006\003\125\004\006\023\002\124\122  
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\125\004\012\023\071\124\165\162\153\151\171\145\040\102\151\154  
\151\155\163\145\154\040\166\145\040\124\145\153\156\157\154\157  
\152\151\153\040\101\162\141\163\164\151\162\155\141\040\113\165  
\162\165\155\165\040\055\040\124\125\102\111\124\101\113\061\055  
\060\053\006\003\125\004\013\023\044\113\141\155\165\040\123\145  
\162\164\151\146\151\153\141\163\171\157\156\040\115\145\162\153  
\145\172\151\040\055\040\113\141\155\165\040\123\115\061\066\060  
\064\006\003\125\004\003\023\055\124\125\102\111\124\101\113\040  
\113\141\155\165\040\123\115\040\123\123\114\040\113\157\153\040  
\123\145\162\164\151\146\151\153\141\163\151\040\055\040\123\165  
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END

CKA\_SERIAL\_NUMBER

MULTILINE\_OCTAL

\002\001\001

END

CKA\_VALUE MULTILINE\_OCTAL

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\030\060\026\006\003\125\004\007\023\017\107\145\142\172\145\040  
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\004\012\023\071\124\165\162\153\151\171\145\040\102\151\154\151  
\155\163\145\154\040\166\145\040\124\145\153\156\157\154\157\152  
\151\153\040\101\162\141\163\164\151\162\155\141\040\113\165\162  
\165\155\165\040\055\040\124\125\102\111\124\101\113\061\055\060  
\053\006\003\125\004\013\023\044\113\141\155\165\040\123\145\162  
\164\151\146\151\153\141\163\171\157\156\040\115\145\162\153\145

\172\151\040\055\040\113\141\155\165\040\123\115\061\066\060\064  
\006\003\125\004\003\023\055\124\125\102\111\124\101\113\040\113  
\141\155\165\040\123\115\040\123\123\114\040\113\157\153\040\123  
\145\162\164\151\146\151\153\141\163\151\040\055\040\123\165\162  
\165\155\040\061\060\036\027\015\061\063\061\061\062\065\060\070  
\062\065\065\065\132\027\015\064\063\061\060\062\065\060\070\062  
\065\065\065\132\060\201\322\061\013\060\011\006\003\125\004\006  
\023\002\124\122\061\030\060\026\006\003\125\004\007\023\017\107  
\145\142\172\145\040\055\040\113\157\143\141\145\154\151\061\102  
\060\100\006\003\125\004\012\023\071\124\165\162\153\151\171\145  
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\156\157\154\157\152\151\153\040\101\162\141\163\164\151\162\155  
\141\040\113\165\162\165\155\165\040\055\040\124\125\102\111\124  
\101\113\061\055\060\053\006\003\125\004\013\023\044\113\141\155  
\165\040\123\145\162\164\151\146\151\153\141\163\171\157\156\040  
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\115\061\066\060\064\006\003\125\004\003\023\055\124\125\102\111  
\124\101\113\040\113\141\155\165\040\123\115\040\123\123\114\040  
\113\157\153\040\123\145\162\164\151\146\151\153\141\163\151\040  
\055\040\123\165\162\165\155\040\061\060\202\001\042\060\015\006  
\011\052\206\110\206\367\015\001\001\001\005\000\003\202\001\017  
\000\060\202\001\012\002\202\001\001\000\257\165\060\063\252\273  
\153\323\231\054\022\067\204\331\215\173\227\200\323\156\347\377  
\233\120\225\076\220\225\126\102\327\031\174\046\204\215\222\372  
\001\035\072\017\342\144\070\267\214\274\350\210\371\213\044\253  
\056\243\365\067\344\100\216\030\045\171\203\165\037\073\377\154  
\250\305\306\126\370\264\355\212\104\243\253\154\114\374\035\320  
\334\357\150\275\317\344\252\316\360\125\367\242\064\324\203\153  
\067\174\034\302\376\265\003\354\127\316\274\264\265\305\355\000  
\017\123\067\052\115\364\117\014\203\373\206\317\313\376\214\116  
\275\207\371\247\213\041\127\234\172\337\003\147\211\054\235\227  
\141\247\020\270\125\220\177\016\055\047\070\164\337\347\375\332  
\116\022\343\115\025\042\002\310\340\340\374\017\255\212\327\311  
\124\120\314\073\017\312\026\200\204\320\121\126\303\216\126\177  
\211\042\063\057\346\205\012\275\245\250\033\066\336\323\334\054  
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\102\060\100\060\035\006\003\125\035\016\004\026\004\024\145\077  
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\127\310\060\016\006\003\125\035\017\001\001\377\004\004\003\002  
\001\006\060\017\006\003\125\035\023\001\001\377\004\005\060\003  
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\134\113\136\317\153\036\152\011\322\042\251\022\307\136\127\175  
\163\126\144\200\204\172\223\344\011\271\020\315\237\052\047\341  
\000\167\276\110\310\065\250\201\237\344\270\054\311\177\016\260  
\322\113\067\135\352\271\325\013\136\064\275\364\163\051\303\355

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\046\025\234\176\010\123\212\130\215\320\113\050\337\301\263\337
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\375\362\015\272\256\271\331\252\306\153\371\223\273\256\253\270
\227\074\003\032\272\103\306\226\271\105\162\070\263\247\241\226
\075\221\173\176\300\041\123\114\207\355\362\013\124\225\121\223
\325\042\245\015\212\361\223\016\076\124\016\260\330\311\116\334
\362\061\062\126\352\144\371\352\265\235\026\146\102\162\363\177
\323\261\061\103\374\244\216\027\361\155\043\253\224\146\370\255
\373\017\010\156\046\055\177\027\007\011\262\214\373\120\300\237
\226\215\317\266\375\000\235\132\024\232\277\002\104\365\301\302
\237\042\136\242\017\241\343
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END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL

CK\_FALSE

# Trust for "TUBITAK Kamu SM SSL Kok Sertifikasi - Surum 1"

# Issuer: CN=TUBITAK Kamu SM SSL Kok Sertifikasi - Surum 1,OU=Kamu Sertifikasyon Merkezi - Kamu SM,O=Turkiye Bilimsel ve Teknolojik Arastirma Kurumu - TUBITAK,L=Gebze - Kocaeli,C=TR

# Serial Number: 1 (0x1)

# Subject: CN=TUBITAK Kamu SM SSL Kok Sertifikasi - Surum 1,OU=Kamu Sertifikasyon Merkezi - Kamu SM,O=Turkiye Bilimsel ve Teknolojik Arastirma Kurumu - TUBITAK,L=Gebze - Kocaeli,C=TR

# Not Valid Before: Mon Nov 25 08:25:55 2013

# Not Valid After : Sun Oct 25 08:25:55 2014

# Fingerprint (SHA-256):

46:ED:C3:68:90:46:D5:3A:45:3F:B3:10:4A:B8:0D:CA:EC:65:8B:26:60:EA:16:29:DD:7E:86:79:90:64:87:16

# Fingerprint (SHA1): 31:43:64:9B:EC:CE:27:EC:ED:3A:3F:0B:8F:0D:E4:E8:91:DD:EE:CA

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "TUBITAK Kamu SM SSL Kok Sertifikasi - Surum 1"

CKA\_CERT\_SHA1\_HASH MULTILINE\_OCTAL

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\061\103\144\233\354\316\047\354\355\072\077\013\217\015\344\350
\221\335\356\312
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END

CKA\_CERT\_MD5\_HASH

MULTILINE\_OCTAL

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\334\000\201\334\151\057\076\057\260\073\366\075\132\221\216\111
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END

CKA\_ISSUER MULTILINE\_OCTAL

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\060\201\322\061\013\060\011\006\003\125\004\006\023\002\124\122
\061\030\060\026\006\003\125\004\007\023\017\107\145\142\172\145
\040\055\040\113\157\143\141\145\154\151\061\102\060\100\006\003
\125\004\012\023\071\124\165\162\153\151\171\145\040\102\151\154
```

\151\155\163\145\154\040\166\145\040\124\145\153\156\157\154\157  
\152\151\153\040\101\162\141\163\164\151\162\155\141\040\113\165  
\162\165\155\165\040\055\040\124\125\102\111\124\101\113\061\055  
\060\053\006\003\125\004\013\023\044\113\141\155\165\040\123\145  
\162\164\151\146\151\153\141\163\171\157\156\040\115\145\162\153  
\145\172\151\040\055\040\113\141\155\165\040\123\115\061\066\060  
\064\006\003\125\004\003\023\055\124\125\102\111\124\101\113\040  
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\123\145\162\164\151\146\151\153\141\163\151\040\055\040\123\165  
\162\165\155\040\061

END

CKA\_SERIAL\_NUMBER

MULTILINE\_OCTAL

\002\001\001

END

CKA\_TRUST\_SERVER\_AUTH CK\_TRUST CKT\_NSS\_TRUSTED\_DELEGATOR

CKA\_TRUST\_EMAIL\_PROTECTION CK\_TRUST CKT\_NSS\_MUST\_VERIFY\_TRUST

CKA\_TRUST\_CODE\_SIGNING CK\_TRUST CKT\_NSS\_MUST\_VERIFY\_TRUST

CKA\_TRUST\_STEP\_UP\_APPROVED CK\_BBOOL CK\_FALSE

#

# Certificate "GDCA TrustAUTH R5 ROOT"

#

# Issuer: CN=GDCA TrustAUTH R5 ROOT,O="GUANG DONG CERTIFICATE AUTHORITY  
CO.,LTD.",C=CN

# Serial Number:7d:09:97:fe:f0:47:ea:7a

# Subject: CN=GDCA TrustAUTH R5 ROOT,O="GUANG DONG CERTIFICATE AUTHORITY  
CO.,LTD.",C=CN

# Not Valid Before: Wed Nov 26 05:13:15 2014

# Not Valid After : Mon Dec 31 15:59:59 2040

# Fingerprint (SHA-256):

BF:FF:8F:D0:44:33:48:7D:6A:8A:A6:0C:1A:29:76:7A:9F:C2:BB:B0:5E:42:0F:71:3A:13:B9:92:89:1D:38:93

# Fingerprint (SHA1): 0F:36:38:5B:81:1A:25:C3:9B:31:4E:83:CA:E9:34:66:70:CC:74:B4

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_CERTIFICATE

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE

CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "GDCA TrustAUTH R5 ROOT"

CKA\_CERTIFICATE\_TYPE CK\_CERTIFICATE\_TYPE CKC\_X\_509

CKA\_SUBJECT MULTILINE\_OCTAL

\060\142\061\013\060\011\006\003\125\004\006\023\002\103\116\061  
\062\060\060\006\003\125\004\012\014\051\107\125\101\116\107\040  
\104\117\116\107\040\103\105\122\124\111\106\111\103\101\124\105  
\040\101\125\124\110\117\122\111\124\131\040\103\117\056\054\114  
\124\104\056\061\037\060\035\006\003\125\004\003\014\026\107\104  
\103\101\040\124\162\165\163\164\101\125\124\110\040\122\065\040  
\122\117\117\124

END

CKA\_ID UTF8 "0"

CKA\_ISSUER MULTILINE\_OCTAL

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\062\060\060\006\003\125\004\012\014\051\107\125\101\116\107\040  
\104\117\116\107\040\103\105\122\124\111\106\111\103\101\124\105  
\040\101\125\124\110\117\122\111\124\131\040\103\117\056\054\114  
\124\104\056\061\037\060\035\006\003\125\004\003\014\026\107\104  
\103\101\040\124\162\165\163\164\101\125\124\110\040\122\065\040  
\122\117\117\124

END

CKA\_SERIAL\_NUMBER

MULTILINE\_OCTAL

\002\010\175\011\227\376\360\107\352\172

END

CKA\_VALUE MULTILINE\_OCTAL

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\006\023\002\103\116\061\062\060\060\006\003\125\004\012\014\051  
\107\125\101\116\107\040\104\117\116\107\040\103\105\122\124\111  
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\004\003\014\026\107\104\103\101\040\124\162\165\163\164\101\125  
\124\110\040\122\065\040\122\117\117\124\060\036\027\015\061\064  
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\256\177\367\206\075\162\172\353\245\373\131\116\247\353\225\214  
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\011\364\054\271\132\146\052\260\027\233\236\036\166\235\112\146  
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\143\073\343\071\030\043\347\147\165\024\325\165\127\222\067\275  
\276\152\033\046\120\362\066\046\006\220\305\160\001\144\155\166  
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\072\101\165\027\314\053\226\167\052\222\041\036\331\225\166\040  
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\057\175\022\200\267\123\060\106\136\113\124\231\017\147\311\245  
\310\362\040\301\202\354\235\021\337\302\002\373\032\073\321\355  
\040\232\357\145\144\222\020\015\052\342\336\160\361\030\147\202  
\214\141\336\270\274\321\057\234\373\017\320\053\355\033\166\271  
\344\071\125\370\370\241\035\270\252\200\000\114\202\347\262\177  
\011\270\274\060\240\057\015\365\122\236\216\367\222\263\012\000  
\035\000\124\227\006\340\261\007\331\307\017\134\145\175\074\155  
\131\127\344\355\245\215\351\100\123\237\025\113\240\161\366\032  
\041\343\332\160\006\041\130\024\207\205\167\171\252\202\171\002  
\003\001\000\001\243\102\060\100\060\035\006\003\125\035\016\004  
\026\004\024\342\311\100\237\115\316\350\232\241\174\317\016\077  
\145\305\051\210\152\031\121\060\017\006\003\125\035\023\001\001  
\377\004\005\060\003\001\001\377\060\016\006\003\125\035\017\001  
\001\377\004\004\003\002\001\206\060\015\006\011\052\206\110\206  
\367\015\001\001\013\005\000\003\202\002\001\000\321\111\127\340  
\247\314\150\130\272\001\017\053\031\315\215\260\141\105\254\021  
\355\143\120\151\370\037\177\276\026\217\375\235\353\013\252\062  
\107\166\322\147\044\355\275\174\063\062\227\052\307\005\206\146  
\015\027\175\024\025\033\324\353\375\037\232\366\136\227\151\267  
\032\045\244\012\263\221\077\137\066\254\213\354\127\250\076\347  
\201\212\030\127\071\205\164\032\102\307\351\133\023\137\217\371  
\010\351\222\164\215\365\107\322\253\073\326\373\170\146\116\066  
\175\371\351\222\351\004\336\375\111\143\374\155\373\024\161\223  
\147\057\107\112\267\271\377\036\052\163\160\106\060\277\132\362  
\057\171\245\341\215\014\331\371\262\143\067\214\067\145\205\160  
\152\134\133\011\162\271\255\143\074\261\335\370\374\062\277\067  
\206\344\273\216\230\047\176\272\037\026\341\160\021\362\003\337  
\045\142\062\047\046\030\062\204\237\377\000\072\023\272\232\115  
\364\117\270\024\160\042\261\312\053\220\316\051\301\160\364\057  
\235\177\362\220\036\326\132\337\267\106\374\346\206\372\313\340  
\040\166\172\272\246\313\365\174\336\142\245\261\213\356\336\202  
\146\212\116\072\060\037\077\200\313\255\047\272\014\136\327\320  
\261\126\312\167\161\262\265\165\241\120\251\100\103\027\302\050  
\331\317\122\213\133\310\143\324\102\076\240\063\172\106\056\367  
\012\040\106\124\176\152\117\061\361\201\176\102\164\070\145\163  
\047\356\306\174\270\216\327\245\072\327\230\241\234\214\020\125  
\323\333\113\354\100\220\362\315\156\127\322\142\016\174\127\223  
\261\247\155\315\235\203\273\052\347\345\266\073\161\130\255\375

```
\321\105\274\132\221\356\123\025\157\323\105\011\165\156\272\220
\135\036\004\317\067\337\036\250\146\261\214\346\040\152\357\374
\110\116\164\230\102\257\051\157\056\152\307\373\175\321\146\061
\042\314\206\000\176\146\203\014\102\364\275\064\222\303\032\352
\117\312\176\162\115\013\160\214\246\110\273\246\241\024\366\373
\130\104\231\024\256\252\013\223\151\240\051\045\112\245\313\053
\335\212\146\007\026\170\025\127\161\033\354\365\107\204\363\236
\061\067\172\325\177\044\255\344\274\375\375\314\156\203\350\014
\250\267\101\154\007\335\275\074\206\227\057\322
```

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER

CK\_BBOOL CK\_FALSE

# Trust for "GDCA TrustAUTH R5 ROOT"

# Issuer: CN=GDCA TrustAUTH R5 ROOT,O="GUANG DONG CERTIFICATE AUTHORITY  
CO.,LTD.",C=CN

# Serial Number:7d:09:97:fe:f0:47:ea:7a

# Subject: CN=GDCA TrustAUTH R5 ROOT,O="GUANG DONG CERTIFICATE AUTHORITY  
CO.,LTD.",C=CN

# Not Valid Before: Wed Nov 26 05:13:15 2014

# Not Valid After : Mon Dec 31 15:59:59 2040

# Fingerprint (SHA-256):

BF:FF:8F:D0:44:33:48:7D:6A:8A:A6:0C:1A:29:76:7A:9F:C2:BB:B0:5E:42:0F:71:3A:13:B9:92:89:1D:38:93

# Fingerprint (SHA1): 0F:36:38:5B:81:1A:25:C3:9B:31:4E:83:CA:E9:34:66:70:CC:74:B4

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "GDCA TrustAUTH R5 ROOT"

CKA\_CERT\_SHA1\_HASH MULTILINE\_OCTAL

```
\017\066\070\133\201\032\045\303\233\061\116\203\312\351\064\146
\160\314\164\264
```

END

CKA\_CERT\_MD5\_HASH MULTILINE\_OCTAL

```
\143\314\331\075\064\065\134\157\123\243\342\010\160\110\037\264
```

END

CKA\_ISSUER MULTILINE\_OCTAL

```
\060\142\061\013\060\011\006\003\125\004\006\023\002\103\116\061
\062\060\060\006\003\125\004\012\014\051\107\125\101\116\107\040
\104\117\116\107\040\103\105\122\124\111\106\111\103\101\124\105
\040\101\125\124\110\117\122\111\124\131\040\103\117\056\054\114
\124\104\056\061\037\060\035\006\003\125\004\003\014\026\107\104
\103\101\040\124\162\165\163\164\101\125\124\110\040\122\065\040
\122\117\117\124
```

END

```

CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\010\175\011\227\376\360\107\352\172
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "TrustCor RootCert CA-1"
#
# Issuer: CN=TrustCor RootCert CA-1,OU=TrustCor Certificate Authority,O=TrustCor Systems S. de
R.L.,L=Panama City,ST=Panama,C=PA
# Serial Number:00:da:9b:ec:71:f3:03:b0:19
# Subject: CN=TrustCor RootCert CA-1,OU=TrustCor Certificate Authority,O=TrustCor
Systems S. de R.L.,L=Panama City,ST=Panama,C=PA
# Not Valid Before: Thu Feb 04 12:32:16 2016
# Not Valid After : Mon Dec 31 17:23:16 2029
# Fingerprint (SHA-256):
D4:0E:9C:86:CD:8F:E4:68:C1:77:69:59:F4:9E:A7:74:FA:54:86:84:B6:C4:06:F3:90:92:61:F4:DC:E2:57:5C
# Fingerprint (SHA1): FF:BD:CD:E7:82:C8:43:5E:3C:6F:26:86:5C:CA:A8:3A:45:5B:C3:0A
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "TrustCor RootCert CA-1"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\201\244\061\013\060\011\006\003\125\004\006\023\002\120\101
\061\017\060\015\006\003\125\004\010\014\006\120\141\156\141\155
\141\061\024\060\022\006\003\125\004\007\014\013\120\141\156\141
\155\141\040\103\151\164\171\061\044\060\042\006\003\125\004\012
\014\033\124\162\165\163\164\103\157\162\040\123\171\163\164\145
\155\163\040\123\056\040\144\145\040\122\056\114\056\061\047\060
\045\006\003\125\004\013\014\036\124\162\165\163\164\103\157\162
\040\103\145\162\164\151\146\151\143\141\164\145\040\101\165\164
\150\157\162\151\164\171\061\037\060\035\006\003\125\004\003\014
\026\124\162\165\163\164\103\157\162\040\122\157\157\164\103\145
\162\164\040\103\101\055\061
END
CKA_ID
UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\201\244\061\013\060\011\006\003\125\004\006\023\002\120\101
\061\017\060\015\006\003\125\004\010\014\006\120\141\156\141\155
\141\061\024\060\022\006\003\125\004\007\014\013\120\141\156\141
\155\141\040\103\151\164\171\061\044\060\042\006\003\125\004\012

```

\014\033\124\162\165\163\164\103\157\162\040\123\171\163\164\145  
\155\163\040\123\056\040\144\145\040\122\056\114\056\061\047\060  
\045\006\003\125\004\013\014\036\124\162\165\163\164\103\157\162  
\040\103\145\162\164\151\146\151\143\141\164\145\040\101\165\164  
\150\157\162\151\164\171\061\037\060\035\006\003\125\004\003\014  
\026\124\162\165\163\164\103\157\162\040\122\157\157\164\103\145  
\162\164\040\103\101\055\061

END

CKA\_SERIAL\_NUMBER

MULTILINE\_OCTAL

\002\011\000\332\233\354\161\363\003\260\031

END

CKA\_VALUE MULTILINE\_OCTAL

\060\202\004\060\060\202\003\030\240\003\002\001\002\002\011\000  
\332\233\354\161\363\003\260\031\060\015\006\011\052\206\110\206  
\367\015\001\001\013\005\000\060\201\244\061\013\060\011\006\003  
\125\004\006\023\002\120\101\061\017\060\015\006\003\125\004\010  
\014\006\120\141\156\141\155\141\061\024\060\022\006\003\125\004  
\007\014\013\120\141\156\141\155\141\040\103\151\164\171\061\044  
\060\042\006\003\125\004\012\014\033\124\162\165\163\164\103\157  
\162\040\123\171\163\164\145\155\163\040\123\056\040\144\145\040  
\122\056\114\056\061\047\060\045\006\003\125\004\013\014\036\124  
\162\165\163\164\103\157\162\040\103\145\162\164\151\146\151\143  
\141\164\145\040\101\165\164\150\157\162\151\164\171\061\037\060  
\035\006\003\125\004\003\014\026\124\162\165\163\164\103\157\162  
\040\122\157\157\164\103\145\162\164\040\103\101\055\061\060\036  
\027\015\061\066\060\062\060\064\061\062\063\062\061\066\132\027  
\015\062\071\061\062\063\061\061\067\062\063\061\066\132\060\201  
\244\061\013\060\011\006\003\125\004\006\023\002\120\101\061\017  
\060\015\006\003\125\004\010\014\006\120\141\156\141\155\141\061  
\024\060\022\006\003\125\004\007\014\013\120\141\156\141\155\141  
\040\103\151\164\171\061\044\060\042\006\003\125\004\012\014\033  
\124\162\165\163\164\103\157\162\040\123\171\163\164\145\155\163  
\040\123\056\040\144\145\040\122\056\114\056\061\047\060\045\006  
\003\125\004\013\014\036\124\162\165\163\164\103\157\162\040\103  
\145\162\164\151\146\151\143\141\164\145\040\101\165\164\150\157  
\162\151\164\171\061\037\060\035\006\003\125\004\003\014\026\124  
\162\165\163\164\103\157\162\040\122\157\157\164\103\145\162\164  
\040\103\101\055\061\060\202\001\042\060\015\006\011\052\206\110  
\206\367\015\001\001\001\005\000\003\202\001\017\000\060\202\001  
\012\002\202\001\001\000\277\216\267\225\342\302\046\022\153\063  
\031\307\100\130\012\253\131\252\215\000\243\374\200\307\120\173  
\216\324\040\046\272\062\022\330\043\124\111\045\020\042\230\235  
\106\322\301\311\236\116\033\056\054\016\070\363\032\045\150\034  
\246\132\005\346\036\213\110\277\230\226\164\076\151\312\351\265  
\170\245\006\274\325\000\136\011\012\362\047\172\122\374\055\325  
\261\352\264\211\141\044\363\032\023\333\251\317\122\355\014\044  
\272\271\236\354\176\000\164\372\223\255\154\051\222\256\121\264

\273\323\127\277\263\363\250\215\234\364\044\113\052\326\231\236  
\364\236\376\300\176\102\072\347\013\225\123\332\267\150\016\220  
\114\373\160\077\217\112\054\224\363\046\335\143\151\251\224\330  
\020\116\305\107\010\220\231\033\027\115\271\154\156\357\140\225  
\021\216\041\200\265\275\240\163\330\320\262\167\304\105\352\132  
\046\373\146\166\166\370\006\037\141\155\017\125\305\203\267\020  
\126\162\006\007\245\363\261\032\003\005\144\016\235\132\212\326  
\206\160\033\044\336\376\050\212\053\320\152\260\374\172\242\334  
\262\171\016\213\145\017\002\003\001\000\001\243\143\060\141\060  
\035\006\003\125\035\016\004\026\004\024\356\153\111\074\172\077  
\015\343\261\011\267\212\310\253\031\237\163\063\120\347\060\037  
\006\003\125\035\043\004\030\060\026\200\024\356\153\111\074\172  
\077\015\343\261\011\267\212\310\253\031\237\163\063\120\347\060  
\017\006\003\125\035\023\001\001\377\004\005\060\003\001\001\377  
\060\016\006\003\125\035\017\001\001\377\004\004\003\002\001\206  
\060\015\006\011\052\206\110\206\367\015\001\001\013\005\000\003  
\202\001\001\000\045\030\324\221\217\023\356\217\036\035\021\123  
\332\055\104\051\031\240\036\153\061\236\115\016\236\255\075\134  
\101\157\225\053\044\241\171\230\072\070\066\373\273\146\236\110  
\377\220\220\357\075\324\270\233\264\207\165\077\040\233\316\162  
\317\241\125\301\115\144\242\031\006\241\007\063\014\013\051\345  
\361\352\253\243\354\265\012\164\220\307\175\162\362\327\134\237  
\221\357\221\213\267\334\355\146\242\317\216\146\073\274\237\072  
\002\340\047\335\026\230\300\225\324\012\244\344\201\232\165\224  
\065\234\220\137\210\067\006\255\131\225\012\260\321\147\323\031  
\312\211\347\062\132\066\034\076\202\250\132\223\276\306\320\144  
\221\266\317\331\266\030\317\333\176\322\145\243\246\304\216\027  
\061\301\373\176\166\333\323\205\343\130\262\167\172\166\073\154  
\057\120\034\347\333\366\147\171\037\365\202\225\232\007\247\024  
\257\217\334\050\041\147\011\322\326\115\132\034\031\034\216\167  
\134\303\224\044\075\062\153\113\176\324\170\224\203\276\067\115  
\316\137\307\036\116\074\340\211\063\225\013\017\245\062\326\074  
\132\171\054\031

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

# For Server Distrust After: Wed Nov 30 00:00:00 2022

CKA\_NSS\_SERVER\_DISTRICT\_AFTER MULTILINE\_OCTAL

\062\062\061\061\063\060\060\060\060\060\060\132

END

# For Email Distrust After: Wed Nov 30 00:00:00 2022

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER MULTILINE\_OCTAL

\062\062\061\061\063\060\060\060\060\060\060\132

END

# Trust for "TrustCor RootCert CA-1"

# Issuer: CN=TrustCor RootCert CA-1,OU=TrustCor Certificate Authority,O=TrustCor Systems S. de

R.L.,L=Panama City,ST=Panama,C=PA

```

#
Serial Number:00:da:9b:ec:71:f3:03:b0:19
# Subject: CN=TrustCor RootCert CA-1,OU=TrustCor Certificate Authority,O=TrustCor Systems S. de
R.L.,L=Panama City,ST=Panama,C=PA
# Not Valid Before: Thu Feb 04 12:32:16 2016
# Not Valid After : Mon Dec 31 17:23:16 2029
# Fingerprint (SHA-256):
D4:0E:9C:86:CD:8F:E4:68:C1:77:69:59:F4:9E:A7:74:FA:54:86:84:B6:C4:06:F3:90:92:61:F4:DC:E2:57:5C
# Fingerprint (SHA1): FF:BD:CD:E7:82:C8:43:5E:3C:6F:26:86:5C:CA:A8:3A:45:5B:C3:0A
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "TrustCor RootCert CA-1"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\377\275\315\347\202\310\103\136\074\157\046\206\134\312\250\072
\105\133\303\012
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\156\205\361\334\032\000\323\042\325\262\262\254\153\067\005\105
END
CKA_ISSUER MULTILINE_OCTAL
\060\201\244\061\013\060\011\006\003\125\004\006\023\002\120\101
\061\017\060\015\006\003\125\004\010\014\006\120\141\156\141\155
\141\061\024\060\022\006\003\125\004\007\014\013\120\141\156\141
\155\141\040\103\151\164\171\061\044\060\042\006\003\125\004\012
\014\033\124\162\165\163\164\103\157\162\040\123\171\163\164\145
\155\163\040\123\056\040\144\145\040\122\056\114\056\061\047\060
\045\006\003\125\004\013\014\036\124\162\165\163\164\103\157\162
\040\103\145\162\164\151\146\151\143\141\164\145\040\101\165\164
\150\157\162\151\164\171\061\037\060\035\006\003\125\004\003\014
\026\124\162\165\163\164\103\157\162\040\122\157\157\164\103\145
\162\164\040\103\101\055\061
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\011\000\332\233\354\161\363\003\260\031
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "TrustCor RootCert CA-2"
#
# Issuer: CN=TrustCor RootCert CA-2,OU=TrustCor Certificate Authority,O=TrustCor

```

```
Systems S. de R.L.,L=Panama City,ST=Panama,C=PA
# Serial Number:25:a1:df:ca:33:cb:59:02
# Subject: CN=TrustCor RootCert CA-2,OU=TrustCor Certificate Authority,O=TrustCor Systems S. de
R.L.,L=Panama City,ST=Panama,C=PA
# Not Valid Before: Thu Feb 04 12:32:23 2016
# Not Valid After : Sun Dec 31 17:26:39 2034
# Fingerprint (SHA-256):
07:53:E9:40:37:8C:1B:D5:E3:83:6E:39:5D:AE:A5:CB:83:9E:50:46:F1:BD:0E:AE:19:51:CF:10:FE:C7:C9:65
# Fingerprint (SHA1): B8:BE:6D:CB:56:F1:55:B9:63:D4:12:CA:4E:06:34:C7:94:B2:1C:C0
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "TrustCor RootCert CA-2"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\201\244\061\013\060\011\006\003\125\004\006\023\002\120\101
\061\017\060\015\006\003\125\004\010\014\006\120\141\156\141\155
\141\061\024\060\022\006\003\125\004\007\014\013\120\141\156\141
\155\141\040\103\151\164\171\061\044\060\042\006\003\125\004\012
\014\033\124\162\165\163\164\103\157\162\040\123\171\163\164\145
\155\163\040\123\056\040\144\145\040\122\056\114\056\061\047\060
\045\006\003\125\004\013\014\036\124\162\165\163\164\103\157\162
\040\103\145\162\164\151\146\151\143\141\164\145\040\101\165\164
\150\157\162\151\164\171\061\037\060\035\006\003\125\004\003\014
\026\124\162\165\163\164\103\157\162\040\122\157\157\164\103\145
\162\164\040\103\101\055\062
END
CKA_ID
UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\201\244\061\013\060\011\006\003\125\004\006\023\002\120\101
\061\017\060\015\006\003\125\004\010\014\006\120\141\156\141\155
\141\061\024\060\022\006\003\125\004\007\014\013\120\141\156\141
\155\141\040\103\151\164\171\061\044\060\042\006\003\125\004\012
\014\033\124\162\165\163\164\103\157\162\040\123\171\163\164\145
\155\163\040\123\056\040\144\145\040\122\056\114\056\061\047\060
\045\006\003\125\004\013\014\036\124\162\165\163\164\103\157\162
\040\103\145\162\164\151\146\151\143\141\164\145\040\101\165\164
\150\157\162\151\164\171\061\037\060\035\006\003\125\004\003\014
\026\124\162\165\163\164\103\157\162\040\122\157\157\164\103\145
\162\164\040\103\101\055\062
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\010\045\241\337\312\063\313\131\002
END
CKA_VALUE MULTILINE_OCTAL
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\060\202\006\057\060\202\004\027\240\003\002\001\002\002\010\045  
\241\337\312\063\313\131\002\060\015\006\011\052\206\110\206\367  
\015\001\001\013\005\000\060\201\244\061\013\060\011\006\003\125  
\004\006\023\002\120\101\061\017\060\015\006\003\125\004\010\014  
\006\120\141\156\141\155\141\061\024\060\022\006\003\125\004\007  
\014\013\120\141\156\141\155\141\040\103\151\164\171\061\044\060  
\042\006\003\125\004\012\014\033\124\162\165\163\164\103\157\162  
\040\123\171\163\164\145\155\163\040\123\056\040\144\145\040\122  
\056\114\056\061\047\060\045\006\003\125\004\013\014\036\124\162  
\165\163\164\103\157\162\040\103\145\162\164\151\146\151\143\141  
\164\145\040\101\165\164\150\157\162\151\164\171\061\037\060\035  
\006\003\125\004\003\014\026\124\162\165\163\164\103\157\162\040  
\122\157\157\164\103\145\162\164\040\103\101\055\062\060\036\027  
\015\061\066\060\062\060\064\061\062\063\062\062\063\132\027\015  
\063\064\061\062\063\061\061\067\062\066\063\071\132\060\201\244  
\061\013\060\011\006\003\125\004\006\023\002\120\101\061\017\060  
\015\006\003\125\004\010\014\006\120\141\156\141\155\141\061\024  
\060\022\006\003\125\004\007\014\013\120\141\156\141\155\141\040  
\103\151\164\171\061\044\060\042\006\003\125\004\012\014\033\124  
\162\165\163\164\103\157\162\040\123\171\163\164\145\155\163\040  
\123\056\040\144\145\040\122\056\114\056\061\047\060\045\006\003  
\125\004\013\014\036\124\162\165\163\164\103\157\162\040\103\145  
\162\164\151\146\151\143\141\164\145\040\101\165\164\150\157\162  
\151\164\171\061\037\060\035\006\003\125\004\003\014\026\124\162  
\165\163\164\103\157\162\040\122\157\157\164\103\145\162\164\040  
\103\101\055\062\060\202\002\042\060\015\006\011\052\206\110\206  
\367\015\001\001\001\005\000\003\202\002\017\000\060\202\002\012  
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\310\070\176\200\322\253\301\233\145\005\224\364\301\012\020\325  
\002\254\355\237\223\307\207\310\260\047\053\102\014\075\012\076  
\101\132\236\165\335\215\312\340\233\354\150\062\244\151\222\150  
\214\013\201\016\126\240\076\032\335\054\045\024\202\057\227\323  
\144\106\364\124\251\334\072\124\055\061\053\231\202\362\331\052  
\327\357\161\000\270\061\244\276\172\044\007\303\102\040\362\212  
\324\222\004\033\145\126\114\154\324\373\266\141\132\107\043\264  
\330\151\264\267\072\320\164\074\014\165\241\214\116\166\241\351  
\333\052\245\073\372\316\260\377\176\152\050\375\047\034\310\261  
\351\051\361\127\156\144\264\320\301\025\155\016\276\056\016\106  
\310\136\364\121\376\357\016\143\072\073\161\272\317\157\131\312  
\014\343\233\135\111\270\114\342\127\261\230\212\102\127\234\166  
\357\357\275\321\150\250\322\364\011\273\167\065\276\045\202\010  
\304\026\054\104\040\126\251\104\021\167\357\135\264\035\252\136  
\153\076\213\062\366\007\057\127\004\222\312\365\376\235\302\351  
\350\263\216\114\113\002\061\331\344\074\110\202\047\367\030\202  
\166\110\072\161\261\023\241\071\325\056\305\064\302\035\142\205  
\337\003\376\115\364\257\075\337\134\133\215\372\160\341\245\176  
\047\307\206\056\152\217\022\306\204\136\103\121\120\234\031\233  
\170\346\374\366\355\107\176\173\075\146\357\023\023\210\137\074



\241\143\373\371\254\207\065\237\363\202\236\244\077\012\234\061  
\151\213\231\244\210\112\216\156\146\115\357\026\304\017\171\050  
\041\140\015\205\026\175\327\124\070\361\222\126\375\265\063\114  
\203\334\327\020\237\113\375\306\370\102\275\272\174\163\002\340  
\377\175\315\133\341\324\254\141\173\127\325\112\173\133\324\205  
\130\047\135\277\370\053\140\254\240\046\256\024\041\047\306\167  
\232\063\200\074\136\106\077\367\303\261\243\206\063\306\350\136  
\015\271\065\054\252\106\301\205\002\165\200\240\353\044\373\025  
\252\344\147\177\156\167\077\364\004\212\057\174\173\343\027\141  
\360\335\011\251\040\310\276\011\244\320\176\104\303\262\060\112  
\070\252\251\354\030\232\007\202\053\333\270\234\030\255\332\340  
\106\027\254\317\135\002\003\001\000\001\243\143\060\141\060\035  
\006\003\125\035\016\004\026\004\024\331\376\041\100\156\224\236  
\274\233\075\234\175\230\040\031\345\214\060\142\262\060\037\006  
\003\125\035\043\004\030\060\026\200\024\331\376\041\100\156\224  
\236\274\233\075\234\175\230\040\031\345\214\060\142\262\060\017  
\006\003\125\035\023\001\001\377\004\005\060\003\001\001\377\060  
\016\006\003\125\035\017\001\001\377\004\004\003\002\001\206\060  
\015\006\011\052\206\110\206\367\015\001\001\013\005\000\003\202  
\002\001\000\236\105\236\014\073\266\357\341\072\310\174\321\000  
\075\317\342\352\006\265\262\072\273\006\113\150\172\320\043\227  
\164\247\054\360\010\330\171\132\327\132\204\212\330\022\232\033  
\331\175\134\115\160\305\245\371\253\345\243\211\211\335\001\372  
\354\335\371\351\222\227\333\260\106\102\363\323\142\252\225\376  
\061\147\024\151\130\220\012\252\013\356\067\043\307\120\121\264  
\365\176\236\343\173\367\344\314\102\062\055\111\014\313\377\111  
\014\233\036\064\375\156\156\226\212\171\003\266\157\333\011\313  
\375\137\145\024\067\341\070\365\363\141\026\130\344\265\155\015  
\013\004\033\077\120\055\177\263\307\172\032\026\200\140\370\212  
\037\351\033\052\306\371\272\001\032\151\277\322\130\307\124\127  
\010\217\341\071\140\167\113\254\131\204\032\210\361\335\313\117  
\170\327\347\341\063\055\374\356\101\372\040\260\276\313\367\070  
\224\300\341\320\205\017\273\355\054\163\253\355\376\222\166\032  
\144\177\133\015\063\011\007\063\173\006\077\021\244\134\160\074  
\205\300\317\343\220\250\203\167\372\333\346\305\214\150\147\020  
\147\245\122\055\360\304\231\217\177\277\321\153\342\265\107\326  
\331\320\205\231\115\224\233\017\113\215\356\000\132\107\035\021  
\003\254\101\030\257\207\267\157\014\072\217\312\317\334\003\301  
\242\011\310\345\375\200\136\310\140\102\001\033\032\123\132\273  
\067\246\267\274\272\204\351\036\154\032\324\144\332\324\103\376  
\223\213\113\362\054\171\026\020\324\223\013\210\217\241\330\206  
\024\106\221\107\233\050\044\357\127\122\116\134\102\234\252\367  
\111\354\047\350\100\036\263\246\211\042\162\234\365\015\063\264  
\130\243\060\073\335\324\152\124\223\276\032\115\363\223\224\367  
\374\204\013\077\204\040\134\064\003\104\305\332\255\274\012\301  
\002\317\036\345\224\331\363\216\133\330\114\360\235\354\141\027  
\273\024\062\124\014\002\051\223\036\222\206\366\177\357\347\222  
\005\016\131\335\231\010\056\056\372\234\000\122\323\305\146\051

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\344\247\227\104\244\016\050\201\023\065\305\366\157\144\346\101
\304\325\057\314\064\105\045\317\101\000\226\075\112\056\302\226
\230\117\116\112\234\227\267\333\037\222\062\310\377\017\121\156
\326\354\011
```

END

CKA\_NSS\_Mozilla\_CA\_POLICY

CK\_BBOOL CK\_TRUE

# For Server Distrust After: Wed Nov 30 00:00:00 2022

CKA\_NSS\_SERVER\_DISTRUSt\_AFTER MULTILINE\_OCTAL

```
\062\062\061\061\063\060\060\060\060\060\060\060\132
```

END

# For Email Distrust After: Wed Nov 30 00:00:00 2022

CKA\_NSS\_EMAIL\_DISTRUSt\_AFTER

MULTILINE\_OCTAL

```
\062\062\061\061\063\060\060\060\060\060\060\060\132
```

END

# Trust for "TrustCor RootCert CA-2"

# Issuer: CN=TrustCor RootCert CA-2,OU=TrustCor Certificate Authority,O=TrustCor Systems S. de R.L.,L=Panama City,ST=Panama,C=PA

# Serial Number:25:a1:df:ca:33:cb:59:02

# Subject: CN=TrustCor RootCert CA-2,OU=TrustCor Certificate Authority,O=TrustCor Systems S. de R.L.,L=Panama City,ST=Panama,C=PA

# Not Valid Before: Thu Feb 04 12:32:23 2016

# Not Valid After : Sun Dec 31 17:26:39 2034

# Fingerprint (SHA-256):

07:53:E9:40:37:8C:1B:D5:E3:83:6E:39:5D:AE:A5:CB:83:9E:50:46:F1:BD:0E:AE:19:51:CF:10:FE:C7:C9:65

# Fingerprint (SHA1): B8:BE:6D:CB:56:F1:55:B9:63:D4:12:CA:4E:06:34:C7:94:B2:1C:C0

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "TrustCor RootCert CA-2"

CKA\_CERT\_SHA1\_HASH MULTILINE\_OCTAL

```
\270\276\155\313\126\361\125\271\143\324\022\312\116\006\064\307
```

```
\224\262\034\300
```

END

CKA\_CERT\_MD5\_HASH

MULTILINE\_OCTAL

```
\242\341\370\030\013\272\105\325\307\101\052\273\067\122\105\144
```

END

CKA\_ISSUER MULTILINE\_OCTAL

```
\060\201\244\061\013\060\011\006\003\125\004\006\023\002\120\101
```

```
\061\017\060\015\006\003\125\004\010\014\006\120\141\156\141\155
```

```
\141\061\024\060\022\006\003\125\004\007\014\013\120\141\156\141
```

```
\155\141\040\103\151\164\171\061\044\060\042\006\003\125\004\012
```

```
\014\033\124\162\165\163\164\103\157\162\040\123\171\163\164\145
```

```
\155\163\040\123\056\040\144\145\040\122\056\114\056\061\047\060
\045\006\003\125\004\013\014\036\124\162\165\163\164\103\157\162
\040\103\145\162\164\151\146\151\143\141\164\145\040\101\165\164
\150\157\162\151\164\171\061\037\060\035\006\003\125\004\003\014
\026\124\162\165\163\164\103\157\162\040\122\157\157\164\103\145
\162\164\040\103\101\055\062
```

END

CKA\_SERIAL\_NUMBER MULTILINE\_OCTAL

```
\002\010\045\241\337\312\063\313\131\002
```

END

CKA\_TRUST\_SERVER\_AUTH CK\_TRUST CKT\_NSS\_TRUSTED\_DELEGATOR

CKA\_TRUST\_EMAIL\_PROTECTION CK\_TRUST

CKT\_NSS\_TRUSTED\_DELEGATOR

CKA\_TRUST\_CODE\_SIGNING CK\_TRUST CKT\_NSS\_MUST\_VERIFY\_TRUST

CKA\_TRUST\_STEP\_UP\_APPROVED CK\_BBOOL CK\_FALSE

#

# Certificate "TrustCor ECA-1"

#

# Issuer: CN=TrustCor ECA-1,OU=TrustCor Certificate Authority,O=TrustCor Systems S. de R.L.,L=Panama City,ST=Panama,C=PA

# Serial Number:00:84:82:2c:5f:1c:62:d0:40

# Subject: CN=TrustCor ECA-1,OU=TrustCor Certificate Authority,O=TrustCor Systems S. de R.L.,L=Panama City,ST=Panama,C=PA

# Not Valid Before: Thu Feb 04 12:32:33 2016

# Not Valid After : Mon Dec 31 17:28:07 2029

# Fingerprint (SHA-256):

5A:88:5D:B1:9C:01:D9:12:C5:75:93:88:93:8C:AF:BB:DF:03:1A:B2:D4:8E:91:EE:15:58:9B:42:97:1D:03:9C

# Fingerprint (SHA1): 58:D1:DF:95:95:67:6B:63:C0:F0:5B:1C:17:4D:8B:84:0B:C8:78:BD

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_CERTIFICATE

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "TrustCor ECA-1"

CKA\_CERTIFICATE\_TYPE CK\_CERTIFICATE\_TYPE CKC\_X\_509

CKA\_SUBJECT MULTILINE\_OCTAL

```
\060\201\234\061\013\060\011\006\003\125\004\006\023\002\120\101
\061\017\060\015\006\003\125\004\010\014\006\120\141\156\141\155
\141\061\024\060\022\006\003\125\004\007\014\013\120\141\156\141
\155\141\040\103\151\164\171\061\044\060\042\006\003\125\004\012
\014\033\124\162\165\163\164\103\157\162\040\123\171\163\164\145
\155\163\040\123\056\040\144\145\040\122\056\114\056\061\047\060
\045\006\003\125\004\013\014\036\124\162\165\163\164\103\157\162
\040\103\145\162\164\151\146\151\143\141\164\145\040\101\165\164
\150\157\162\151\164\171\061\027\060\025\006\003\125\004\003\014
\016\124\162\165\163\164\103\157\162\040\105\103\101\055\061
```

END

CKA\_ID

UTF8 "0"

CKA\_ISSUER MULTILINE\_OCTAL

\060\201\234\061\013\060\011\006\003\125\004\006\023\002\120\101  
\061\017\060\015\006\003\125\004\010\014\006\120\141\156\141\155  
\141\061\024\060\022\006\003\125\004\007\014\013\120\141\156\141  
\155\141\040\103\151\164\171\061\044\060\042\006\003\125\004\012  
\014\033\124\162\165\163\164\103\157\162\040\123\171\163\164\145  
\155\163\040\123\056\040\144\145\040\122\056\114\056\061\047\060  
\045\006\003\125\004\013\014\036\124\162\165\163\164\103\157\162  
\040\103\145\162\164\151\146\151\143\141\164\145\040\101\165\164  
\150\157\162\151\164\171\061\027\060\025\006\003\125\004\003\014  
\016\124\162\165\163\164\103\157\162\040\105\103\101\055\061

END

CKA\_SERIAL\_NUMBER

MULTILINE\_OCTAL

\002\011\000\204\202\054\137\034\142\320\100

END

CKA\_VALUE MULTILINE\_OCTAL

\060\202\004\040\060\202\003\010\240\003\002\001\002\002\011\000  
\204\202\054\137\034\142\320\100\060\015\006\011\052\206\110\206  
\367\015\001\001\013\005\000\060\201\234\061\013\060\011\006\003  
\125\004\006\023\002\120\101\061\017\060\015\006\003\125\004\010  
\014\006\120\141\156\141\155\141\061\024\060\022\006\003\125\004  
\007\014\013\120\141\156\141\155\141\040\103\151\164\171\061\044  
\060\042\006\003\125\004\012\014\033\124\162\165\163\164\103\157  
\162\040\123\171\163\164\145\155\163\040\123\056\040\144\145\040  
\122\056\114\056\061\047\060\045\006\003\125\004\013\014\036\124  
\162\165\163\164\103\157\162\040\103\145\162\164\151\146\151\143  
\141\164\145\040\101\165\164\150\157\162\151\164\171\061\027\060  
\025\006\003\125\004\003\014\016\124\162\165\163\164\103\157\162  
\040\105\103\101\055\061\060\036\027\015\061\066\060\062\060\064  
\061\062\063\062\063\063\132\027\015\062\071\061\062\063\061\061  
\067\062\070\060\067\132\060\201\234\061\013\060\011\006\003\125  
\004\006\023\002\120\101\061\017\060\015\006\003\125\004\010\014  
\006\120\141\156\141\155\141\061\024\060\022\006\003\125\004\007  
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\040\123\171\163\164\145\155\163\040\123\056\040\144\145\040\122  
\056\114\056\061\047\060\045\006\003\125\004\013\014\036\124\162  
\165\163\164\103\157\162\040\103\145\162\164\151\146\151\143\141  
\164\145\040\101\165\164\150\157\162\151\164\171\061\027\060\025  
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\105\103\101\055\061\060\202\001\042\060\015\006\011\052\206\110  
\206\367\015\001\001\001\005\000\003\202\001\017\000\060\202\001  
\012\002\202\001\001\000\317\217\340\021\265\237\250\166\166\333  
\337\017\124\357\163\143\051\202\255\107\306\243\153\355\376\137  
\063\370\103\121\351\032\063\221\061\027\240\164\304\324\247\001  
\346\262\222\076\152\235\355\016\371\164\230\100\323\077\003\200

\006\202\100\350\261\342\247\121\247\035\203\046\153\253\336\372  
\027\221\053\330\306\254\036\261\236\031\001\325\227\246\352\015  
\267\304\125\037\047\174\322\010\325\166\037\051\025\207\100\071  
\335\070\105\021\165\320\232\247\064\340\277\315\310\122\035\271  
\107\176\015\270\273\306\014\366\163\127\026\132\176\103\221\037  
\125\072\306\155\104\004\252\234\251\234\247\114\211\027\203\256  
\243\004\136\122\200\213\036\022\045\021\031\327\014\175\175\061  
\104\101\352\333\257\260\034\357\201\320\054\305\232\041\233\075  
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\175\260\242\132\017\127\350\073\314\362\045\262\324\174\057\354  
\115\306\241\072\025\172\347\266\135\065\365\366\110\112\066\105  
\146\324\272\230\130\301\002\003\001\000\001\243\143\060\141\060  
\035\006\003\125\035\016\004\026\004\024\104\236\110\365\314\155  
\110\324\240\113\177\376\131\044\057\203\227\231\232\206\060\037  
\006\003\125\035\043\004\030\060\026\200\024\104\236\110\365\314  
\155\110\324\240\113\177\376\131\044\057\203\227\231\232\206\060  
\017\006\003\125\035\023\001\001\377\004\005\060\003\001\001\377  
\060\016\006\003\125\035\017\001\001\377\004\004\003\002\001\206  
\060\015\006\011\052\206\110\206\367\015\001\001\013\005\000\003  
\202\001\001\000\005\076\065\134\025\160\233\311\307\163\141\157  
\162\053\324\302\217\362\103\135\002\316\304\224\271\224\021\203  
\147\135\342\147\154\165\166\277\273\014\252\066\306\255\107\223  
\143\334\036\176\326\336\056\376\351\031\062\070\003\177\024\366  
\000\163\054\131\261\041\006\341\373\254\030\225\014\243\377\231  
\226\367\053\047\233\325\044\314\035\335\301\072\340\230\104\260  
\304\344\076\167\261\163\251\144\054\366\034\001\174\077\135\105  
\205\300\205\347\045\217\225\334\027\363\074\237\032\156\260\312  
\343\035\052\351\114\143\372\044\141\142\326\332\176\266\034\154  
\365\002\035\324\052\335\125\220\353\052\021\107\074\056\136\164  
\262\202\042\245\175\123\037\105\354\047\221\175\347\042\026\350  
\300\150\066\330\306\361\117\200\104\062\371\341\321\321\035\252  
\336\250\253\234\004\257\255\040\016\144\230\115\245\153\300\110  
\130\226\151\115\334\007\214\121\223\242\337\237\017\075\213\140  
\264\202\215\252\010\116\142\105\340\371\013\322\340\340\074\133  
\336\134\161\047\045\302\346\003\201\213\020\123\343\307\125\242  
\264\237\327\346

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

# For Server Distrust After: Wed Nov 30 00:00:00 2022

CKA\_NSS\_SERVER\_DISTRICT\_AFTER MULTILINE\_OCTAL

\062\062\061\061\063\060\060\060\060\060\060\132

END

# For Email Distrust After: Wed Nov 30 00:00:00

2022

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER MULTILINE\_OCTAL

\062\062\061\061\063\060\060\060\060\060\060\132

END

# Trust for "TrustCor ECA-1"

# Issuer: CN=TrustCor ECA-1,OU=TrustCor Certificate Authority,O=TrustCor Systems S. de R.L.,L=Panama City,ST=Panama,C=PA

# Serial Number:00:84:82:2c:5f:1c:62:d0:40

# Subject: CN=TrustCor ECA-1,OU=TrustCor Certificate Authority,O=TrustCor Systems S. de R.L.,L=Panama City,ST=Panama,C=PA

# Not Valid Before: Thu Feb 04 12:32:33 2016

# Not Valid After : Mon Dec 31 17:28:07 2029

# Fingerprint (SHA-256):

5A:88:5D:B1:9C:01:D9:12:C5:75:93:88:93:8C:AF:BB:DF:03:1A:B2:D4:8E:91:EE:15:58:9B:42:97:1D:03:9C

# Fingerprint (SHA1): 58:D1:DF:95:95:67:6B:63:C0:F0:5B:1C:17:4D:8B:84:0B:C8:78:BD

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "TrustCor ECA-1"

CKA\_CERT\_SHA1\_HASH MULTILINE\_OCTAL

\130\321\337\225\225\147\153\143\300\360\133\034\027\115\213\204

\013\310\170\275

END

CKA\_CERT\_MD5\_HASH

MULTILINE\_OCTAL

\047\222\043\035\012\365\100\174\351\346\153\235\330\365\347\154

END

CKA\_ISSUER MULTILINE\_OCTAL

\060\201\234\061\013\060\011\006\003\125\004\006\023\002\120\101

\061\017\060\015\006\003\125\004\010\014\006\120\141\156\141\155

\141\061\024\060\022\006\003\125\004\007\014\013\120\141\156\141

\155\141\040\103\151\164\171\061\044\060\042\006\003\125\004\012

\014\033\124\162\165\163\164\103\157\162\040\123\171\163\164\145

\155\163\040\123\056\040\144\145\040\122\056\114\056\061\047\060

\045\006\003\125\004\013\014\036\124\162\165\163\164\103\157\162

\040\103\145\162\164\151\146\151\143\141\164\145\040\101\165\164

\150\157\162\151\164\171\061\027\060\025\006\003\125\004\003\014

\016\124\162\165\163\164\103\157\162\040\105\103\101\055\061

END

CKA\_SERIAL\_NUMBER MULTILINE\_OCTAL

\002\011\000\204\202\054\137\034\142\320\100

END

CKA\_TRUST\_SERVER\_AUTH CK\_TRUST CKT\_NSS\_TRUSTED\_DELEGATOR

CKA\_TRUST\_EMAIL\_PROTECTION CK\_TRUST CKT\_NSS\_TRUSTED\_DELEGATOR

CKA\_TRUST\_CODE\_SIGNING

CK\_TRUST CKT\_NSS\_MUST\_VERIFY\_TRUST

CKA\_TRUST\_STEP\_UP\_APPROVED CK\_BBOOL CK\_FALSE

#

```
# Certificate "SSL.com Root Certification Authority RSA"
#
# Issuer: CN=SSL.com Root Certification Authority RSA,O=SSL Corporation,L=Houston,ST=Texas,C=US
# Serial Number:7b:2c:9b:d3:16:80:32:99
# Subject: CN=SSL.com Root Certification Authority RSA,O=SSL Corporation,L=Houston,ST=Texas,C=US
# Not Valid Before: Fri Feb 12 17:39:39 2016
# Not Valid After : Tue Feb 12 17:39:39 2041
# Fingerprint (SHA-256):
85:66:6A:56:2E:E0:BE:5C:E9:25:C1:D8:89:0A:6F:76:A8:7E:C1:6D:4D:7D:5F:29:EA:74:19:CF:20:12:3B:69
# Fingerprint (SHA1): B7:AB:33:08:D1:EA:44:77:BA:14:80:12:5A:6F:BD:A9:36:49:0C:BB
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "SSL.com Root Certification Authority RSA"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\174\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\016\060\014\006\003\125\004\010\014\005\124\145\170\141\163\061
\020\060\016\006\003\125\004\007\014\007\110\157\165\163\164\157
\156\061\030\060\026\006\003\125\004\012\014\017\123\123\114\040
\103\157\162\160\157\162\141\164\151\157\156\061\061\060\057\006
\003\125\004\003\014\050\123\123\114\056\143\157\155\040\122\157
\157\164\040\103\145\162\164\151\146\151\143\141\164\151\157\156
\040\101\165\164\150\157\162\151\164\171\040\122\123\101
END
CKA_ID
UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\174\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\016\060\014\006\003\125\004\010\014\005\124\145\170\141\163\061
\020\060\016\006\003\125\004\007\014\007\110\157\165\163\164\157
\156\061\030\060\026\006\003\125\004\012\014\017\123\123\114\040
\103\157\162\160\157\162\141\164\151\157\156\061\061\060\057\006
\003\125\004\003\014\050\123\123\114\056\143\157\155\040\122\157
\157\164\040\103\145\162\164\151\146\151\143\141\164\151\157\156
\040\101\165\164\150\157\162\151\164\171\040\122\123\101
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\010\173\054\233\323\026\200\062\231
END
CKA_VALUE MULTILINE_OCTAL
\060\202\005\335\060\202\003\305\240\003\002\001\002\002\010\173
\054\233\323\026\200\062\231\060\015\006\011\052\206\110\206\367
\015\001\001\013\005\000\060\174\061\013\060\011\006\003\125\004
\006\023\002\125\123\061\016\060\014\006\003\125\004\010\014\005
\124\145\170\141\163\061\020\060\016\006\003\125\004\007\014\007
```

\110\157\165\163\164\157\156\061\030\060\026\006\003\125\004\012  
\014\017\123\123\114\040\103\157\162\160\157\162\141\164\151\157  
\156\061\061\060\057\006\003\125\004\003\014\050\123\123\114\056  
\143\157\155\040\122\157\157\164\040\103\145\162\164\151\146\151  
\143\141\164\151\157\156\040\101\165\164\150\157\162\151\164\171  
\040\122\123\101\060\036\027\015\061\066\060\062\061\062\061\067  
\063\071\063\071\132\027\015\064\061\060\062\061\062\061\067\063  
\071\063\071\132\060\174\061\013\060\011\006\003\125\004\006\023  
\002\125\123\061\016\060\014\006\003\125\004\010\014\005\124\145  
\170\141\163\061\020\060\016\006\003\125\004\007\014\007\110\157  
\165\163\164\157\156\061\030\060\026\006\003\125\004\012\014\017  
\123\123\114\040\103\157\162\160\157\162\141\164\151\157\156\061  
\061\060\057\006\003\125\004\003\014\050\123\123\114\056\143\157  
\155\040\122\157\157\164\040\103\145\162\164\151\146\151\143\141  
\164\151\157\156\040\101\165\164\150\157\162\151\164\171\040\122  
\123\101\060\202\002\042\060\015\006\011\052\206\110\206\367\015  
\001\001\001\005\000\003\202\002\017\000\060\202\002\012\002\202  
\002\001\000\371\017\335\243\053\175\313\320\052\376\354\147\205  
\246\347\056\033\272\167\341\343\365\257\244\354\372\112\135\221  
\304\127\107\153\030\167\153\166\362\375\223\344\075\017\302\026  
\236\013\146\303\126\224\236\027\203\205\316\126\357\362\026\375  
\000\142\365\042\011\124\350\145\027\116\101\271\340\117\106\227  
\252\033\310\270\156\142\136\151\261\137\333\052\002\176\374\154  
\312\363\101\330\355\320\350\374\077\141\110\355\260\003\024\035  
\020\016\113\031\340\273\116\354\206\145\377\066\363\136\147\002  
\013\235\206\125\141\375\172\070\355\376\342\031\000\267\157\241  
\120\142\165\164\074\240\372\310\045\222\264\156\172\042\307\370  
\036\241\343\262\335\221\061\253\053\035\004\377\245\112\004\067  
\351\205\244\063\053\375\342\326\125\064\174\031\244\112\150\307  
\262\250\323\267\312\241\223\210\353\301\227\274\214\371\035\331  
\042\204\044\164\307\004\075\152\251\051\223\314\353\270\133\341  
\376\137\045\252\064\130\310\301\043\124\235\033\230\021\303\070  
\234\176\075\206\154\245\017\100\206\174\002\364\134\002\117\050  
\313\256\161\237\017\072\310\063\376\021\045\065\352\374\272\305  
\140\075\331\174\030\325\262\251\323\165\170\003\162\042\312\072  
\303\037\357\054\345\056\251\372\236\054\266\121\106\375\257\003  
\326\352\140\150\352\205\026\066\153\205\351\036\300\263\335\304  
\044\334\200\052\201\101\155\224\076\310\340\311\201\101\000\236  
\136\277\177\305\010\230\242\030\054\102\100\263\371\157\070\047  
\113\116\200\364\075\201\107\340\210\174\352\034\316\265\165\134  
\121\056\034\053\177\032\162\050\347\000\265\321\164\306\327\344  
\237\255\007\223\266\123\065\065\374\067\344\303\366\135\026\276  
\041\163\336\222\012\370\240\143\152\274\226\222\152\076\370\274  
\145\125\233\336\365\015\211\046\004\374\045\032\246\045\151\313  
\302\155\312\174\342\131\137\227\254\353\357\056\310\274\327\033  
\131\074\053\314\362\031\310\223\153\047\143\031\317\374\351\046  
\370\312\161\233\177\223\376\064\147\204\116\231\353\374\263\170  
\011\063\160\272\146\246\166\355\033\163\353\032\245\015\304\042



\023\040\224\126\012\116\054\154\116\261\375\317\234\011\272\242  
\063\355\207\002\003\001\000\001\243\143\060\141\060\035\006\003  
\125\035\016\004\026\004\024\335\004\011\007\242\365\172\175\122  
\123\022\222\225\356\070\200\045\015\246\131\060\017\006\003\125  
\035\023\001\001\377\004\005\060\003\001\001\377\060\037\006\003  
\125\035\043\004\030\060\026\200\024\335\004\011\007\242\365\172  
\175\122\123\022\222\225\356\070\200\045\015\246\131\060\016\006  
\003\125\035\017\001\001\377\004\004\003\002\001\206\060\015\006  
\011\052\206\110\206\367\015\001\001\013\005\000\003\202\002\001  
\000\040\030\021\224\051\373\046\235\034\036\036\160\141\361\225  
\162\223\161\044\255\150\223\130\216\062\257\033\263\160\003\374  
\045\053\164\205\220\075\170\152\364\271\213\245\227\073\265\030  
\221\273\036\247\371\100\133\221\371\125\231\257\036\021\320\134  
\035\247\146\343\261\224\007\014\062\071\246\352\033\260\171\330  
\035\234\160\104\343\212\335\304\371\225\037\212\070\103\077\001  
\205\245\107\247\075\106\262\274\345\042\150\367\173\234\330\054  
\076\012\041\310\055\063\254\277\305\201\231\061\164\301\165\161  
\305\276\261\360\043\105\364\235\153\374\031\143\235\243\274\004  
\306\030\013\045\273\123\211\017\263\200\120\336\105\356\104\177  
\253\224\170\144\230\323\366\050\335\207\330\160\145\164\373\016  
\271\023\353\247\017\141\251\062\226\314\336\273\355\143\114\030  
\273\251\100\367\240\124\156\040\210\161\165\030\352\172\264\064  
\162\340\043\047\167\134\266\220\352\206\045\100\253\357\063\017  
\313\237\202\276\242\040\373\366\265\055\032\346\302\205\261\164  
\017\373\310\145\002\244\122\001\107\335\111\042\301\277\330\353  
\153\254\176\336\354\143\063\025\267\043\010\217\306\017\215\101  
\132\335\216\305\271\217\345\105\077\170\333\272\322\033\100\261  
\376\161\115\077\340\201\242\272\136\264\354\025\340\223\335\010  
\037\176\341\125\231\013\041\336\223\236\012\373\346\243\111\275  
\066\060\376\347\167\262\240\165\227\265\055\201\210\027\145\040  
\367\332\220\000\237\311\122\314\062\312\065\174\365\075\017\330  
\053\327\365\046\154\311\006\064\226\026\352\160\131\032\062\171  
\171\013\266\210\177\017\122\110\075\277\154\330\242\104\056\321  
\116\267\162\130\323\211\023\225\376\104\253\370\327\213\033\156  
\234\274\054\240\133\325\152\000\257\137\067\341\325\372\020\013  
\230\234\206\347\046\217\316\360\354\156\212\127\013\200\343\116  
\262\300\240\143\141\220\272\125\150\067\164\152\266\222\333\237  
\241\206\042\266\145\047\016\354\266\237\102\140\344\147\302\265  
\332\101\013\304\323\213\141\033\274\372\037\221\053\327\104\007  
\136\272\051\254\331\305\351\357\123\110\132\353\200\361\050\130  
\041\315\260\006\125\373\047\077\123\220\160\251\004\036\127\047  
\271

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

```

# Trust for "SSL.com Root Certification Authority RSA"
# Issuer: CN=SSL.com Root Certification Authority RSA,O=SSL Corporation,L=Houston,ST=Texas,C=US
# Serial Number:7b:2c:9b:d3:16:80:32:99
# Subject: CN=SSL.com Root Certification Authority RSA,O=SSL Corporation,L=Houston,ST=Texas,C=US
# Not Valid Before: Fri Feb 12 17:39:39 2016
# Not Valid After : Tue Feb 12 17:39:39 2041
# Fingerprint (SHA-256):
85:66:6A:56:2E:E0:BE:5C:E9:25:C1:D8:89:0A:6F:76:A8:7E:C1:6D:4D:7D:5F:29:EA:74:19:CF:20:12:3B:69
# Fingerprint (SHA1): B7:AB:33:08:D1:EA:44:77:BA:14:80:12:5A:6F:BD:A9:36:49:0C:BB
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN
CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "SSL.com Root Certification Authority RSA"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\267\253\063\010\321\352\104\167\272\024\200\022\132\157\275\251
\066\111\014\273
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\206\151\022\300\160\361\354\254\254\302\325\274\245\133\241\051
END
CKA_ISSUER MULTILINE_OCTAL
\060\174\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\016\060\014\006\003\125\004\010\014\005\124\145\170\141\163\061
\020\060\016\006\003\125\004\007\014\007\110\157\165\163\164\157
\156\061\030\060\026\006\003\125\004\012\014\017\123\123\114\040
\103\157\162\160\157\162\141\164\151\157\156\061\061\060\057\006
\003\125\004\003\014\050\123\123\114\056\143\157\155\040\122\157
\157\164\040\103\145\162\164\151\146\151\143\141\164\151\157\156
\040\101\165\164\150\157\162\151\164\171\040\122\123\101
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\010\173\054\233\323\026\200\062\231
END
CKA_TRUST_SERVER_AUTH
CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "SSL.com Root Certification Authority ECC"
#
# Issuer: CN=SSL.com Root Certification Authority ECC,O=SSL Corporation,L=Houston,ST=Texas,C=US
# Serial Number:75:e6:df:cb:c1:68:5b:a8
# Subject: CN=SSL.com Root Certification Authority ECC,O=SSL Corporation,L=Houston,ST=Texas,C=US
# Not Valid Before: Fri Feb 12 18:14:03 2016

```

```
# Not Valid After : Tue Feb 12 18:14:03 2041
# Fingerprint (SHA-256):
34:17:BB:06:CC:60:07:DA:1B:96:1C:92:0B:8A:B4:CE:3F:AD:82:0E:4A:A3:0B:9A:CB:C4:A7:4E:BD:CE:BC:65
# Fingerprint (SHA1): C3:19:7C:39:24:E6:54:AF:1B:C4:AB:20:95:7A:E2:C3:0E:13:02:6A
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "SSL.com Root Certification Authority ECC"
CKA_CERTIFICATE_TYPE
  CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\174\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\016\060\014\006\003\125\004\010\014\005\124\145\170\141\163\061
\020\060\016\006\003\125\004\007\014\007\110\157\165\163\164\157
\156\061\030\060\026\006\003\125\004\012\014\017\123\123\114\040
\103\157\162\160\157\162\141\164\151\157\156\061\061\060\057\006
\003\125\004\003\014\050\123\123\114\056\143\157\155\040\122\157
\157\164\040\103\145\162\164\151\146\151\143\141\164\151\157\156
\040\101\165\164\150\157\162\151\164\171\040\105\103\103
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\174\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\016\060\014\006\003\125\004\010\014\005\124\145\170\141\163\061
\020\060\016\006\003\125\004\007\014\007\110\157\165\163\164\157
\156\061\030\060\026\006\003\125\004\012\014\017\123\123\114\040
\103\157\162\160\157\162\141\164\151\157\156\061\061\060\057\006
\003\125\004\003\014\050\123\123\114\056\143\157\155\040\122\157
\157\164\040\103\145\162\164\151\146\151\143\141\164\151\157\156
\040\101\165\164\150\157\162\151\164\171\040\105\103\103
END
CKA_SERIAL_NUMBER
  MULTILINE_OCTAL
\002\010\165\346\337\313\301\150\133\250
END
CKA_VALUE MULTILINE_OCTAL
\060\202\002\215\060\202\002\024\240\003\002\001\002\002\010\165
\346\337\313\301\150\133\250\060\012\006\010\052\206\110\316\075
\004\003\002\060\174\061\013\060\011\006\003\125\004\006\023\002
\125\123\061\016\060\014\006\003\125\004\010\014\005\124\145\170
\141\163\061\020\060\016\006\003\125\004\007\014\007\110\157\165
\163\164\157\156\061\030\060\026\006\003\125\004\012\014\017\123
\123\114\040\103\157\162\160\157\162\141\164\151\157\156\061\061
\060\057\006\003\125\004\003\014\050\123\123\114\056\143\157\155
\040\122\157\157\164\040\103\145\162\164\151\146\151\143\141\164
\151\157\156\040\101\165\164\150\157\162\151\164\171\040\105\103
\103\060\036\027\015\061\066\060\062\061\062\061\070\061\064\060
```

\063\132\027\015\064\061\060\062\061\062\061\070\061\064\060\063  
\132\060\174\061\013\060\011\006\003\125\004\006\023\002\125\123  
\061\016\060\014\006\003\125\004\010\014\005\124\145\170\141\163  
\061\020\060\016\006\003\125\004\007\014\007\110\157\165\163\164  
\157\156\061\030\060\026\006\003\125\004\012\014\017\123\123\114  
\040\103\157\162\160\157\162\141\164\151\157\156\061\061\060\057  
\006\003\125\004\003\014\050\123\123\114\056\143\157\155\040\122  
\157\157\164\040\103\145\162\164\151\146\151\143\141\164\151\157  
\156\040\101\165\164\150\157\162\151\164\171\040\105\103\103\060  
\166\060\020\006\007\052\206\110\316\075\002\001\006\005\053\201  
\004\000\042\003\142\000\004\105\156\251\120\304\246\043\066\236  
\137\050\215\027\313\226\042\144\077\334\172\216\035\314\010\263  
\242\161\044\272\216\111\271\004\033\107\226\130\253\055\225\310  
\355\236\010\065\310\047\353\211\214\123\130\353\142\212\376\360  
\133\017\153\061\122\143\101\073\211\315\354\354\266\215\031\323  
\064\007\334\273\306\006\177\302\105\225\354\313\177\250\043\340  
\011\351\201\372\363\107\323\243\143\060\141\060\035\006\003\125  
\035\016\004\026\004\024\202\321\205\163\060\347\065\004\323\216  
\002\222\373\345\244\321\304\041\350\315\060\017\006\003\125\035  
\023\001\001\377\004\005\060\003\001\001\377\060\037\006\003\125  
\035\043\004\030\060\026\200\024\202\321\205\163\060\347\065\004  
\323\216\002\222\373\345\244\321\304\041\350\315\060\016\006\003  
\125\035\017\001\001\377\004\004\003\002\001\206\060\012\006\010  
\052\206\110\316\075\004\003\002\003\147\000\060\144\002\060\157  
\347\353\131\021\244\140\317\141\260\226\173\355\005\371\057\023  
\221\334\355\345\374\120\153\021\106\106\263\034\041\000\142\273  
\276\303\347\350\315\007\231\371\015\013\135\162\076\304\252\002  
\060\037\274\272\013\342\060\044\373\174\155\200\125\012\231\076  
\200\015\063\345\146\243\263\243\273\245\325\213\217\011\054\246  
\135\176\342\360\007\010\150\155\322\174\151\156\137\337\345\152  
\145

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER

CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "SSL.com Root Certification Authority ECC"

# Issuer: CN=SSL.com Root Certification Authority ECC,O=SSL Corporation,L=Houston,ST=Texas,C=US

# Serial Number:75:e6:df:cb:c1:68:5b:a8

# Subject: CN=SSL.com Root Certification Authority ECC,O=SSL Corporation,L=Houston,ST=Texas,C=US

# Not Valid Before: Fri Feb 12 18:14:03 2016

# Not Valid After : Tue Feb 12 18:14:03 2041

# Fingerprint (SHA-256):

34:17:BB:06:CC:60:07:DA:1B:96:1C:92:0B:8A:B4:CE:3F:AD:82:0E:4A:A3:0B:9A:CB:C4:A7:4E:BD:CE:BC:65

# Fingerprint (SHA1): C3:19:7C:39:24:E6:54:AF:1B:C4:AB:20:95:7A:E2:C3:0E:13:02:6A

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

```

CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "SSL.com Root Certification Authority ECC"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\303\031\174\071\044\346\124\257\033\304\253\040\225\172\342\303
\016\023\002\152
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\056\332\344\071\177\234\217\067\321\160\237\046\027\121\072\216
END
CKA_ISSUER
MULTILINE_OCTAL
\060\174\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\016\060\014\006\003\125\004\010\014\005\124\145\170\141\163\061
\020\060\016\006\003\125\004\007\014\007\110\157\165\163\164\157
\156\061\030\060\026\006\003\125\004\012\014\017\123\123\114\040
\103\157\162\160\157\162\141\164\151\157\156\061\061\060\057\006
\003\125\004\003\014\050\123\123\114\056\143\157\155\040\122\157
\157\164\040\103\145\162\164\151\146\151\143\141\164\151\157\156
\040\101\165\164\150\157\162\151\164\171\040\105\103\103
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\010\165\346\337\313\301\150\133\250
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "SSL.com EV Root Certification Authority RSA R2"
#
# Issuer: CN=SSL.com EV Root
Certification Authority RSA R2,O=SSL Corporation,L=Houston,ST=Texas,C=US
# Serial Number:56:b6:29:cd:34:bc:78:f6
# Subject: CN=SSL.com EV Root Certification Authority RSA R2,O=SSL
Corporation,L=Houston,ST=Texas,C=US
# Not Valid Before: Wed May 31 18:14:37 2017
# Not Valid After : Fri May 30 18:14:37 2042
# Fingerprint (SHA-256):
2E:7B:F1:6C:C2:24:85:A7:BB:E2:AA:86:96:75:07:61:B0:AE:39:BE:3B:2F:E9:D0:CC:6D:4E:F7:34:91:42:5C
# Fingerprint (SHA1): 74:3A:F0:52:9B:D0:32:A0:F4:4A:83:CD:D4:BA:A9:7B:7C:2E:C4:9A
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "SSL.com EV Root Certification Authority RSA R2"

```

CKA\_CERTIFICATE\_TYPE CK\_CERTIFICATE\_TYPE CKC\_X\_509

CKA\_SUBJECT MULTILINE\_OCTAL

\060\201\202\061\013\060\011\006\003\125\004\006\023\002\125\123  
\061\016\060\014\006\003\125\004\010\014\005\124\145\170\141\163  
\061\020\060\016\006\003\125\004\007\014\007\110\157\165\163\164  
\157\156\061\030\060\026\006\003\125\004\012\014\017\123\123\114  
\040\103\157\162\160\157\162\141\164\151\157\156\061\067\060\065  
\006\003\125\004\003\014\056\123\123\114\056\143\157\155\040\105  
\126\040\122\157\157\164\040\103\145\162\164\151\146\151\143\141  
\164\151\157\156\040\101\165\164\150\157\162\151\164\171\040\122  
\123\101\040\122\062

END

CKA\_ID

UTF8 "0"

CKA\_ISSUER MULTILINE\_OCTAL

\060\201\202\061\013\060\011\006\003\125\004\006\023\002\125\123  
\061\016\060\014\006\003\125\004\010\014\005\124\145\170\141\163  
\061\020\060\016\006\003\125\004\007\014\007\110\157\165\163\164  
\157\156\061\030\060\026\006\003\125\004\012\014\017\123\123\114  
\040\103\157\162\160\157\162\141\164\151\157\156\061\067\060\065  
\006\003\125\004\003\014\056\123\123\114\056\143\157\155\040\105  
\126\040\122\157\157\164\040\103\145\162\164\151\146\151\143\141  
\164\151\157\156\040\101\165\164\150\157\162\151\164\171\040\122  
\123\101\040\122\062

END

CKA\_SERIAL\_NUMBER MULTILINE\_OCTAL

\002\010\126\266\051\315\064\274\170\366

END

CKA\_VALUE

MULTILINE\_OCTAL

\060\202\005\353\060\202\003\323\240\003\002\001\002\002\010\126  
\266\051\315\064\274\170\366\060\015\006\011\052\206\110\206\367  
\015\001\001\013\005\000\060\201\202\061\013\060\011\006\003\125  
\004\006\023\002\125\123\061\016\060\014\006\003\125\004\010\014  
\005\124\145\170\141\163\061\020\060\016\006\003\125\004\007\014  
\007\110\157\165\163\164\157\156\061\030\060\026\006\003\125\004  
\012\014\017\123\123\114\040\103\157\162\160\157\162\141\164\151  
\157\156\061\067\060\065\006\003\125\004\003\014\056\123\123\114  
\056\143\157\155\040\105\126\040\122\157\157\164\040\103\145\162  
\164\151\146\151\143\141\164\151\157\156\040\101\165\164\150\157  
\162\151\164\171\040\122\123\101\040\122\062\060\036\027\015\061  
\067\060\065\063\061\061\070\061\064\063\067\132\027\015\064\062  
\060\065\063\060\061\070\061\064\063\067\132\060\201\202\061\013  
\060\011\006\003\125\004\006\023\002\125\123\061\016\060\014\006  
\003\125\004\010\014\005\124\145\170\141\163\061\020\060\016\006  
\003\125\004\007\014\007\110\157\165\163\164\157\156\061\030\060  
\026\006\003\125\004\012\014\017\123\123\114\040\103\157\162\160  
\157\162\141\164\151\157\156\061\067\060\065\006\003\125\004\003

\014\056\123\123\114\056\143\157\155\040\105\126\040\122\157\157  
\164\040\103\145\162\164\151\146\151\143\141\164\151\157\156\040  
\101\165\164\150\157\162\151\164\171\040\122\123\101\040\122\062  
\060\202\002\042\060\015\006\011\052\206\110\206\367\015\001\001  
\001\005\000\003\202\002\017\000\060\202\002\012\002\202\002\001  
\000\217\066\145\100\341\326\115\300\327\264\351\106\332\153\352  
\063\107\315\114\371\175\175\276\275\055\075\360\333\170\341\206  
\245\331\272\011\127\150\355\127\076\240\320\010\101\203\347\050  
\101\044\037\343\162\025\320\001\032\373\136\160\043\262\313\237  
\071\343\317\305\116\306\222\155\046\306\173\273\263\332\047\235  
\012\206\351\201\067\005\376\360\161\161\354\303\034\351\143\242  
\027\024\235\357\033\147\323\205\125\002\002\326\111\311\314\132  
\341\261\367\157\062\237\311\324\073\210\101\250\234\275\313\253  
\333\155\173\011\037\242\114\162\220\332\053\010\374\317\074\124  
\316\147\017\250\317\135\226\031\013\304\343\162\353\255\321\175  
\035\047\357\222\353\020\277\133\353\073\257\317\200\335\301\322  
\226\004\133\172\176\244\251\074\070\166\244\142\216\240\071\136  
\352\167\317\135\000\131\217\146\054\076\007\242\243\005\046\021  
\151\227\352\205\267\017\226\013\113\310\100\341\120\272\056\212  
\313\367\017\232\042\347\177\232\067\023\315\362\115\023\153\041  
\321\300\314\042\362\241\106\366\104\151\234\312\141\065\007\000  
\157\326\141\010\021\352\272\270\366\351\263\140\345\115\271\354  
\237\024\146\311\127\130\333\315\207\151\370\212\206\022\003\107  
\277\146\023\166\254\167\175\064\044\205\203\315\327\252\234\220  
\032\237\041\054\177\170\267\144\270\330\350\246\364\170\263\125  
\313\204\322\062\304\170\256\243\217\141\335\316\010\123\255\354  
\210\374\025\344\232\015\346\237\032\167\316\114\217\270\024\025  
\075\142\234\206\070\006\000\146\022\344\131\166\132\123\300\002  
\230\242\020\053\150\104\173\216\171\316\063\112\166\252\133\201  
\026\033\265\212\330\320\000\173\136\142\264\011\326\206\143\016  
\246\005\225\111\272\050\213\210\223\262\064\034\330\244\125\156  
\267\034\320\336\231\125\073\043\364\042\340\371\051\146\046\354  
\040\120\167\333\112\013\217\276\345\002\140\160\101\136\324\256  
\120\071\042\024\046\313\262\073\163\164\125\107\007\171\201\071  
\250\060\023\104\345\004\212\256\226\023\045\102\017\271\123\304  
\233\374\315\344\034\336\074\372\253\326\006\112\037\147\246\230  
\060\034\335\054\333\334\030\225\127\146\306\377\134\213\126\365  
\167\002\003\001\000\001\243\143\060\141\060\017\006\003\125\035  
\023\001\001\377\004\005\060\003\001\001\377\060\037\006\003\125  
\035\043\004\030\060\026\200\024\371\140\273\324\343\325\064\366  
\270\365\006\200\045\247\163\333\106\151\250\236\060\035\006\003  
\125\035\016\004\026\004\024\371\140\273\324\343\325\064\366\270  
\365\006\200\045\247\163\333\106\151\250\236\060\016\006\003\125  
\035\017\001\001\377\004\004\003\002\001\206\060\015\006\011\052  
\206\110\206\367\015\001\001\013\005\000\003\202\002\001\000\126  
\263\216\313\012\235\111\216\277\244\304\221\273\146\027\005\121  
\230\165\373\345\120\054\172\236\361\024\372\253\323\212\076\377  
\221\051\217\143\213\330\264\251\124\001\015\276\223\206\057\371

\112\155\307\136\365\127\371\312\125\034\022\276\107\017\066\305  
\337\152\267\333\165\302\107\045\177\271\361\143\370\150\055\125  
\004\321\362\215\260\244\317\274\074\136\037\170\347\245\240\040  
\160\260\004\305\267\367\162\247\336\042\015\275\063\045\106\214  
\144\222\046\343\076\056\143\226\332\233\214\075\370\030\011\327  
\003\314\175\206\202\340\312\004\007\121\120\327\377\222\325\014  
\357\332\206\237\231\327\353\267\257\150\342\071\046\224\272\150  
\267\277\203\323\352\172\147\075\142\147\256\045\345\162\350\342  
\344\354\256\022\366\113\053\074\237\351\260\100\363\070\124\263  
\375\267\150\310\332\306\217\121\074\262\373\221\334\034\347\233  
\235\341\267\015\162\217\342\244\304\251\170\371\353\024\254\306  
\103\005\302\145\071\050\030\002\303\202\262\235\005\276\145\355  
\226\137\145\164\074\373\011\065\056\173\234\023\375\033\017\135  
\307\155\201\072\126\017\314\073\341\257\002\057\042\254\106\312  
\106\074\240\034\114\326\104\264\136\056\134\025\146\011\341\046  
\051\376\306\122\141\272\261\163\377\303\014\234\345\154\152\224  
\077\024\312\100\026\225\204\363\131\251\254\137\114\141\223\155  
\321\073\314\242\225\014\042\246\147\147\104\056\271\331\322\212  
\101\263\146\013\132\373\175\043\245\362\032\260\377\336\233\203  
\224\056\321\077\337\222\267\221\257\005\073\145\307\240\154\261  
\315\142\022\303\220\033\343\045\316\064\274\157\167\166\261\020  
\303\367\005\032\300\326\257\164\142\110\027\167\222\151\220\141  
\034\336\225\200\164\124\217\030\034\303\363\003\320\277\244\103  
\165\206\123\030\172\012\056\011\034\066\237\221\375\202\212\042  
\113\321\016\120\045\335\313\003\014\027\311\203\000\010\116\065  
\115\212\213\355\360\002\224\146\054\104\177\313\225\047\226\027  
\255\011\060\254\266\161\027\156\213\027\366\034\011\324\055\073  
\230\245\161\323\124\023\331\140\363\365\113\146\117\372\361\356  
\040\022\215\264\254\127\261\105\143\241\254\166\251\302\373

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRUST\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRUST\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "SSL.com EV Root Certification Authority RSA R2"

# Issuer: CN=SSL.com EV Root Certification Authority RSA R2,O=SSL Corporation,L=Houston,ST=Texas,C=US

# Serial Number:56:b6:29:cd:34:bc:78:f6

# Subject: CN=SSL.com EV Root Certification Authority RSA R2,O=SSL Corporation,L=Houston,ST=Texas,C=US

# Not Valid Before: Wed May 31 18:14:37 2017

# Not Valid After : Fri May 30 18:14:37 2042

# Fingerprint (SHA-256):

2E:7B:F1:6C:C2:24:85:A7:BB:E2:AA:86:96:75:07:61:B0:AE:39:BE:3B:2F:E9:D0:CC:6D:4E:F7:34:91:42:5C

# Fingerprint (SHA1): 74:3A:F0:52:9B:D0:32:A0:F4:4A:83:CD:D4:BA:A9:7B:7C:2E:C4:9A

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE



```

CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "SSL.com EV Root Certification Authority RSA R2"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\164\072\360\122\233\320\062\240\364\112\203\315\324\272\251\173
\174\056\304\232
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\341\036\061\130\032\256\124\123\002\366\027\152\021\173\115\225
END
CKA_ISSUER MULTILINE_OCTAL
\060\201\202\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\016\060\014\006\003\125\004\010\014\005\124\145\170\141\163
\061\020\060\016\006\003\125\004\007\014\007\110\157\165\163\164
\157\156\061\030\060\026\006\003\125\004\012\014\017\123\123\114
\040\103\157\162\160\157\162\141\164\151\157\156\061\067\060\065
\006\003\125\004\003\014\056\123\123\114\056\143\157\155\040\105
\126\040\122\157\157\164\040\103\145\162\164\151\146\151\143\141
\164\151\157\156\040\101\165\164\150\157\162\151\164\171\040\122
\123\101\040\122\062
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\010\126\266\051\315\064\274\170\366
END
CKA_TRUST_SERVER_AUTH
CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "SSL.com EV Root Certification Authority ECC"
#
# Issuer: CN=SSL.com EV Root Certification Authority ECC,O=SSL Corporation,L=Houston,ST=Texas,C=US
# Serial Number:2c:29:9c:5b:16:ed:05:95
# Subject: CN=SSL.com EV Root Certification Authority ECC,O=SSL Corporation,L=Houston,ST=Texas,C=US
# Not Valid Before: Fri Feb 12 18:15:23 2016
# Not Valid After : Tue Feb 12 18:15:23 2041
# Fingerprint (SHA-256):
22:A2:C1:F7:BD:ED:70:4C:C1:E7:01:B5:F4:08:C3:10:88:0F:E9:56:B5:DE:2A:4A:44:F9:9C:87:3A:25:A7:C8
# Fingerprint (SHA1): 4C:DD:51:A3:D1:F5:20:32:14:B0:C6:C5:32:23:03:91:C7:46:42:6D
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "SSL.com EV Root Certification
Authority ECC"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509

```

CKA\_SUBJECT MULTILINE\_OCTAL

\060\177\061\013\060\011\006\003\125\004\006\023\002\125\123\061  
\016\060\014\006\003\125\004\010\014\005\124\145\170\141\163\061  
\020\060\016\006\003\125\004\007\014\007\110\157\165\163\164\157  
\156\061\030\060\026\006\003\125\004\012\014\017\123\123\114\040  
\103\157\162\160\157\162\141\164\151\157\156\061\064\060\062\006  
\003\125\004\003\014\053\123\123\114\056\143\157\155\040\105\126  
\040\122\157\157\164\040\103\145\162\164\151\146\151\143\141\164  
\151\157\156\040\101\165\164\150\157\162\151\164\171\040\105\103  
\103

END

CKA\_ID UTF8 "0"

CKA\_ISSUER MULTILINE\_OCTAL

\060\177\061\013\060\011\006\003\125\004\006\023\002\125\123\061  
\016\060\014\006\003\125\004\010\014\005\124\145\170\141\163\061  
\020\060\016\006\003\125\004\007\014\007\110\157\165\163\164\157  
\156\061\030\060\026\006\003\125\004\012\014\017\123\123\114\040  
\103\157\162\160\157\162\141\164\151\157\156\061\064\060\062\006  
\003\125\004\003\014\053\123\123\114\056\143\157\155\040\105\126  
\040\122\157\157\164\040\103\145\162\164\151\146\151\143\141\164  
\151\157\156\040\101\165\164\150\157\162\151\164\171\040\105\103  
\103

END

CKA\_SERIAL\_NUMBER

MULTILINE\_OCTAL

\002\010\054\051\234\133\026\355\005\225

END

CKA\_VALUE MULTILINE\_OCTAL

\060\202\002\224\060\202\002\032\240\003\002\001\002\002\010\054  
\051\234\133\026\355\005\225\060\012\006\010\052\206\110\316\075  
\004\003\002\060\177\061\013\060\011\006\003\125\004\006\023\002  
\125\123\061\016\060\014\006\003\125\004\010\014\005\124\145\170  
\141\163\061\020\060\016\006\003\125\004\007\014\007\110\157\165  
\163\164\157\156\061\030\060\026\006\003\125\004\012\014\017\123  
\123\114\040\103\157\162\160\157\162\141\164\151\157\156\061\064  
\060\062\006\003\125\004\003\014\053\123\123\114\056\143\157\155  
\040\105\126\040\122\157\157\164\040\103\145\162\164\151\146\151  
\143\141\164\151\157\156\040\101\165\164\150\157\162\151\164\171  
\040\105\103\103\060\036\027\015\061\066\060\062\061\062\061\070  
\061\065\062\063\132\027\015\064\061\060\062\061\062\061\070\061  
\065\062\063\132\060\177\061\013\060\011\006\003\125\004\006\023  
\002\125\123\061\016\060\014\006\003\125\004\010\014\005\124\145  
\170\141\163\061\020\060\016\006\003\125\004\007\014\007\110\157  
\165\163\164\157\156\061\030\060\026\006\003\125\004\012\014\017  
\123\123\114\040\103\157\162\160\157\162\141\164\151\157\156\061  
\064\060\062\006\003\125\004\003\014\053\123\123\114\056\143\157  
\155\040\105\126\040\122\157\157\164\040\103\145\162\164\151\146  
\151\143\141\164\151\157\156\040\101\165\164\150\157\162\151\164

```
\171\040\105\103\103\060\166\060\020\006\007\052\206\110\316\075
\002\001\006\005\053\201\004\000\042\003\142\000\004\252\022\107
\220\230\033\373\357\303\100\007\203\040\116\361\060\202\242\006
\321\362\222\206\141\362\366\041\150\312\000\304\307\352\103\000
\124\206\334\375\037\337\000\270\101\142\134\334\160\026\062\336
\037\231\324\314\305\007\310\010\037\141\026\007\121\075\175\134
\007\123\343\065\070\214\337\315\237\331\056\015\112\266\031\056
\132\160\132\006\355\276\360\241\260\312\320\011\051\243\143\060
\141\060\035\006\003\125\035\016\004\026\004\024\133\312\136\345
\336\322\201\252\315\250\055\144\121\266\331\162\233\227\346\117
\060\017\006\003\125\035\023\001\001\377\004\005\060\003\001\001
\377\060\037\006\003\125\035\043\004\030\060\026\200\024\133\312
\136\345\336\322\201\252\315\250\055\144\121\266\331\162\233\227
\346\117\060\016\006\003\125\035\017\001\001\377\004\004\003\002
\001\206\060\012\006\010\052\206\110\316\075\004\003\002\003\150
\000\060\145\002\061\000\212\346\100\211\067\353\351\325\023\331
\312\324\153\044\363\260\075\207\106\130\032\354\261\337\157\373
\126\272\160\153\307\070\314\350\261\214\117\017\367\361\147\166
\016\203\320\036\121\217\002\060\075\366\043\050\046\114\306\140
\207\223\046\233\262\065\036\272\326\367\074\321\034\316\372\045
\074\246\032\201\025\133\363\022\017\154\356\145\212\311\207\250
\371\007\340\142\232\214\134\112
```

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "SSL.com EV Root Certification Authority ECC"

# Issuer: CN=SSL.com EV Root Certification Authority ECC,O=SSL Corporation,L=Houston,ST=Texas,C=US

# Serial Number:2c:29:9c:5b:16:ed:05:95

# Subject: CN=SSL.com EV Root Certification Authority ECC,O=SSL Corporation,L=Houston,ST=Texas,C=US

# Not Valid Before: Fri Feb 12 18:15:23 2016

# Not Valid After : Tue Feb 12 18:15:23 2041

# Fingerprint (SHA-256):

22:A2:C1:F7:BD:ED:70:4C:C1:E7:01:B5:F4:08:C3:10:88:0F:E9:56:B5:DE:2A:4A:44:F9:9C:87:3A:25:A7:C8

# Fingerprint (SHA1): 4C:DD:51:A3:D1:F5:20:32:14:B0:C6:C5:32:23:03:91:C7:46:42:6D

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "SSL.com EV Root Certification Authority ECC"

CKA\_CERT\_SHA1\_HASH MULTILINE\_OCTAL

```
\114\335\121\243\321\365\040\062\024\260\306\305\062\043\003\221
\307\106\102\155
```

END

CKA\_CERT\_MD5\_HASH

```

MULTILINE_OCTAL
\131\123\042\145\203\102\001\124\300\316\102\271\132\174\362\220
END
CKA_ISSUER MULTILINE_OCTAL
\060\177\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\016\060\014\006\003\125\004\010\014\005\124\145\170\141\163\061
\020\060\016\006\003\125\004\007\014\007\110\157\165\163\164\157
\156\061\030\060\026\006\003\125\004\012\014\017\123\123\114\040
\103\157\162\160\157\162\141\164\151\157\156\061\064\060\062\006
\003\125\004\003\014\053\123\123\114\056\143\157\155\040\105\126
\040\122\157\157\164\040\103\145\162\164\151\146\151\143\141\164
\151\157\156\040\101\165\164\150\157\162\151\164\171\040\105\103
\103
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\010\054\051\234\133\026\355\005\225
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
#
Certificate "GlobalSign Root CA - R6"
#
# Issuer: CN=GlobalSign,O=GlobalSign,OU=GlobalSign Root CA - R6
# Serial Number:45:e6:bb:03:83:33:c3:85:65:48:e6:ff:45:51
# Subject: CN=GlobalSign,O=GlobalSign,OU=GlobalSign Root CA - R6
# Not Valid Before: Wed Dec 10 00:00:00 2014
# Not Valid After : Sun Dec 10 00:00:00 2034
# Fingerprint (SHA-256):
2C:AB:EA:FE:37:D0:6C:A2:2A:BA:73:91:C0:03:3D:25:98:29:52:C4:53:64:73:49:76:3A:3A:B5:AD:6C:CF:69
# Fingerprint (SHA1): 80:94:64:0E:B5:A7:A1:CA:11:9C:1F:DD:D5:9F:81:02:63:A7:FB:D1
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "GlobalSign Root CA - R6"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\114\061\040\060\036\006\003\125\004\013\023\027\107\154\157
\142\141\154\123\151\147\156\040\122\157\157\164\040\103\101\040
\055\040\122\066\061\023\060\021\006\003\125\004\012\023\012\107
\154\157\142\141\154\123\151\147\156\061\023\060\021\006\003\125
\004\003\023\012\107\154\157\142\141\154\123\151\147\156
END
CKA_ID

```

UTF8 "0"

CKA\_ISSUER MULTILINE\_OCTAL

\060\114\061\040\060\036\006\003\125\004\013\023\027\107\154\157  
\142\141\154\123\151\147\156\040\122\157\157\164\040\103\101\040  
\055\040\122\066\061\023\060\021\006\003\125\004\012\023\012\107  
\154\157\142\141\154\123\151\147\156\061\023\060\021\006\003\125  
\004\003\023\012\107\154\157\142\141\154\123\151\147\156

END

CKA\_SERIAL\_NUMBER MULTILINE\_OCTAL

\002\016\105\346\273\003\203\063\303\205\145\110\346\377\105\121

END

CKA\_VALUE MULTILINE\_OCTAL

\060\202\005\203\060\202\003\153\240\003\002\001\002\002\016\105  
\346\273\003\203\063\303\205\145\110\346\377\105\121\060\015\006  
\011\052\206\110\206\367\015\001\001\014\005\000\060\114\061\040  
\060\036\006\003\125\004\013\023\027\107\154\157\142\141\154\123  
\151\147\156\040\122\157\157\164\040\103\101\040\055\040\122\066  
\061\023\060\021\006\003\125\004\012\023\012\107\154\157\142\141  
\154\123\151\147\156\061\023\060\021\006\003\125\004\003\023\012  
\107\154\157\142\141\154\123\151\147\156\060\036\027\015\061\064  
\061\062\061\060\060\060\060\060\060\060\132\027\015\063\064\061  
\062\061\060\060\060\060\060\060\060\132\060\114\061\040\060\036  
\006\003\125\004\013\023\027\107\154\157\142\141\154\123\151\147  
\156\040\122\157\157\164\040\103\101\040\055\040\122\066\061\023  
\060\021\006\003\125\004\012\023\012\107\154\157\142\141\154\123  
\151\147\156\061\023\060\021\006\003\125\004\003\023\012\107\154  
\157\142\141\154\123\151\147\156\060\202\002\042\060\015\006\011  
\052\206\110\206\367\015\001\001\001\005\000\003\202\002\017\000  
\060\202\002\012\002\202\002\001\000\225\007\350\163\312\146\371  
\354\024\312\173\074\367\015\010\361\264\105\013\054\202\264\110  
\306\353\133\074\256\203\270\101\222\063\024\244\157\177\351\052  
\314\306\260\210\153\305\266\211\321\306\262\377\024\316\121\024  
\041\354\112\335\033\132\306\326\207\356\115\072\025\006\355\144  
\146\013\222\200\312\104\336\163\224\116\363\247\211\177\117\170  
\143\010\310\022\120\155\102\146\057\115\271\171\050\115\122\032  
\212\032\200\267\031\201\016\176\304\212\274\144\114\041\034\103  
\150\327\075\074\212\305\262\146\325\220\232\267\061\006\305\276  
\342\155\062\006\246\036\371\271\353\252\243\270\277\276\202\143  
\120\320\360\030\211\337\344\017\171\365\352\242\037\052\322\160  
\056\173\347\274\223\273\155\123\342\110\174\214\020\007\070\377  
\146\262\167\141\176\340\352\214\074\252\264\244\366\363\225\112  
\022\007\155\375\214\262\211\317\320\240\141\167\310\130\164\260  
\324\043\072\367\135\072\312\242\333\235\011\336\135\104\055\220  
\361\201\315\127\222\372\176\274\120\004\143\064\337\153\223\030  
\276\153\066\262\071\344\254\044\066\267\360\357\266\034\023\127  
\223\266\336\262\370\342\205\267\163\242\270\065\252\105\362\340  
\235\066\241\157\124\212\361\162\126\156\056\210\305\121\102\104  
\025\224\356\243\305\070\226\233\116\116\132\013\107\363\006\066

\111\167\060\274\161\067\345\246\354\041\010\165\374\346\141\026  
\077\167\325\331\221\227\204\012\154\324\002\115\164\300\024\355  
\375\071\373\203\362\136\024\241\004\260\013\351\376\356\217\341  
\156\013\262\010\263\141\146\011\152\261\006\072\145\226\131\300  
\360\065\375\311\332\050\215\032\021\207\160\201\012\250\232\165  
\035\236\072\206\005\000\236\333\200\326\045\371\334\005\236\047  
\131\114\166\071\133\352\371\245\241\330\203\017\321\377\337\060  
\021\371\205\317\063\110\365\312\155\144\024\054\172\130\117\323  
\113\010\111\305\225\144\032\143\016\171\075\365\263\214\312\130  
\255\234\102\105\171\156\016\207\031\134\124\261\145\266\277\214  
\233\334\023\351\015\157\270\056\334\147\156\311\213\021\265\204  
\024\212\000\031\160\203\171\221\227\221\324\032\047\277\067\036  
\062\007\330\024\143\074\050\114\257\002\003\001\000\001\243\143  
\060\141\060\016\006\003\125\035\017\001\001\377\004\004\003\002  
\001\006\060\017\006\003\125\035\023\001\001\377\004\005\060\003  
\001\001\377\060\035\006\003\125\035\016\004\026\004\024\256\154  
\005\243\223\023\342\242\347\342\327\034\326\307\360\177\310\147  
\123\240\060\037\006\003\125\035\043\004\030\060\026\200\024\256  
\154\005\243\223\023\342\242\347\342\327\034\326\307\360\177\310  
\147\123\240\060\015\006\011\052\206\110\206\367\015\001\001\014  
\005\000\003\202\002\001\000\203\045\355\350\321\375\225\122\315  
\236\300\004\240\221\151\346\134\320\204\336\334\255\242\117\350  
\107\170\326\145\230\251\133\250\074\207\174\002\212\321\156\267  
\026\163\346\137\300\124\230\325\164\276\301\315\342\021\221\255  
\043\030\075\335\341\162\104\226\264\225\136\300\173\216\231\170  
\026\103\023\126\127\263\242\263\073\265\167\334\100\162\254\243  
\353\233\065\076\261\010\041\241\347\304\103\067\171\062\276\265  
\347\234\054\114\274\103\051\231\216\060\323\254\041\340\343\035  
\372\330\007\063\166\124\000\042\052\271\115\040\056\160\150\332  
\345\123\374\203\134\323\235\362\377\104\014\104\146\362\322\343  
\275\106\000\032\155\002\272\045\135\215\241\061\121\335\124\106  
\034\115\333\231\226\357\032\034\004\134\246\025\357\170\340\171  
\376\135\333\076\252\114\125\375\232\025\251\157\341\246\373\337  
\160\060\351\303\356\102\106\355\302\223\005\211\372\175\143\173  
\077\320\161\201\174\000\350\230\256\016\170\064\303\045\373\257  
\012\237\040\153\335\073\023\217\022\214\342\101\032\110\172\163  
\240\167\151\307\266\134\177\202\310\036\376\130\033\050\053\250  
\154\255\136\155\300\005\322\173\267\353\200\376\045\067\376\002  
\233\150\254\102\135\303\356\365\314\334\360\120\165\322\066\151  
\234\346\173\004\337\156\006\151\266\336\012\011\110\131\207\353  
\173\024\140\172\144\252\151\103\357\221\307\114\354\030\335\154  
\357\123\055\214\231\341\136\362\162\076\317\124\310\275\147\354  
\244\017\114\105\377\323\271\060\043\007\114\217\020\277\206\226  
\331\231\132\264\231\127\034\244\314\273\025\211\123\272\054\005  
\017\344\304\236\031\261\030\064\325\114\235\272\355\367\037\257  
\044\225\004\170\250\003\273\356\201\345\332\137\174\213\112\241  
\220\164\045\247\263\076\113\310\054\126\275\307\310\357\070\342  
\134\222\360\171\367\234\204\272\164\055\141\001\040\176\176\321

```
\362\117\007\131\137\213\055\103\122\353\106\014\224\341\365\146
\107\171\167\325\124\133\037\255\044\067\313\105\132\116\240\104
\110\310\330\260\231\305\025\204\011\366\326\111\111\300\145\270
\346\032\161\156\240\250\361\202\350\105\076\154\326\002\327\012
\147\203\005\132\311\244\020
```

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "GlobalSign Root CA - R6"

# Issuer: CN=GlobalSign,O=GlobalSign,OU=GlobalSign Root CA - R6

# Serial Number:45:e6:bb:03:83:33:c3:85:65:48:e6:ff:45:51

# Subject: CN=GlobalSign,O=GlobalSign,OU=GlobalSign Root CA - R6

# Not Valid Before: Wed Dec 10 00:00:00 2014

# Not Valid After : Sun Dec 10 00:00:00 2034

# Fingerprint (SHA-256):

2C:AB:EA:FE:37:D0:6C:A2:2A:BA:73:91:C0:03:3D:25:98:29:52:C4:53:64:73:49:76:3A:3A:B5:AD:6C:CF:69

# Fingerprint (SHA1): 80:94:64:0E:B5:A7:A1:CA:11:9C:1F:DD:D5:9F:81:02:63:A7:FB:D1

CKA\_CLASS

CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "GlobalSign Root CA - R6"

CKA\_CERT\_SHA1\_HASH MULTILINE\_OCTAL

```
\200\224\144\016\265\247\241\312\021\234\037\335\325\237\201\002
\143\247\373\321
```

END

CKA\_CERT\_MD5\_HASH MULTILINE\_OCTAL

```
\117\335\007\344\324\042\144\071\036\014\067\102\352\321\306\256
```

END

CKA\_ISSUER MULTILINE\_OCTAL

```
\060\114\061\040\060\036\006\003\125\004\013\023\027\107\154\157
\142\141\154\123\151\147\156\040\122\157\157\164\040\103\101\040
\055\040\122\066\061\023\060\021\006\003\125\004\012\023\012\107
\154\157\142\141\154\123\151\147\156\061\023\060\021\006\003\125
\004\003\023\012\107\154\157\142\141\154\123\151\147\156
```

END

CKA\_SERIAL\_NUMBER MULTILINE\_OCTAL

```
\002\016\105\346\273\003\203\063\303\205\145\110\346\377\105\121
```

END

CKA\_TRUST\_SERVER\_AUTH CK\_TRUST CKT\_NSS\_TRUSTED\_DELEGATOR

CKA\_TRUST\_EMAIL\_PROTECTION CK\_TRUST CKT\_NSS\_TRUSTED\_DELEGATOR

CKA\_TRUST\_CODE\_SIGNING CK\_TRUST

CKT\_NSS\_MUST\_VERIFY\_TRUST

CKA\_TRUST\_STEP\_UP\_APPROVED CK\_BBOOL CK\_FALSE

```

#
# Certificate "OISTE WISeKey Global Root GC CA"
#
# Issuer: CN=OISTE WISeKey Global Root GC CA,OU=OISTE Foundation Endorsed,O=WISeKey,C=CH
# Serial Number:21:2a:56:0c:ae:da:0c:ab:40:45:bf:2b:a2:2d:3a:ea
# Subject: CN=OISTE WISeKey Global Root GC CA,OU=OISTE Foundation Endorsed,O=WISeKey,C=CH
# Not Valid Before: Tue May 09 09:48:34 2017
# Not Valid After : Fri May 09 09:58:33 2042
# Fingerprint (SHA-256):
85:60:F9:1C:36:24:DA:BA:95:70:B5:FE:A0:DB:E3:6F:F1:1A:83:23:BE:94:86:85:4F:B3:F3:4A:55:71:19:8D
# Fingerprint (SHA1): E0:11:84:5E:34:DE:BE:88:81:B9:9C:F6:16:26:D1:96:1F:C3:B9:31
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "OISTE WISeKey Global Root GC CA"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\155\061\013\060\011\006\003\125\004\006\023\002\103\110\061
\020\060\016\006\003\125\004\012\023\007\127\111\123\145\113\145
\171\061\042\060\040\006\003\125\004\013\023\031\117\111\123\124
\105\040\106\157\165\156\144\141\164\151\157\156\040\105\156\144
\157\162\163\145\144\061\050\060\046\006\003\125\004\003\023\037
\117\111\123\124\105\040\127\111\123\145\113\145\171\040\107\154
\157\142\141\154\040\122\157\157\164\040\107\103\040\103\101
END
CKA_ID
UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\155\061\013\060\011\006\003\125\004\006\023\002\103\110\061
\020\060\016\006\003\125\004\012\023\007\127\111\123\145\113\145
\171\061\042\060\040\006\003\125\004\013\023\031\117\111\123\124
\105\040\106\157\165\156\144\141\164\151\157\156\040\105\156\144
\157\162\163\145\144\061\050\060\046\006\003\125\004\003\023\037
\117\111\123\124\105\040\127\111\123\145\113\145\171\040\107\154
\157\142\141\154\040\122\157\157\164\040\107\103\040\103\101
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\020\041\052\126\014\256\332\014\253\100\105\277\053\242\055
\072\352
END
CKA_VALUE
MULTILINE_OCTAL
\060\202\002\151\060\202\001\357\240\003\002\001\002\002\020\041
\052\126\014\256\332\014\253\100\105\277\053\242\055\072\352\060
\012\006\010\052\206\110\316\075\004\003\003\060\155\061\013\060
\011\006\003\125\004\006\023\002\103\110\061\020\060\016\006\003

```



\125\004\012\023\007\127\111\123\145\113\145\171\061\042\060\040  
\006\003\125\004\013\023\031\117\111\123\124\105\040\106\157\165  
\156\144\141\164\151\157\156\040\105\156\144\157\162\163\145\144  
\061\050\060\046\006\003\125\004\003\023\037\117\111\123\124\105  
\040\127\111\123\145\113\145\171\040\107\154\157\142\141\154\040  
\122\157\157\164\040\107\103\040\103\101\060\036\027\015\061\067  
\060\065\060\071\060\071\064\070\063\064\132\027\015\064\062\060  
\065\060\071\060\071\065\070\063\063\132\060\155\061\013\060\011  
\006\003\125\004\006\023\002\103\110\061\020\060\016\006\003\125  
\004\012\023\007\127\111\123\145\113\145\171\061\042\060\040\006  
\003\125\004\013\023\031\117\111\123\124\105\040\106\157\165\156  
\144\141\164\151\157\156\040\105\156\144\157\162\163\145\144\061  
\050\060\046\006\003\125\004\003\023\037\117\111\123\124\105\040  
\127\111\123\145\113\145\171\040\107\154\157\142\141\154\040\122  
\157\157\164\040\107\103\040\103\101\060\166\060\020\006\007\052  
\206\110\316\075\002\001\006\005\053\201\004\000\042\003\142\000  
\004\114\351\120\300\306\017\162\030\274\330\361\272\263\211\342  
\171\112\243\026\247\153\124\044\333\121\377\352\364\011\044\303  
\013\042\237\313\152\047\202\201\015\322\300\257\061\344\164\202  
\156\312\045\331\214\165\235\361\333\320\232\242\113\041\176\026  
\247\143\220\322\071\324\261\207\170\137\030\226\017\120\033\065  
\067\017\152\306\334\331\023\115\244\216\220\067\346\275\133\061  
\221\243\124\060\122\060\016\006\003\125\035\017\001\001\377\004  
\004\003\002\001\006\060\017\006\003\125\035\023\001\001\377\004  
\005\060\003\001\001\377\060\035\006\003\125\035\016\004\026\004  
\024\110\207\024\254\343\303\236\220\140\072\327\312\211\356\323  
\255\214\264\120\146\060\020\006\011\053\006\001\004\001\202\067  
\025\001\004\003\002\001\000\060\012\006\010\052\206\110\316\075  
\004\003\003\003\150\000\060\145\002\060\046\307\151\133\334\325  
\347\262\347\310\014\214\214\303\335\171\214\033\143\325\311\122  
\224\116\115\202\112\163\036\262\200\204\251\045\300\114\132\155  
\111\051\140\170\023\342\176\110\353\144\002\061\000\333\064\040  
\062\010\377\232\111\002\266\210\336\024\257\135\154\231\161\215  
\032\077\213\327\340\242\066\206\034\007\202\072\166\123\375\302  
\242\355\357\173\260\200\117\130\017\113\123\071\275

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "OISTE WISEKey Global Root GC CA"

# Issuer: CN=OISTE WISEKey Global Root GC CA,OU=OISTE Foundation Endorsed,O=WISEKey,C=CH

# Serial Number:21:2a:56:0c:ae:da:0c:ab:40:45:bf:2b:a2:2d:3a:ea

# Subject: CN=OISTE WISEKey Global Root GC CA,OU=OISTE Foundation Endorsed,O=WISEKey,C=CH

# Not Valid Before: Tue May 09

09:48:34 2017

# Not Valid After : Fri May 09 09:58:33 2042

```

# Fingerprint (SHA-256):
85:60:F9:1C:36:24:DA:BA:95:70:B5:FE:A0:DB:E3:6F:F1:1A:83:23:BE:94:86:85:4F:B3:F3:4A:55:71:19:8D
# Fingerprint (SHA1): E0:11:84:5E:34:DE:BE:88:81:B9:9C:F6:16:26:D1:96:1F:C3:B9:31
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "OISTE WISeKey Global Root GC CA"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\340\021\204\136\064\336\276\210\201\271\234\366\026\046\321\226
\037\303\271\061
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\251\326\271\055\057\223\144\370\245\151\312\221\351\150\007\043
END
CKA_ISSUER MULTILINE_OCTAL
\060\155\061\013\060\011\006\003\125\004\006\023\002\103\110\061
\020\060\016\006\003\125\004\012\023\007\127\111\123\145\113\145
\171\061\042\060\040\006\003\125\004\013\023\031\117\111\123\124
\105\040\106\157\165\156\144\141\164\151\157\156\040\105\156\144
\157\162\163\145\144\061\050\060\046\006\003\125\004\003\023\037
\117\111\123\124\105\040\127\111\123\145\113\145\171\040\107\154
\157\142\141\154\040\122\157\157\164\040\107\103\040\103\101
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\020\041\052\126\014\256\332\014\253\100\105\277\053\242\055
\072\352
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "UCA Global G2 Root"
#
# Issuer: CN=UCA Global G2 Root,O=UniTrust,C=CN
# Serial Number:5d:df:b1:da:5a:a3:ed:5d:be:5a:65:20:65:03:90:ef
# Subject: CN=UCA Global G2 Root,O=UniTrust,C=CN
# Not Valid Before: Fri Mar 11 00:00:00 2016
# Not Valid After : Mon Dec 31 00:00:00 2040
# Fingerprint (SHA-256):
9B:EA:11:C9:76:FE:01:47:64:C1:BE:56:A6:F9:14:B5:A5:60:31:7A:BD:99:88:39:33:82:E5:16:1A:A0:49:3C
# Fingerprint (SHA1): 28:F9:78:16:19:7A:FF:18:25:18:AA:44:FE:C1:A0:CE:5C:B6:4C:8A
CKA_CLASS CK_OBJECT_CLASS
CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE

```

```
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "UCA Global G2 Root"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\075\061\013\060\011\006\003\125\004\006\023\002\103\116\061
\021\060\017\006\003\125\004\012\014\010\125\156\151\124\162\165
\163\164\061\033\060\031\006\003\125\004\003\014\022\125\103\101
\040\107\154\157\142\141\154\040\107\062\040\122\157\157\164
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\075\061\013\060\011\006\003\125\004\006\023\002\103\116\061
\021\060\017\006\003\125\004\012\014\010\125\156\151\124\162\165
\163\164\061\033\060\031\006\003\125\004\003\014\022\125\103\101
\040\107\154\157\142\141\154\040\107\062\040\122\157\157\164
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\020\135\337\261\332\132\243\355\135\276\132\145\040\145\003
\220\357
END
CKA_VALUE MULTILINE_OCTAL
\060\202\005\106\060\202\003\056\240\003\002\001\002\002\020\135
\337\261\332\132\243\355\135\276\132\145\040\145\003\220\357\060
\015\006\011\052\206\110\206\367\015\001\001\013\005\000\060\075
\061\013\060\011\006\003\125\004\006\023\002\103\116\061\021\060
\017\006\003\125\004\012\014\010\125\156\151\124\162\165\163\164
\061\033\060\031\006\003\125\004\003\014\022\125\103\101\040\107
\154\157\142\141\154\040\107\062\040\122\157\157\164\060\036\027
\015\061\066\060\063\061\061\060\060\060\060\060\060\132\027\015
\064\060\061\062\063\061\060\060\060\060\060\060\132\060\075\061
\013\060\011\006\003\125\004\006\023\002\103\116\061\021\060\017
\006\003\125\004\012\014\010\125\156\151\124\162\165\163\164\061
\033\060\031\006\003\125\004\003\014\022\125\103\101\040\107\154
\157\142\141\154\040\107\062\040\122\157\157\164\060\202\002\042
\060\015\006\011\052\206\110\206\367\015\001\001\001\005\000\003
\202\002\017\000\060\202\002\012\002\202\002\001\000\305\346\053
\157\174\357\046\005\047\243\201\044\332\157\313\001\371\231\232
\251\062\302\042\207\141\101\221\073\313\303\150\033\006\305\114
\251\053\301\147\027\042\035\053\355\371\051\211\223\242\170\275
\222\153\240\243\015\242\176\312\223\263\246\321\214\065\325\165
\371\027\366\317\105\305\345\172\354\167\223\240\217\043\256\016
\032\003\177\276\324\320\355\056\173\253\106\043\133\377\054\346
\124\172\224\300\052\025\360\311\215\260\172\073\044\341\327\150
\342\061\074\006\063\106\266\124\021\246\245\057\042\124\052\130
\015\001\002\361\372\025\121\147\154\300\372\327\266\033\177\321
\126\210\057\032\072\215\073\273\202\021\340\107\000\320\122\207
\253\373\206\176\017\044\153\100\235\064\147\274\215\307\055\206
```

\157\171\076\216\251\074\027\113\177\260\231\343\260\161\140\334  
\013\365\144\303\316\103\274\155\161\271\322\336\047\133\212\350  
\330\306\256\341\131\175\317\050\055\065\270\225\126\032\361\262  
\130\113\267\022\067\310\174\263\355\113\200\341\215\372\062\043  
\266\157\267\110\225\010\261\104\116\205\214\072\002\124\040\057  
\337\277\127\117\073\072\220\041\327\301\046\065\124\040\354\307  
\077\107\354\357\132\277\113\172\301\255\073\027\120\134\142\330  
\017\113\112\334\053\372\156\274\163\222\315\354\307\120\350\101  
\226\327\251\176\155\330\351\035\217\212\265\271\130\222\272\112  
\222\053\014\126\375\200\353\010\360\136\051\156\033\034\014\257  
\217\223\211\255\333\275\243\236\041\312\211\031\354\337\265\303  
\032\353\026\376\170\066\114\326\156\320\076\027\034\220\027\153  
\046\272\373\172\057\277\021\034\030\016\055\163\003\217\240\345  
\065\240\132\342\114\165\035\161\341\071\070\123\170\100\314\203  
\223\327\012\236\235\133\217\212\344\345\340\110\344\110\262\107  
\315\116\052\165\052\173\362\042\366\311\276\011\221\226\127\172  
\210\210\254\356\160\254\371\334\051\343\014\034\073\022\116\104  
\326\247\116\260\046\310\363\331\032\227\221\150\352\357\215\106  
\006\322\126\105\130\232\074\014\017\203\270\005\045\303\071\317  
\073\244\064\211\267\171\022\057\107\305\347\251\227\151\374\246  
\167\147\265\337\173\361\172\145\025\344\141\126\145\002\003\001  
\000\001\243\102\060\100\060\016\006\003\125\035\017\001\001\377  
\004\004\003\002\001\006\060\017\006\003\125\035\023\001\001\377  
\004\005\060\003\001\001\377\060\035\006\003\125\035\016\004\026  
\004\024\201\304\214\314\365\344\060\377\245\014\010\137\214\025  
\147\041\164\001\337\337\060\015\006\011\052\206\110\206\367\015  
\001\001\013\005\000\003\202\002\001\000\023\145\042\365\216\053  
\255\104\344\313\377\271\150\346\303\200\110\075\004\173\372\043  
\057\172\355\066\332\262\316\155\366\346\236\345\137\130\217\313  
\067\062\241\310\145\266\256\070\075\065\033\076\274\073\266\004  
\320\274\371\111\365\233\367\205\305\066\266\313\274\370\310\071  
\325\344\137\007\275\025\124\227\164\312\312\355\117\272\272\144  
\166\237\201\270\204\105\111\114\215\157\242\353\261\314\321\303  
\224\332\104\302\346\342\352\030\350\242\037\047\005\272\327\345  
\326\251\315\335\357\166\230\215\000\016\315\033\372\003\267\216  
\200\130\016\047\077\122\373\224\242\312\136\145\311\326\204\332  
\271\065\161\363\046\300\117\167\346\201\047\322\167\073\232\024  
\157\171\364\366\320\341\323\224\272\320\127\121\275\047\005\015  
\301\375\310\022\060\356\157\215\021\053\010\235\324\324\277\200  
\105\024\232\210\104\332\060\352\264\247\343\356\357\133\202\325  
\076\326\255\170\222\333\134\074\363\330\255\372\270\153\177\304  
\066\050\266\002\025\212\124\054\234\260\027\163\216\320\067\243  
\024\074\230\225\000\014\051\005\133\236\111\111\261\137\307\343  
\313\317\047\145\216\065\027\267\127\310\060\331\101\133\271\024  
\266\350\302\017\224\061\247\224\230\314\152\353\265\341\047\365  
\020\250\001\350\216\022\142\350\210\314\265\177\106\227\300\233  
\020\146\070\032\066\106\137\042\150\075\337\311\306\023\047\253  
\123\006\254\242\074\206\006\145\157\261\176\261\051\104\232\243

```
\272\111\151\050\151\217\327\345\137\255\004\206\144\157\032\240
\014\305\010\142\316\200\243\320\363\354\150\336\276\063\307\027
\133\177\200\304\114\114\261\246\204\212\303\073\270\011\315\024
\201\272\030\343\124\127\066\376\333\057\174\107\241\072\063\310
\371\130\073\104\117\261\312\002\211\004\226\050\150\305\113\270
\046\211\273\326\063\057\120\325\376\232\211\272\030\062\222\124
\306\133\340\235\371\136\345\015\042\233\366\332\342\310\041\262
\142\041\252\206\100\262\056\144\323\137\310\343\176\021\147\105
\037\005\376\343\242\357\263\250\263\363\175\217\370\014\037\042
\037\055\160\264\270\001\064\166\060\000\345\043\170\247\126\327
\120\037\212\373\006\365\302\031\360\320
```

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "UCA Global G2 Root"

# Issuer: CN=UCA Global G2 Root,O=UniTrust,C=CN

# Serial Number:5d:df:b1:da:5a:a3:ed:5d:be:5a:65:20:65:03:90:ef

# Subject: CN=UCA Global G2 Root,O=UniTrust,C=CN

# Not Valid Before: Fri Mar 11 00:00:00 2016

# Not Valid After : Mon Dec 31 00:00:00 2040

# Fingerprint (SHA-256):

9B:EA:11:C9:76:FE:01:47:64:C1:BE:56:A6:F9:14:B5:A5:60:31:7A:BD:99:88:39:33:82:E5:16:1A:A0:49:3C

# Fingerprint (SHA1): 28:F9:78:16:19:7A:FF:18:25:18:AA:44:FE:C1:A0:CE:5C:B6:4C:8A

CKA\_CLASS

CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "UCA Global G2 Root"

CKA\_CERT\_SHA1\_HASH MULTILINE\_OCTAL

```
\050\371\170\026\031\172\377\030\045\030\252\104\376\301\240\316
\134\266\114\212
```

END

CKA\_CERT\_MD5\_HASH MULTILINE\_OCTAL

```
\200\376\360\304\112\360\134\142\062\237\034\272\170\251\120\370
```

END

CKA\_ISSUER MULTILINE\_OCTAL

```
\060\075\061\013\060\011\006\003\125\004\006\023\002\103\116\061
\021\060\017\006\003\125\004\012\014\010\125\156\151\124\162\165
\163\164\061\033\060\031\006\003\125\004\003\014\022\125\103\101
\040\107\154\157\142\141\154\040\107\062\040\122\157\157\164
```

END

CKA\_SERIAL\_NUMBER MULTILINE\_OCTAL

```
\002\020\135\337\261\332\132\243\355\135\276\132\145\040\145\003
\220\357
```

```

END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED
CK_BBOOL CK_FALSE

#
# Certificate "UCA Extended Validation Root"
#
# Issuer: CN=UCA Extended Validation Root,O=UniTrust,C=CN
# Serial Number:4f:d2:2b:8f:f5:64:c8:33:9e:4f:34:58:66:23:70:60
# Subject: CN=UCA Extended Validation Root,O=UniTrust,C=CN
# Not Valid Before: Fri Mar 13 00:00:00 2015
# Not Valid After : Fri Dec 31 00:00:00 2038
# Fingerprint (SHA-256):
D4:3A:F9:B3:54:73:75:5C:96:84:FC:06:D7:D8:CB:70:EE:5C:28:E7:73:FB:29:4E:B4:1E:E7:17:22:92:4D:24
# Fingerprint (SHA1): A3:A1:B0:6F:24:61:23:4A:E3:36:A5:C2:37:FC:A6:FF:DD:F0:D7:3A
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "UCA Extended Validation Root"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\107\061\013\060\011\006\003\125\004\006\023\002\103\116\061
\021\060\017\006\003\125\004\012\014\010\125\156\151\124\162\165
\163\164\061\045\060\043\006\003\125\004\003\014\034\125\103\101
\040\105\170\164\145\156\144\145\144\040\126\141\154\151\144\141
\164\151\157\156\040\122\157\157\164
END
CKA_ID
UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\107\061\013\060\011\006\003\125\004\006\023\002\103\116\061
\021\060\017\006\003\125\004\012\014\010\125\156\151\124\162\165
\163\164\061\045\060\043\006\003\125\004\003\014\034\125\103\101
\040\105\170\164\145\156\144\145\144\040\126\141\154\151\144\141
\164\151\157\156\040\122\157\157\164
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\020\117\322\053\217\365\144\310\063\236\117\064\130\146\043
\160\140
END
CKA_VALUE MULTILINE_OCTAL
\060\202\005\132\060\202\003\102\240\003\002\001\002\002\020\117
\322\053\217\365\144\310\063\236\117\064\130\146\043\160\140\060
\015\006\011\052\206\110\206\367\015\001\001\013\005\000\060\107

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\061\013\060\011\006\003\125\004\006\023\002\103\116\061\021\060  
\017\006\003\125\004\012\014\010\125\156\151\124\162\165\163\164  
\061\045\060\043\006\003\125\004\003\014\034\125\103\101\040\105  
\170\164\145\156\144\145\144\040\126\141\154\151\144\141\164\151  
\157\156\040\122\157\157\164\060\036\027\015\061\065\060\063\061  
\063\060\060\060\060\060\060\132\027\015\063\070\061\062\063\061  
\060\060\060\060\060\060\132\060\107\061\013\060\011\006\003\125  
\004\006\023\002\103\116\061\021\060\017\006\003\125\004\012\014  
\010\125\156\151\124\162\165\163\164\061\045\060\043\006\003\125  
\004\003\014\034\125\103\101\040\105\170\164\145\156\144\145\144  
\040\126\141\154\151\144\141\164\151\157\156\040\122\157\157\164  
\060\202\002\042\060\015\006\011\052\206\110\206\367\015\001\001  
\001\005\000\003\202\002\017\000\060\202\002\012\002\202\002\001  
\000\251\011\007\050\023\002\260\231\340\144\252\036\103\026\172  
\163\261\221\240\165\076\250\372\343\070\000\172\354\211\152\040  
\017\213\305\260\233\063\003\132\206\306\130\206\325\301\205\273  
\117\306\234\100\115\312\276\356\151\226\270\255\201\060\232\174  
\222\005\353\005\053\232\110\320\270\166\076\226\310\040\273\322  
\260\361\217\330\254\105\106\377\252\147\140\264\167\176\152\037  
\074\032\122\172\004\075\007\074\205\015\204\320\037\166\012\367  
\152\024\337\162\343\064\174\127\116\126\001\076\171\361\252\051  
\073\154\372\370\217\155\115\310\065\337\256\353\334\044\356\171  
\105\247\205\266\005\210\336\210\135\045\174\227\144\147\011\331  
\277\132\025\005\206\363\011\036\354\130\062\063\021\363\167\144  
\260\166\037\344\020\065\027\033\362\016\261\154\244\052\243\163  
\374\011\037\036\062\031\123\021\347\331\263\054\056\166\056\241  
\243\336\176\152\210\011\350\362\007\212\370\262\315\020\347\342  
\163\100\223\273\010\321\077\341\374\013\224\263\045\357\174\246  
\327\321\257\237\377\226\232\365\221\173\230\013\167\324\176\350  
\007\322\142\265\225\071\343\363\361\155\017\016\145\204\212\143  
\124\305\200\266\340\236\113\175\107\046\247\001\010\135\321\210  
\236\327\303\062\104\372\202\112\012\150\124\177\070\123\003\314  
\244\000\063\144\121\131\013\243\202\221\172\136\354\026\302\363  
\052\346\142\332\052\333\131\142\020\045\112\052\201\013\107\007  
\103\006\160\207\322\372\223\021\051\172\110\115\353\224\307\160  
\115\257\147\325\121\261\200\040\001\001\264\172\010\246\220\177  
\116\340\357\007\101\207\257\152\245\136\213\373\317\120\262\232  
\124\257\303\211\272\130\055\365\060\230\261\066\162\071\176\111  
\004\375\051\247\114\171\344\005\127\333\224\271\026\123\215\106  
\263\035\225\141\127\126\177\257\360\026\133\141\130\157\066\120  
\021\013\330\254\053\225\026\032\016\037\010\315\066\064\145\020  
\142\146\325\200\137\024\040\137\055\014\240\170\012\150\326\054  
\327\351\157\053\322\112\005\223\374\236\157\153\147\377\210\361  
\116\245\151\112\122\067\005\352\306\026\215\322\304\231\321\202  
\053\073\272\065\165\367\121\121\130\363\310\007\335\344\264\003  
\177\002\003\001\000\001\243\102\060\100\060\035\006\003\125\035  
\016\004\026\004\024\331\164\072\344\060\075\015\367\022\334\176  
\132\005\237\036\064\232\367\341\024\060\017\006\003\125\035\023

\001\001\377\004\005\060\003\001\001\377\060\016\006\003\125\035  
\017\001\001\377\004\004\003\002\001\206\060\015\006\011\052\206  
\110\206\367\015\001\001\013\005\000\003\202\002\001\000\066\215  
\227\314\102\025\144\051\067\233\046\054\326\373\256\025\151\054  
\153\032\032\367\137\266\371\007\114\131\352\363\311\310\271\256  
\314\272\056\172\334\300\365\260\055\300\073\257\237\160\005\021  
\152\237\045\117\001\051\160\343\345\014\341\352\132\174\334\111  
\273\301\036\052\201\365\026\113\162\221\310\242\061\271\252\332  
\374\235\037\363\135\100\002\023\374\116\034\006\312\263\024\220  
\124\027\031\022\032\361\037\327\014\151\132\366\161\170\364\224  
\175\221\013\216\354\220\124\216\274\157\241\114\253\374\164\144  
\375\161\232\370\101\007\241\315\221\344\074\232\340\233\062\071  
\163\253\052\325\151\310\170\221\046\061\175\342\307\060\361\374  
\024\170\167\022\016\023\364\335\026\224\277\113\147\173\160\123  
\205\312\260\273\363\070\115\054\220\071\300\015\302\135\153\351  
\342\345\325\210\215\326\054\277\253\033\276\265\050\207\022\027  
\164\156\374\175\374\217\320\207\046\260\033\373\271\154\253\342  
\236\075\025\301\073\056\147\002\130\221\237\357\370\102\037\054  
\267\150\365\165\255\317\265\366\377\021\175\302\360\044\245\255  
\323\372\240\074\251\372\135\334\245\240\357\104\244\276\326\350  
\345\344\023\226\027\173\006\076\062\355\307\267\102\274\166\243  
\330\145\070\053\070\065\121\041\016\016\157\056\064\023\100\341  
\053\147\014\155\112\101\060\030\043\132\062\125\231\311\027\340  
\074\336\366\354\171\255\053\130\031\242\255\054\042\032\225\216  
\276\226\220\135\102\127\304\371\024\003\065\053\034\055\121\127  
\010\247\072\336\077\344\310\264\003\163\302\301\046\200\273\013  
\102\037\255\015\257\046\162\332\314\276\263\243\203\130\015\202  
\305\037\106\121\343\234\030\314\215\233\215\354\111\353\165\120  
\325\214\050\131\312\164\064\332\214\013\041\253\036\352\033\345  
\307\375\025\076\300\027\252\373\043\156\046\106\313\372\371\261  
\162\153\151\317\042\204\013\142\017\254\331\031\000\224\242\166  
\074\324\055\232\355\004\236\055\006\142\020\067\122\034\205\162  
\033\047\345\314\306\061\354\067\354\143\131\233\013\035\166\314  
\176\062\232\210\225\010\066\122\273\336\166\137\166\111\111\255  
\177\275\145\040\262\311\301\053\166\030\166\237\126\261

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "UCA Extended Validation Root"

# Issuer: CN=UCA Extended Validation Root,O=UniTrust,C=CN

# Serial Number:4f:d2:2b:8f:f5:64:c8:33:9e:4f:34:58:66:23:70:60

# Subject: CN=UCA Extended Validation Root,O=UniTrust,C=CN

# Not Valid Before: Fri Mar 13 00:00:00 2015

# Not Valid After : Fri Dec 31 00:00:00 2038

# Fingerprint (SHA-256):



```
D4:3A:F9:B3:54:73:75:5C:96:84:FC:06:D7:D8:CB:70:EE:5C:28:E7:73:FB:29:4E:B4:1E:E7:17:22:92:4D:24
# Fingerprint (SHA1): A3:A1:B0:6F:24:61:23:4A:E3:36:A5:C2:37:FC:A6:FF:DD:F0:D7:3A
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL
UTF8 "UCA Extended Validation Root"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\243\241\260\157\044\141\043\112\343\066\245\302\067\374\246\377
\335\360\327\072
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\241\363\137\103\306\064\233\332\277\214\176\005\123\255\226\342
END
CKA_ISSUER MULTILINE_OCTAL
\060\107\061\013\060\011\006\003\125\004\006\023\002\103\116\061
\021\060\017\006\003\125\004\012\014\010\125\156\151\124\162\165
\163\164\061\045\060\043\006\003\125\004\003\014\034\125\103\101
\040\105\170\164\145\156\144\145\144\040\126\141\154\151\144\141
\164\151\157\156\040\122\157\157\164
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\020\117\322\053\217\365\144\310\063\236\117\064\130\146\043
\160\140
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE
```

```
#
# Certificate "Certigna Root CA"
#
# Issuer: CN=Certigna Root
CA,OU=0002 48146308100036,O=Dhimyotis,C=FR
# Serial Number:00:ca:e9:1b:89:f1:55:03:0d:a3:e6:41:6d:c4:e3:a6:e1
# Subject: CN=Certigna Root CA,OU=0002 48146308100036,O=Dhimyotis,C=FR
# Not Valid Before: Tue Oct 01 08:32:27 2013
# Not Valid After : Sat Oct 01 08:32:27 2033
# Fingerprint (SHA-256):
D4:8D:3D:23:EE:DB:50:A4:59:E5:51:97:60:1C:27:77:4B:9D:7B:18:C9:4D:5A:05:95:11:A1:02:50:B9:31:68
# Fingerprint (SHA1): 2D:0D:52:14:FF:9E:AD:99:24:01:74:20:47:6E:6C:85:27:27:F5:43
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Certigna Root CA"
```

CKA\_CERTIFICATE\_TYPE CK\_CERTIFICATE\_TYPE CKC\_X\_509

CKA\_SUBJECT MULTILINE\_OCTAL

\060\132\061\013\060\011\006\003\125\004\006\023\002\106\122\061  
\022\060\020\006\003\125\004\012\014\011\104\150\151\155\171\157  
\164\151\163\061\034\060\032\006\003\125\004\013\014\023\060\060  
\060\062\040\064\070\061\064\066\063\060\070\061\060\060\060\063  
\066\061\031\060\027\006\003\125\004\003\014\020\103\145\162\164  
\151\147\156\141\040\122\157\157\164\040\103\101

END

CKA\_ID

UTF8 "0"

CKA\_ISSUER MULTILINE\_OCTAL

\060\132\061\013\060\011\006\003\125\004\006\023\002\106\122\061  
\022\060\020\006\003\125\004\012\014\011\104\150\151\155\171\157  
\164\151\163\061\034\060\032\006\003\125\004\013\014\023\060\060  
\060\062\040\064\070\061\064\066\063\060\070\061\060\060\060\063  
\066\061\031\060\027\006\003\125\004\003\014\020\103\145\162\164  
\151\147\156\141\040\122\157\157\164\040\103\101

END

CKA\_SERIAL\_NUMBER MULTILINE\_OCTAL

\002\021\000\312\351\033\211\361\125\003\015\243\346\101\155\304  
\343\246\341

END

CKA\_VALUE MULTILINE\_OCTAL

\060\202\006\133\060\202\004\103\240\003\002\001\002\002\021\000  
\312\351\033\211\361\125\003\015\243\346\101\155\304\343\246\341  
\060\015\006\011\052\206\110\206\367\015\001\001\013\005\000\060  
\132\061\013\060\011\006\003\125\004\006\023\002\106\122\061\022  
\060\020\006\003\125\004\012\014\011\104\150\151\155\171\157\164  
\151\163\061\034\060\032\006\003\125\004\013\014\023\060\060\060  
\062\040\064\070\061\064\066\063\060\070\061\060\060\060\063\066  
\061\031\060\027\006\003\125\004\003\014\020\103\145\162\164\151  
\147\156\141\040\122\157\157\164\040\103\101\060\036\027\015\061  
\063\061\060\060\061\060\070\063\062\062\067\132\027\015\063\063  
\061\060\060\061\060\070\063\062\062\067\132\060\132\061\013\060  
\011\006\003\125\004\006\023\002\106\122\061\022\060\020\006\003  
\125\004\012\014\011\104\150\151\155\171\157\164\151\163\061\034  
\060\032\006\003\125\004\013\014\023\060\060\060\062\040\064\070  
\061\064\066\063\060\070\061\060\060\060\063\066\061\031\060\027  
\006\003\125\004\003\014\020\103\145\162\164\151\147\156\141\040  
\122\157\157\164\040\103\101\060\202\002\042\060\015\006\011\052  
\206\110\206\367\015\001\001\001\005\000\003\202\002\017\000\060  
\202\002\012\002\202\002\001\000\315\030\071\145\032\131\261\352  
\144\026\016\214\224\044\225\174\203\323\305\071\046\334\014\357  
\026\127\215\327\330\254\243\102\177\202\312\355\315\133\333\016  
\267\055\355\105\010\027\262\331\263\313\326\027\122\162\050\333  
\216\116\236\212\266\013\371\236\204\232\115\166\336\042\051\134  
\322\263\322\006\076\060\071\251\164\243\222\126\034\241\157\114

\012\040\155\237\043\172\264\306\332\054\344\035\054\334\263\050  
\320\023\362\114\116\002\111\241\124\100\236\346\345\005\240\055  
\204\310\377\230\154\320\353\212\032\204\010\036\267\150\043\356  
\043\325\160\316\155\121\151\020\356\241\172\302\321\042\061\302  
\202\205\322\362\125\166\120\174\045\172\311\204\134\013\254\335  
\102\116\053\347\202\242\044\211\313\220\262\320\356\043\272\146  
\114\273\142\244\371\123\132\144\173\174\230\372\243\110\236\017  
\225\256\247\030\364\152\354\056\003\105\257\360\164\370\052\315  
\172\135\321\276\104\046\062\051\361\361\365\154\314\176\002\041  
\013\237\157\244\077\276\235\123\342\317\175\251\054\174\130\032  
\227\341\075\067\067\030\146\050\322\100\305\121\212\214\303\055  
\316\123\210\044\130\144\060\026\305\252\340\326\012\246\100\337  
\170\366\365\004\174\151\023\204\274\321\321\247\006\317\001\367  
\150\300\250\127\273\072\141\255\004\214\223\343\255\374\360\333  
\104\155\131\334\111\131\256\254\232\231\066\060\101\173\166\063  
\042\207\243\302\222\206\156\371\160\356\256\207\207\225\033\304  
\172\275\061\363\324\322\345\231\377\276\110\354\165\365\170\026  
\035\246\160\301\177\074\033\241\222\373\317\310\074\326\305\223  
\012\217\365\125\072\166\225\316\131\230\212\011\225\167\062\232  
\203\272\054\004\072\227\275\324\057\276\327\154\233\242\312\175  
\155\046\311\125\325\317\303\171\122\010\011\231\007\044\055\144  
\045\153\246\041\151\233\152\335\164\115\153\227\172\101\275\253  
\027\371\220\027\110\217\066\371\055\325\305\333\356\252\205\105  
\101\372\315\072\105\261\150\346\066\114\233\220\127\354\043\271  
\207\010\302\304\011\361\227\206\052\050\115\342\164\300\332\304  
\214\333\337\342\241\027\131\316\044\131\164\061\332\177\375\060  
\155\331\334\341\152\341\374\137\002\003\001\000\001\243\202\001  
\032\060\202\001\026\060\017\006\003\125\035\023\001\001\377\004  
\005\060\003\001\001\377\060\016\006\003\125\035\017\001\001\377  
\004\004\003\002\001\006\060\035\006\003\125\035\016\004\026\004  
\024\030\207\126\340\156\167\356\044\065\074\116\163\232\037\326  
\341\342\171\176\053\060\037\006\003\125\035\043\004\030\060\026  
\200\024\030\207\126\340\156\167\356\044\065\074\116\163\232\037  
\326\341\342\171\176\053\060\104\006\003\125\035\040\004\075\060  
\073\060\071\006\004\125\035\040\000\060\061\060\057\006\010\053  
\006\001\005\005\007\002\001\026\043\150\164\164\160\163\072\057  
\057\167\167\167\167\056\143\145\162\164\151\147\156\141\056\146  
\162\057\141\165\164\157\162\151\164\145\163\057\060\155\006\003  
\125\035\037\004\146\060\144\060\057\240\055\240\053\206\051\150  
\164\164\160\072\057\057\143\162\154\056\143\145\162\164\151\147  
\156\141\056\146\162\057\143\145\162\164\151\147\156\141\162\157  
\157\164\143\141\056\143\162\154\060\061\240\057\240\055\206\053  
\150\164\164\160\072\057\057\143\162\154\056\144\150\151\155\171  
\157\164\151\163\056\143\157\155\057\143\145\162\164\151\147\156  
\141\162\157\157\164\143\141\056\143\162\154\060\015\006\011\052  
\206\110\206\367\015\001\001\013\005\000\003\202\002\001\000\224  
\270\236\117\360\343\225\010\042\347\315\150\101\367\034\125\325  
\174\000\342\055\072\211\135\150\070\057\121\042\013\112\215\313

\351\273\135\076\273\134\075\261\050\376\344\123\125\023\317\241  
\220\033\002\035\137\146\106\011\063\050\341\015\044\227\160\323  
\020\037\352\144\127\226\273\135\332\347\304\214\117\114\144\106  
\035\134\207\343\131\336\102\321\233\250\176\246\211\335\217\034  
\311\060\202\355\073\234\315\300\351\031\340\152\330\002\165\067  
\253\367\064\050\050\221\362\004\012\117\065\343\140\046\001\372  
\320\021\214\371\021\152\356\257\075\303\120\323\217\137\063\171  
\074\206\250\163\105\220\214\040\266\162\163\027\043\276\007\145  
\345\170\222\015\272\001\300\353\214\034\146\277\254\206\167\001  
\224\015\234\346\351\071\215\037\246\121\214\231\014\071\167\341  
\264\233\372\034\147\127\157\152\152\216\251\053\114\127\171\172  
\127\042\317\315\137\143\106\215\134\131\072\206\370\062\107\142  
\243\147\015\030\221\334\373\246\153\365\110\141\163\043\131\216  
\002\247\274\104\352\364\111\235\361\124\130\371\140\257\332\030  
\244\057\050\105\334\172\240\210\206\135\363\073\347\377\051\065  
\200\374\144\103\224\346\343\034\157\276\255\016\052\143\231\053  
\311\176\205\366\161\350\006\003\225\376\336\217\110\034\132\324  
\222\350\053\356\347\061\333\272\004\152\207\230\347\305\137\357  
\175\247\042\367\001\330\115\371\211\320\016\232\005\131\244\236  
\230\331\157\053\312\160\276\144\302\125\243\364\351\257\303\222  
\051\334\210\026\044\231\074\215\046\230\266\133\267\314\316\267  
\067\007\375\046\331\230\205\044\377\131\043\003\232\355\235\235  
\250\344\136\070\316\327\122\015\157\322\077\155\261\005\153\111  
\316\212\221\106\163\364\366\057\360\250\163\167\016\145\254\241  
\215\146\122\151\176\113\150\014\307\036\067\047\203\245\214\307  
\002\344\024\315\111\001\260\163\263\375\306\220\072\157\322\154  
\355\073\356\354\221\276\242\103\135\213\000\112\146\045\104\160  
\336\100\017\370\174\025\367\242\316\074\327\136\023\214\201\027  
\030\027\321\275\361\167\020\072\324\145\071\301\047\254\127\054  
\045\124\377\242\332\117\212\141\071\136\256\075\112\214\275

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "Certigna Root CA"

# Issuer: CN=Certigna Root CA,OU=0002 48146308100036,O=Dhimyotis,C=FR

# Serial Number:00:ca:e9:1b:89:f1:55:03:0d:a3:e6:41:6d:c4:e3:a6:e1

# Subject: CN=Certigna Root CA,OU=0002 48146308100036,O=Dhimyotis,C=FR

# Not Valid Before: Tue Oct 01 08:32:27 2013

# Not Valid After : Sat Oct 01 08:32:27 2033

# Fingerprint (SHA-256):

D4:8D:3D:23:EE:DB:50:A4:59:E5:51:97:60:1C:27:77:4B:9D:7B:18:C9:4D:5A:05:95:11:A1:02:50:B9:31:68

# Fingerprint (SHA1): 2D:0D:52:14:FF:9E:AD:99:24:01:74:20:47:6E:6C:85:27:27:F5:43

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN

```

CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Certigna Root CA"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\055\015\122\024\377\236\255\231\044\001\164\040\107\156\154\205
\047\047\365\103
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\016\134\060\142\047\353\133\274\327\256\142\272\351\325\337\167
END
CKA_ISSUER MULTILINE_OCTAL
\060\132\061\013\060\011\006\003\125\004\006\023\002\106\122\061
\022\060\020\006\003\125\004\012\014\011\104\150\151\155\171\157
\164\151\163\061\034\060\032\006\003\125\004\013\014\023\060\060
\060\062\040\064\070\061\064\066\063\060\070\061\060\060\060\063
\066\061\031\060\027\006\003\125\004\003\014\020\103\145\162\164
\151\147\156\141\040\122\157\157\164\040\103\101
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\021\000\312\351\033\211\361\125\003\015\243\346\101\155\304
\343\246\341
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING
CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "emSign Root CA - G1"
#
# Issuer: CN=emSign Root CA - G1,O=eMudhra Technologies Limited,OU=emSign PKI,C=IN
# Serial Number:31:f5:e4:62:0c:6c:58:ed:d6:d8
# Subject: CN=emSign Root CA - G1,O=eMudhra Technologies Limited,OU=emSign PKI,C=IN
# Not Valid Before: Sun Feb 18 18:30:00 2018
# Not Valid After : Wed Feb 18 18:30:00 2043
# Fingerprint (SHA-256):
40:F6:AF:03:46:A9:9A:A1:CD:1D:55:5A:4E:9C:CE:62:C7:F9:63:46:03:EE:40:66:15:83:3D:C8:C8:D0:03:67
# Fingerprint (SHA1): 8A:C7:AD:8F:73:AC:4E:C1:B5:75:4D:A5:40:F4:FC:CF:7C:B5:8E:8C
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "emSign Root CA - G1"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\147\061\013\060\011\006\003\125\004\006\023\002\111\116\061

```

\023\060\021\006\003\125\004\013\023\012\145\155\123\151\147\156  
\040\120\113\111\061\045\060\043\006\003\125\004\012\023\034\145  
\115\165\144\150\162\141\040\124\145\143\150\156\157\154\157\147  
\151\145\163\040\114\151\155\151\164\145\144\061\034\060\032\006  
\003\125\004\003\023\023\145\155\123\151\147\156\040\122\157\157  
\164\040\103\101\040\055\040\107\061

END

CKA\_ID

UTF8 "0"

CKA\_ISSUER MULTILINE\_OCTAL

\060\147\061\013\060\011\006\003\125\004\006\023\002\111\116\061  
\023\060\021\006\003\125\004\013\023\012\145\155\123\151\147\156  
\040\120\113\111\061\045\060\043\006\003\125\004\012\023\034\145  
\115\165\144\150\162\141\040\124\145\143\150\156\157\154\157\147  
\151\145\163\040\114\151\155\151\164\145\144\061\034\060\032\006  
\003\125\004\003\023\023\145\155\123\151\147\156\040\122\157\157  
\164\040\103\101\040\055\040\107\061

END

CKA\_SERIAL\_NUMBER MULTILINE\_OCTAL

\002\012\061\365\344\142\014\154\130\355\326\330

END

CKA\_VALUE MULTILINE\_OCTAL

\060\202\003\224\060\202\002\174\240\003\002\001\002\002\012\061  
\365\344\142\014\154\130\355\326\330\060\015\006\011\052\206\110  
\206\367\015\001\001\013\005\000\060\147\061\013\060\011\006\003  
\125\004\006\023\002\111\116\061\023\060\021\006\003\125\004\013  
\023\012\145\155\123\151\147\156\040\120\113\111\061\045\060\043  
\006\003\125\004\012\023\034\145\115\165\144\150\162\141\040\124  
\145\143\150\156\157\154\157\147\151\145\163\040\114\151\155\151  
\164\145\144\061\034\060\032\006\003\125\004\003\023\023\145\155  
\123\151\147\156\040\122\157\157\164\040\103\101\040\055\040\107  
\061\060\036\027\015\061\070\060\062\061\070\061\070\063\060\060  
\060\132\027\015\064\063\060\062\061\070\061\070\063\060\060\060  
\132\060\147\061\013\060\011\006\003\125\004\006\023\002\111\116  
\061\023\060\021\006\003\125\004\013\023\012\145\155\123\151\147  
\156\040\120\113\111\061\045\060\043\006\003\125\004\012\023\034  
\145\115\165\144\150\162\141\040\124\145\143\150\156\157\154\157  
\147\151\145\163\040\114\151\155\151\164\145\144\061\034\060\032  
\006\003\125\004\003\023\023\145\155\123\151\147\156\040\122\157  
\157\164\040\103\101\040\055\040\107\061\060\202\001\042\060\015  
\006\011\052\206\110\206\367\015\001\001\001\005\000\003\202\001  
\017\000\060\202\001\012\002\202\001\001\000\223\113\273\351\146  
\212\356\235\133\325\064\223\320\033\036\303\347\236\270\144\063  
\177\143\170\150\264\315\056\161\165\327\233\040\306\115\051\274  
\266\150\140\212\367\041\232\126\065\132\363\166\275\330\315\232  
\377\223\126\113\245\131\006\241\223\064\051\335\026\064\165\116  
\362\201\264\307\226\116\255\031\025\122\112\376\074\160\165\160  
\315\257\053\253\025\232\063\074\252\263\213\252\315\103\375\365

\352\160\377\355\317\021\073\224\316\116\062\026\323\043\100\052  
\167\263\257\074\001\054\154\355\231\054\213\331\116\151\230\262  
\367\217\101\260\062\170\141\326\015\137\303\372\242\100\222\035  
\134\027\346\160\076\065\347\242\267\302\142\342\253\244\070\114  
\265\071\065\157\352\003\151\372\072\124\150\205\155\326\362\057  
\103\125\036\221\015\016\330\325\152\244\226\321\023\074\054\170  
\120\350\072\222\322\027\126\345\065\032\100\034\076\215\054\355  
\071\337\102\340\203\101\164\337\243\315\302\206\140\110\150\343  
\151\013\124\000\213\344\166\151\041\015\171\116\064\010\136\024  
\302\314\261\267\255\327\174\160\212\307\205\002\003\001\000\001  
\243\102\060\100\060\035\006\003\125\035\016\004\026\004\024\373  
\357\015\206\236\260\343\335\251\271\361\041\027\177\076\374\360  
\167\053\032\060\016\006\003\125\035\017\001\001\377\004\004\003  
\002\001\006\060\017\006\003\125\035\023\001\001\377\004\005\060  
\003\001\001\377\060\015\006\011\052\206\110\206\367\015\001\001  
\013\005\000\003\202\001\001\000\131\377\362\214\365\207\175\161  
\075\243\237\033\133\321\332\370\323\234\153\066\275\233\251\141  
\353\336\026\054\164\075\236\346\165\332\327\272\247\274\102\027  
\347\075\221\353\345\175\335\076\234\361\317\222\254\154\110\314  
\302\042\077\151\073\305\266\025\057\243\065\306\150\052\034\127  
\257\071\357\215\320\065\303\030\014\173\000\126\034\315\213\031  
\164\336\276\017\022\340\320\252\241\077\002\064\261\160\316\235  
\030\326\010\003\011\106\356\140\340\176\266\304\111\004\121\175  
\160\140\274\252\262\377\171\162\172\246\035\075\137\052\370\312  
\342\375\071\267\107\271\353\176\337\004\043\257\372\234\006\007  
\351\373\143\223\200\100\265\306\154\012\061\050\316\014\237\317  
\263\043\065\200\101\215\154\304\067\173\201\057\200\241\100\102  
\205\351\331\070\215\350\241\123\315\001\277\151\350\132\006\362  
\105\013\220\372\256\341\277\235\362\256\127\074\245\256\262\126  
\364\213\145\100\351\375\061\201\054\364\071\011\330\356\153\247  
\264\246\035\025\245\230\367\001\201\330\205\175\363\121\134\161  
\210\336\272\314\037\200\176\112

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "emSign Root CA - G1"

# Issuer: CN=emSign Root CA - G1,O=eMudhra Technologies Limited,OU=emSign PKI,C=IN

# Serial Number:31:f5:e4:62:0c:6c:58:ed:d6:d8

# Subject: CN=emSign Root CA - G1,O=eMudhra Technologies

Limited,OU=emSign PKI,C=IN

# Not Valid Before: Sun Feb 18 18:30:00 2018

# Not Valid After : Wed Feb 18 18:30:00 2043

# Fingerprint (SHA-256):

40:F6:AF:03:46:A9:9A:A1:CD:1D:55:5A:4E:9C:CE:62:C7:F9:63:46:03:EE:40:66:15:83:3D:C8:C8:D0:03:67

# Fingerprint (SHA1): 8A:C7:AD:8F:73:AC:4E:C1:B5:75:4D:A5:40:F4:FC:CF:7C:B5:8E:8C

```

CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "emSign Root CA - G1"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\212\307\255\217\163\254\116\301\265\165\115\245\100\364\374\317
\174\265\216\214
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\234\102\204\127\335\313\013\247\056\225\255\266\363\332\274\254
END
CKA_ISSUER MULTILINE_OCTAL
\060\147\061\013\060\011\006\003\125\004\006\023\002\111\116\061
\023\060\021\006\003\125\004\013\023\012\145\155\123\151\147\156
\040\120\113\111\061\045\060\043\006\003\125\004\012\023\034\145
\115\165\144\150\162\141\040\124\145\143\150\156\157\154\157\147
\151\145\163\040\114\151\155\151\164\145\144\061\034\060\032\006
\003\125\004\003\023\023\145\155\123\151\147\156\040\122\157\157
\164\040\103\101\040\055\040\107\061
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\012\061\365\344\142\014\154\130\355\326\330
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "emSign ECC Root CA - G3"
#
# Issuer: CN=emSign ECC Root CA - G3,O=eMudhra Technologies Limited,OU=emSign PKI,C=IN
# Serial Number:3c:f6:07:a9:68:70:0e:da:8b:84
# Subject: CN=emSign ECC Root CA - G3,O=eMudhra Technologies Limited,OU=emSign PKI,C=IN
# Not Valid Before: Sun Feb 18 18:30:00 2018
# Not Valid After : Wed Feb 18 18:30:00 2043
# Fingerprint (SHA-256):
86:A1:EC:BA:08:9C:4A:8D:3B:BE:27:34:C6:12:BA:34:1D:81:3E:04:3C:F9:E8:A8:62:CD:5C:57:A3:6B:BE:6B
# Fingerprint (SHA1): 30:43:FA:4F:F2:57:DC:A0:C3:80:EE:2E:58:EA:78:B2:3F:E6:BB:C1
CKA_CLASS
CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "emSign ECC Root CA - G3"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509

```



CKA\_SUBJECT MULTILINE\_OCTAL

\060\153\061\013\060\011\006\003\125\004\006\023\002\111\116\061  
\023\060\021\006\003\125\004\013\023\012\145\155\123\151\147\156  
\040\120\113\111\061\045\060\043\006\003\125\004\012\023\034\145  
\115\165\144\150\162\141\040\124\145\143\150\156\157\154\157\147  
\151\145\163\040\114\151\155\151\164\145\144\061\040\060\036\006  
\003\125\004\003\023\027\145\155\123\151\147\156\040\105\103\103  
\040\122\157\157\164\040\103\101\040\055\040\107\063

END

CKA\_ID UTF8 "0"

CKA\_ISSUER MULTILINE\_OCTAL

\060\153\061\013\060\011\006\003\125\004\006\023\002\111\116\061  
\023\060\021\006\003\125\004\013\023\012\145\155\123\151\147\156  
\040\120\113\111\061\045\060\043\006\003\125\004\012\023\034\145  
\115\165\144\150\162\141\040\124\145\143\150\156\157\154\157\147  
\151\145\163\040\114\151\155\151\164\145\144\061\040\060\036\006  
\003\125\004\003\023\027\145\155\123\151\147\156\040\105\103\103  
\040\122\157\157\164\040\103\101\040\055\040\107\063

END

CKA\_SERIAL\_NUMBER

MULTILINE\_OCTAL

\002\012\074\366\007\251\150\160\016\332\213\204

END

CKA\_VALUE MULTILINE\_OCTAL

\060\202\002\116\060\202\001\323\240\003\002\001\002\002\012\074  
\366\007\251\150\160\016\332\213\204\060\012\006\010\052\206\110  
\316\075\004\003\003\060\153\061\013\060\011\006\003\125\004\006  
\023\002\111\116\061\023\060\021\006\003\125\004\013\023\012\145  
\155\123\151\147\156\040\120\113\111\061\045\060\043\006\003\125  
\004\012\023\034\145\115\165\144\150\162\141\040\124\145\143\150  
\156\157\154\157\147\151\145\163\040\114\151\155\151\164\145\144  
\061\040\060\036\006\003\125\004\003\023\027\145\155\123\151\147  
\156\040\105\103\103\040\122\157\157\164\040\103\101\040\055\040  
\107\063\060\036\027\015\061\070\060\062\061\070\061\070\063\060  
\060\060\132\027\015\064\063\060\062\061\070\061\070\063\060\060  
\060\132\060\153\061\013\060\011\006\003\125\004\006\023\002\111  
\116\061\023\060\021\006\003\125\004\013\023\012\145\155\123\151  
\147\156\040\120\113\111\061\045\060\043\006\003\125\004\012\023  
\034\145\115\165\144\150\162\141\040\124\145\143\150\156\157\154  
\157\147\151\145\163\040\114\151\155\151\164\145\144\061\040\060  
\036\006\003\125\004\003\023\027\145\155\123\151\147\156\040\105  
\103\103\040\122\157\157\164\040\103\101\040\055\040\107\063\060  
\166\060\020\006\007\052\206\110\316\075\002\001\006\005\053\201  
\004\000\042\003\142\000\004\043\245\014\270\055\022\365\050\363  
\261\262\335\342\002\022\200\236\071\137\111\115\237\311\045\064  
\131\164\354\273\006\034\347\300\162\257\350\256\057\341\101\124  
\207\024\250\112\262\350\174\202\346\133\152\265\334\263\165\316  
\213\006\320\206\043\277\106\325\216\017\077\004\364\327\034\222

```
\176\366\245\143\302\365\137\216\056\117\241\030\031\002\053\062
\012\202\144\175\026\223\321\243\102\060\100\060\035\006\003\125
\035\016\004\026\004\024\174\135\002\204\023\324\314\212\233\201
\316\027\034\056\051\036\234\110\143\102\060\016\006\003\125\035
\017\001\001\377\004\004\003\002\001\006\060\017\006\003\125\035
\023\001\001\377\004\005\060\003\001\001\377\060\012\006\010\052
\206\110\316\075\004\003\003\003\151\000\060\146\002\061\000\276
\363\141\317\002\020\035\144\225\007\270\030\156\210\205\005\057
\203\010\027\220\312\037\212\114\350\015\033\172\261\255\325\201
\011\107\357\073\254\010\004\174\134\231\261\355\107\007\322\002
\061\000\235\272\125\374\251\112\350\355\355\346\166\001\102\173
\310\370\140\331\215\121\213\125\073\373\214\173\353\145\011\303
\370\226\315\107\250\202\362\026\125\167\044\176\022\020\225\004
\054\243
```

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "emSign ECC Root CA - G3"

# Issuer: CN=emSign ECC Root CA - G3,O=eMudhra Technologies  
Limited,OU=emSign PKI,C=IN

# Serial Number:3c:f6:07:a9:68:70:0e:da:8b:84

# Subject: CN=emSign ECC Root CA - G3,O=eMudhra Technologies Limited,OU=emSign PKI,C=IN

# Not Valid Before: Sun Feb 18 18:30:00 2018

# Not Valid After : Wed Feb 18 18:30:00 2043

# Fingerprint (SHA-256):

86:A1:EC:BA:08:9C:4A:8D:3B:BE:27:34:C6:12:BA:34:1D:81:3E:04:3C:F9:E8:A8:62:CD:5C:57:A3:6B:BE:6B

# Fingerprint (SHA1): 30:43:FA:4F:F2:57:DC:A0:C3:80:EE:2E:58:EA:78:B2:3F:E6:BB:C1

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "emSign ECC Root CA - G3"

CKA\_CERT\_SHA1\_HASH MULTILINE\_OCTAL

```
\060\103\372\117\362\127\334\240\303\200\356\056\130\352\170\262
\077\346\273\301
```

END

CKA\_CERT\_MD5\_HASH MULTILINE\_OCTAL

```
\316\013\162\321\237\210\216\320\120\003\350\343\270\213\147\100
```

END

CKA\_ISSUER MULTILINE\_OCTAL

```
\060\153\061\013\060\011\006\003\125\004\006\023\002\111\116\061
\023\060\021\006\003\125\004\013\023\012\145\155\123\151\147\156
\040\120\113\111\061\045\060\043\006\003\125\004\012\023\034\145
\115\165\144\150\162\141\040\124\145\143\150\156\157\154\157\147
\151\145\163\040\114\151\155\151\164\145\144\061\040\060\036\006
```

\003\125\004\003\023\027\145\155\123\151\147\156\040\105\103\103

\040\122\157\157\164\040\103\101\040\055\040\107\063

END

CKA\_SERIAL\_NUMBER

MULTILINE\_OCTAL

\002\012\074\366\007\251\150\160\016\332\213\204

END

CKA\_TRUST\_SERVER\_AUTH CK\_TRUST CKT\_NSS\_TRUSTED\_DELEGATOR

CKA\_TRUST\_EMAIL\_PROTECTION CK\_TRUST CKT\_NSS\_TRUSTED\_DELEGATOR

CKA\_TRUST\_CODE\_SIGNING CK\_TRUST CKT\_NSS\_MUST\_VERIFY\_TRUST

CKA\_TRUST\_STEP\_UP\_APPROVED CK\_BBOOL CK\_FALSE

#

# Certificate "emSign Root CA - C1"

#

# Issuer: CN=emSign Root CA - C1,O=eMudhra Inc,OU=emSign PKI,C=US

# Serial Number:00:ae:cf:00:ba:c4:cf:32:f8:43:b2

# Subject: CN=emSign Root CA - C1,O=eMudhra Inc,OU=emSign PKI,C=US

# Not Valid Before: Sun Feb 18 18:30:00 2018

# Not Valid After : Wed Feb 18 18:30:00 2043

# Fingerprint (SHA-256):

12:56:09:AA:30:1D:A0:A2:49:B9:7A:82:39:CB:6A:34:21:6F:44:DC:AC:9F:39:54:B1:42:92:F2:E8:C8:60:8F

#

Fingerprint (SHA1): E7:2E:F1:DF:FC:B2:09:28:CF:5D:D4:D5:67:37:B1:51:CB:86:4F:01

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_CERTIFICATE

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "emSign Root CA - C1"

CKA\_CERTIFICATE\_TYPE CK\_CERTIFICATE\_TYPE CKC\_X\_509

CKA\_SUBJECT MULTILINE\_OCTAL

\060\126\061\013\060\011\006\003\125\004\006\023\002\125\123\061

\023\060\021\006\003\125\004\013\023\012\145\155\123\151\147\156

\040\120\113\111\061\024\060\022\006\003\125\004\012\023\013\145

\115\165\144\150\162\141\040\111\156\143\061\034\060\032\006\003

\125\004\003\023\023\145\155\123\151\147\156\040\122\157\157\164

\040\103\101\040\055\040\103\061

END

CKA\_ID UTF8 "0"

CKA\_ISSUER MULTILINE\_OCTAL

\060\126\061\013\060\011\006\003\125\004\006\023\002\125\123\061

\023\060\021\006\003\125\004\013\023\012\145\155\123\151\147\156

\040\120\113\111\061\024\060\022\006\003\125\004\012\023\013\145

\115\165\144\150\162\141\040\111\156\143\061\034\060\032\006\003

\125\004\003\023\023\145\155\123\151\147\156\040\122\157\157\164

\040\103\101\040\055\040\103\061

END

CKA\_SERIAL\_NUMBER

MULTILINE\_OCTAL

\002\013\000\256\317\000\272\304\317\062\370\103\262

END

CKA\_VALUE MULTILINE\_OCTAL

\060\202\003\163\060\202\002\133\240\003\002\001\002\002\013\000  
\256\317\000\272\304\317\062\370\103\262\060\015\006\011\052\206  
\110\206\367\015\001\001\013\005\000\060\126\061\013\060\011\006  
\003\125\004\006\023\002\125\123\061\023\060\021\006\003\125\004  
\013\023\012\145\155\123\151\147\156\040\120\113\111\061\024\060  
\022\006\003\125\004\012\023\013\145\115\165\144\150\162\141\040  
\111\156\143\061\034\060\032\006\003\125\004\003\023\023\145\155  
\123\151\147\156\040\122\157\157\164\040\103\101\040\055\040\103  
\061\060\036\027\015\061\070\060\062\061\070\061\070\063\060\060  
\060\132\027\015\064\063\060\062\061\070\061\070\063\060\060\060  
\132\060\126\061\013\060\011\006\003\125\004\006\023\002\125\123  
\061\023\060\021\006\003\125\004\013\023\012\145\155\123\151\147  
\156\040\120\113\111\061\024\060\022\006\003\125\004\012\023\013  
\145\115\165\144\150\162\141\040\111\156\143\061\034\060\032\006  
\003\125\004\003\023\023\145\155\123\151\147\156\040\122\157\157  
\164\040\103\101\040\055\040\103\061\060\202\001\042\060\015\006  
\011\052\206\110\206\367\015\001\001\001\005\000\003\202\001\017  
\000\060\202\001\012\002\202\001\001\000\317\353\251\271\361\231  
\005\314\330\050\041\112\363\163\064\121\204\126\020\365\240\117  
\054\022\343\372\023\232\047\320\317\371\171\032\164\137\035\171  
\071\374\133\370\160\216\340\222\122\367\344\045\371\124\203\331  
\035\323\310\132\205\077\136\307\266\007\356\076\300\316\232\257  
\254\126\102\052\071\045\160\326\277\265\173\066\255\254\366\163  
\334\315\327\035\212\203\245\373\053\220\025\067\153\034\046\107  
\334\073\051\126\223\152\263\301\152\072\235\075\365\301\227\070  
\130\005\213\034\021\343\344\264\270\135\205\035\203\376\170\137  
\013\105\150\030\110\245\106\163\064\073\376\017\310\166\273\307  
\030\363\005\321\206\363\205\355\347\271\331\062\255\125\210\316  
\246\266\221\260\117\254\176\025\043\226\366\077\360\040\064\026  
\336\012\306\304\004\105\171\177\247\375\276\322\251\245\257\234  
\305\043\052\367\074\041\154\275\257\217\116\305\072\262\363\064  
\022\374\337\200\032\111\244\324\251\225\367\236\211\136\242\211  
\254\224\313\250\150\233\257\212\145\047\315\211\356\335\214\265  
\153\051\160\103\240\151\013\344\271\017\002\003\001\000\001\243  
\102\060\100\060\035\006\003\125\035\016\004\026\004\024\376\241  
\340\160\036\052\003\071\122\132\102\276\134\221\205\172\030\252  
\115\265\060\016\006\003\125\035\017\001\001\377\004\004\003\002  
\001\006\060\017\006\003\125\035\023\001\001\377\004\005\060\003  
\001\001\377\060\015\006\011\052\206\110\206\367\015\001\001\013  
\005\000\003\202\001\001\000\302\112\126\372\025\041\173\050\242  
\351\345\035\373\370\055\304\071\226\101\114\073\047\054\304\154  
\030\025\200\306\254\257\107\131\057\046\013\343\066\260\357\073  
\376\103\227\111\062\231\022\025\133\337\021\051\377\253\123\370  
\273\301\170\017\254\234\123\257\127\275\150\214\075\151\063\360

```
\243\240\043\143\073\144\147\042\104\255\325\161\313\126\052\170
\222\243\117\022\061\066\066\342\336\376\000\304\243\140\017\047
\255\240\260\212\265\066\172\122\241\275\047\364\040\047\142\350
\115\224\044\023\344\012\004\351\074\253\056\310\103\011\112\306
\141\004\345\111\064\176\323\304\310\365\017\300\252\351\272\124
\136\363\143\053\117\117\120\324\376\271\173\231\214\075\300\056
\274\002\053\323\304\100\344\212\007\061\036\233\316\046\231\023
\373\021\352\232\042\014\021\031\307\136\033\201\120\060\310\226
\022\156\347\313\101\177\221\073\242\107\267\124\200\033\334\000
\314\232\220\352\303\303\120\006\142\014\060\300\025\110\247\250
\131\174\341\256\042\242\342\012\172\017\372\142\253\122\114\341
\361\337\312\276\203\015\102
```

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER

CK\_BBOOL CK\_FALSE

# Trust for "emSign Root CA - C1"

# Issuer: CN=emSign Root CA - C1,O=eMudhra Inc,OU=emSign PKI,C=US

# Serial Number:00:ae:cf:00:ba:c4:cf:32:f8:43:b2

# Subject: CN=emSign Root CA - C1,O=eMudhra Inc,OU=emSign PKI,C=US

# Not Valid Before: Sun Feb 18 18:30:00 2018

# Not Valid After : Wed Feb 18 18:30:00 2043

# Fingerprint (SHA-256):

12:56:09:AA:30:1D:A0:A2:49:B9:7A:82:39:CB:6A:34:21:6F:44:DC:AC:9F:39:54:B1:42:92:F2:E8:C8:60:8F

# Fingerprint (SHA1): E7:2E:F1:DF:FC:B2:09:28:CF:5D:D4:D5:67:37:B1:51:CB:86:4F:01

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "emSign Root CA - C1"

CKA\_CERT\_SHA1\_HASH MULTILINE\_OCTAL

```
\347\056\361\337\374\262\011\050\317\135\324\325\147\067\261\121
\313\206\117\001
```

END

CKA\_CERT\_MD5\_HASH MULTILINE\_OCTAL

```
\330\343\135\001\041\372\170\132\260\337\272\322\356\052\137\150
```

END

CKA\_ISSUER MULTILINE\_OCTAL

```
\060\126\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\023\060\021\006\003\125\004\013\023\012\145\155\123\151\147\156
\040\120\113\111\061\024\060\022\006\003\125\004\012\023\013\145
\115\165\144\150\162\141\040\111\156\143\061\034\060\032\006\003
\125\004\003\023\023\145\155\123\151\147\156\040\122\157\157\164
\040\103\101\040\055\040\103\061
```

END

```

CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\013\000\256\317\000\272\304\317\062\370\103\262
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "emSign ECC Root CA - C3"
#
# Issuer: CN=emSign ECC Root CA - C3,O=eMudhra Inc,OU=emSign PKI,C=US
# Serial Number:7b:71:b6:82:56:b8:12:7c:9c:a8
# Subject: CN=emSign ECC Root CA - C3,O=eMudhra Inc,OU=emSign PKI,C=US
# Not Valid Before: Sun Feb 18 18:30:00 2018
# Not Valid After : Wed Feb 18 18:30:00 2043
# Fingerprint (SHA-256):
BC:4D:80:9B:15:18:9D:78:DB:3E:1D:8C:F4:F9:72:6A:79:5D:A1:64:3C:A5:F1:35:8E:1D:DB:0E:DC:0D:7E:B3
#
Fingerprint (SHA1): B6:AF:43:C2:9B:81:53:7D:F6:EF:6B:C3:1F:1F:60:15:0C:EE:48:66
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "emSign ECC Root CA - C3"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\132\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\023\060\021\006\003\125\004\013\023\012\145\155\123\151\147\156
\040\120\113\111\061\024\060\022\006\003\125\004\012\023\013\145
\115\165\144\150\162\141\040\111\156\143\061\040\060\036\006\003
\125\004\003\023\027\145\155\123\151\147\156\040\105\103\103\040
\122\157\157\164\040\103\101\040\055\040\103\063
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\132\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\023\060\021\006\003\125\004\013\023\012\145\155\123\151\147\156
\040\120\113\111\061\024\060\022\006\003\125\004\012\023\013\145
\115\165\144\150\162\141\040\111\156\143\061\040\060\036\006\003
\125\004\003\023\027\145\155\123\151\147\156\040\105\103\103\040
\122\157\157\164\040\103\101\040\055\040\103\063
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\012\173\161\266\202\126\270\022\174\234\250
END

```

CKA\_VALUE MULTILINE\_OCTAL

\060\202\002\053\060\202\001\261\240\003\002\001\002\002\012\173  
\161\266\202\126\270\022\174\234\250\060\012\006\010\052\206\110  
\316\075\004\003\003\060\132\061\013\060\011\006\003\125\004\006  
\023\002\125\123\061\023\060\021\006\003\125\004\013\023\012\145  
\155\123\151\147\156\040\120\113\111\061\024\060\022\006\003\125  
\004\012\023\013\145\115\165\144\150\162\141\040\111\156\143\061  
\040\060\036\006\003\125\004\003\023\027\145\155\123\151\147\156  
\040\105\103\103\040\122\157\157\164\040\103\101\040\055\040\103  
\063\060\036\027\015\061\070\060\062\061\070\061\070\063\060\060\060  
\060\132\027\015\064\063\060\062\061\070\061\070\063\060\060\060  
\132\060\132\061\013\060\011\006\003\125\004\006\023\002\125\123  
\061\023\060\021\006\003\125\004\013\023\012\145\155\123\151\147  
\156\040\120\113\111\061\024\060\022\006\003\125\004\012\023\013  
\145\115\165\144\150\162\141\040\111\156\143\061\040\060\036\006  
\003\125\004\003\023\027\145\155\123\151\147\156\040\105\103\103  
\040\122\157\157\164\040\103\101\040\055\040\103\063\060\166\060  
\020\006\007\052\206\110\316\075\002\001\006\005\053\201\004\000  
\042\003\142\000\004\375\245\141\256\173\046\020\035\351\267\042  
\060\256\006\364\201\263\261\102\161\225\071\274\323\122\343\257  
\257\371\362\227\065\222\066\106\016\207\225\215\271\071\132\351  
\273\337\320\376\310\007\101\074\273\125\157\203\243\152\373\142  
\260\201\211\002\160\175\110\305\112\343\351\042\124\042\115\223  
\273\102\014\257\167\234\043\246\175\327\141\021\316\145\307\370  
\177\376\365\362\251\243\102\060\100\060\035\006\003\125\035\016  
\004\026\004\024\373\132\110\320\200\040\100\362\250\351\000\007  
\151\031\167\247\346\303\364\317\060\016\006\003\125\035\017\001  
\001\377\004\004\003\002\001\006\060\017\006\003\125\035\023\001  
\001\377\004\005\060\003\001\001\377\060\012\006\010\052\206\110  
\316\075\004\003\003\003\150\000\060\145\002\061\000\264\330\057  
\002\211\375\266\114\142\272\103\116\023\204\162\265\256\335\034  
\336\326\265\334\126\217\130\100\132\055\336\040\114\042\203\312  
\223\250\176\356\022\100\307\326\207\117\370\337\205\002\060\034  
\024\144\344\174\226\203\021\234\260\321\132\141\113\246\017\111  
\323\000\374\241\374\344\245\377\177\255\327\060\320\307\167\177  
\276\201\007\125\060\120\040\024\365\127\070\012\250\061\121

END

CKA\_NSS\_Mozilla\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "emSign ECC Root CA - C3"

# Issuer: CN=emSign ECC Root CA - C3,O=eMudhra Inc,OU=emSign PKI,C=US

# Serial Number:7b:71:b6:82:56:b8:12:7c:9c:a8

# Subject: CN=emSign ECC Root CA - C3,O=eMudhra Inc,OU=emSign PKI,C=US

# Not Valid Before: Sun Feb 18 18:30:00 2018

#

```

Not Valid After : Wed Feb 18 18:30:00 2043
# Fingerprint (SHA-256):
BC:4D:80:9B:15:18:9D:78:DB:3E:1D:8C:F4:F9:72:6A:79:5D:A1:64:3C:A5:F1:35:8E:1D:DB:0E:DC:0D:7E:B3
# Fingerprint (SHA1): B6:AF:43:C2:9B:81:53:7D:F6:EF:6B:C3:1F:1F:60:15:0C:EE:48:66
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "emSign ECC Root CA - C3"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\266\257\103\302\233\201\123\175\366\357\153\303\037\037\140\025
\014\356\110\146
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\076\123\263\243\201\356\327\020\370\323\260\035\027\222\365\325
END
CKA_ISSUER MULTILINE_OCTAL
\060\132\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\023\060\021\006\003\125\004\013\023\012\145\155\123\151\147\156
\040\120\113\111\061\024\060\022\006\003\125\004\012\023\013\145
\115\165\144\150\162\141\040\111\156\143\061\040\060\036\006\003
\125\004\003\023\027\145\155\123\151\147\156\040\105\103\103\040
\122\157\157\164\040\103\101\040\055\040\103\063
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\012\173\161\266\202\126\270\022\174\234\250
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "Hongkong Post Root CA 3"
#
# Issuer: CN=Hongkong Post Root CA 3,O=Hongkong Post,L=Hong Kong,ST=Hong Kong,C=HK
# Serial Number:08:16:5f:8a:4c:a5:ec:00:c9:93:40:df:c4:c6:ae:23:b8:1c:5a:a4
# Subject: CN=Hongkong Post Root CA 3,O=Hongkong Post,L=Hong Kong,ST=Hong Kong,C=HK
# Not Valid Before: Sat Jun 03 02:29:46 2017
# Not Valid After : Tue Jun 03 02:29:46 2042
# Fingerprint (SHA-256):
5A:2F:C0:3F:0C:83:B0:90:BB:FA:40:60:4B:09:88:44:6C:76:36:18:3D:F9:84:6E:17:10:1A:44:7F:B8:EF:D6
# Fingerprint (SHA1): 58:A2:D0:EC:20:52:81:5B:C1:F3:F8:64:02:24:4E:C2:8E:02:4B:02
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL
CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE

```



```
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Hongkong Post Root CA 3"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\157\061\013\060\011\006\003\125\004\006\023\002\110\113\061
\022\060\020\006\003\125\004\010\023\011\110\157\156\147\040\113
\157\156\147\061\022\060\020\006\003\125\004\007\023\011\110\157
\156\147\040\113\157\156\147\061\026\060\024\006\003\125\004\012
\023\015\110\157\156\147\153\157\156\147\040\120\157\163\164\061
\040\060\036\006\003\125\004\003\023\027\110\157\156\147\153\157
\156\147\040\120\157\163\164\040\122\157\157\164\040\103\101\040
\063
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\157\061\013\060\011\006\003\125\004\006\023\002\110\113\061
\022\060\020\006\003\125\004\010\023\011\110\157\156\147\040\113
\157\156\147\061\022\060\020\006\003\125\004\007\023\011\110\157
\156\147\040\113\157\156\147\061\026\060\024\006\003\125\004\012
\023\015\110\157\156\147\153\157\156\147\040\120\157\163\164\061
\040\060\036\006\003\125\004\003\023\027\110\157\156\147\153\157
\156\147\040\120\157\163\164\040\122\157\157\164\040\103\101\040
\063
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\024\010\026\137\212\114\245\354\000\311\223\100\337\304\306
\256\043\270\034\132\244
END
CKA_VALUE MULTILINE_OCTAL
\060\202\005\317\060\202\003\267\240\003\002\001\002\002\024\010
\026\137\212\114\245\354\000\311\223\100\337\304\306\256\043\270
\034\132\244\060\015\006\011\052\206\110\206\367\015\001\001\013
\005\000\060\157\061\013\060\011\006\003\125\004\006\023\002\110
\113\061\022\060\020\006\003\125\004\010\023\011\110\157\156\147
\040\113\157\156\147\061\022\060\020\006\003\125\004\007\023\011
\110\157\156\147\040\113\157\156\147\061\026\060\024\006\003\125
\004\012\023\015\110\157\156\147\153\157\156\147\040\120\157\163
\164\061\040\060\036\006\003\125\004\003\023\027\110\157\156\147
\153\157\156\147\040\120\157\163\164\040\122\157\157\164\040\103
\101\040\063\060\036\027\015\061\067\060\066\060\063\060\062\062
\071\064\066\132\027\015\064\062\060\066\060\063\060\062\062\071
\064\066\132\060\157\061\013\060\011\006\003\125\004\006\023\002
\110\113\061\022\060\020\006\003\125\004\010\023\011\110\157\156
\147\040\113\157\156\147\061\022\060\020\006\003\125\004\007\023
\011\110\157\156\147\040\113\157\156\147\061\026\060\024\006\003
\125\004\012\023\015\110\157\156\147\153\157\156\147\040\120\157
\163\164\061\040\060\036\006\003\125\004\003\023\027\110\157\156
```

\147\153\157\156\147\040\120\157\163\164\040\122\157\157\164\040  
\103\101\040\063\060\202\002\042\060\015\006\011\052\206\110\206  
\367\015\001\001\001\005\000\003\202\002\017\000\060\202\002\012  
\002\202\002\001\000\263\210\327\352\316\017\040\116\276\346\326  
\003\155\356\131\374\302\127\337\051\150\241\203\016\076\150\307  
\150\130\234\034\140\113\211\103\014\271\324\025\262\356\301\116  
\165\351\265\247\357\345\351\065\231\344\314\034\347\113\137\215  
\063\060\040\063\123\331\246\273\325\076\023\216\351\037\207\111  
\255\120\055\120\312\030\276\001\130\242\023\160\226\273\211\210  
\126\200\134\370\275\054\074\341\114\127\210\273\323\271\225\357  
\313\307\366\332\061\164\050\246\346\124\211\365\101\061\312\345  
\046\032\315\202\340\160\332\073\051\273\325\003\365\231\272\125  
\365\144\321\140\016\263\211\111\270\212\057\005\322\204\105\050  
\174\217\150\120\022\170\374\013\265\123\313\302\230\034\204\243  
\236\260\276\043\244\332\334\310\053\036\332\156\105\036\211\230  
\332\371\000\056\006\351\014\073\160\325\120\045\210\231\313\315  
\163\140\367\325\377\065\147\305\241\274\136\253\315\112\270\105  
\353\310\150\036\015\015\024\106\022\343\322\144\142\212\102\230  
\274\264\306\010\010\370\375\250\114\144\234\166\001\275\057\251  
\154\063\017\330\077\050\270\074\151\001\102\206\176\151\301\311  
\006\312\345\172\106\145\351\302\326\120\101\056\077\267\344\355  
\154\327\277\046\001\021\242\026\051\112\153\064\006\220\354\023  
\322\266\373\152\166\322\074\355\360\326\055\335\341\025\354\243  
\233\057\054\311\076\053\344\151\073\377\162\045\261\066\206\133  
\307\177\153\213\125\033\112\305\040\141\075\256\313\120\341\010  
\072\276\260\217\143\101\123\060\010\131\074\230\035\167\272\143  
\221\172\312\020\120\140\277\360\327\274\225\207\217\227\305\376  
\227\152\001\224\243\174\133\205\035\052\071\072\320\124\241\321  
\071\161\235\375\041\371\265\173\360\342\340\002\217\156\226\044  
\045\054\240\036\054\250\304\211\247\357\355\231\006\057\266\012  
\114\117\333\242\314\067\032\257\107\205\055\212\137\304\064\064  
\114\000\375\030\223\147\023\321\067\346\110\264\213\006\305\127  
\173\031\206\012\171\313\000\311\122\257\102\377\067\217\341\243  
\036\172\075\120\253\143\006\347\025\265\077\266\105\067\224\067  
\261\176\362\110\303\177\305\165\376\227\215\105\217\032\247\032  
\162\050\032\100\017\002\003\001\000\001\243\143\060\141\060\017  
\006\003\125\035\023\001\001\377\004\005\060\003\001\001\377\060  
\016\006\003\125\035\017\001\001\377\004\004\003\002\001\006\060  
\037\006\003\125\035\043\004\030\060\026\200\024\027\235\315\036  
\213\326\071\053\160\323\134\324\240\270\037\260\000\374\305\141  
\060\035\006\003\125\035\016\004\026\004\024\027\235\315\036\213  
\326\071\053\160\323\134\324\240\270\037\260\000\374\305\141\060  
\015\006\011\052\206\110\206\367\015\001\001\013\005\000\003\202  
\002\001\000\126\325\173\156\346\042\001\322\102\233\030\325\016  
\327\146\043\134\343\376\240\307\222\322\351\224\255\113\242\306  
\354\022\174\164\325\110\322\131\024\231\300\353\271\321\353\364  
\110\060\133\255\247\127\163\231\251\323\345\267\321\056\131\044  
\130\334\150\056\056\142\330\152\344\160\013\055\040\120\040\244

\062\225\321\000\230\273\323\375\367\062\362\111\256\306\172\340  
\107\276\156\316\313\243\162\072\055\151\135\313\310\350\105\071  
\324\372\102\301\021\114\167\135\222\373\152\377\130\104\345\353  
\201\236\257\240\231\255\276\251\001\146\313\070\035\074\337\103  
\037\364\115\156\264\272\027\106\374\175\375\207\201\171\152\015  
\063\017\372\057\370\024\271\200\263\135\115\252\227\341\371\344  
\030\305\370\325\070\214\046\074\375\362\050\342\356\132\111\210  
\054\337\171\075\216\236\220\074\275\101\112\072\335\133\366\232  
\264\316\077\045\060\177\062\175\242\003\224\320\334\172\241\122  
\336\156\223\215\030\046\375\125\254\275\217\233\322\317\257\347  
\206\054\313\037\011\157\243\157\251\204\324\163\277\115\241\164  
\033\116\043\140\362\314\016\252\177\244\234\114\045\250\262\146  
\073\070\377\331\224\060\366\162\204\276\150\125\020\017\306\163  
\054\026\151\223\007\376\261\105\355\273\242\125\152\260\332\265  
\112\002\045\047\205\327\267\267\206\104\026\211\154\200\053\076  
\227\251\234\325\176\125\114\306\336\105\020\034\352\351\073\237  
\003\123\356\356\172\001\002\026\170\324\350\302\276\106\166\210  
\023\077\042\273\110\022\035\122\000\264\002\176\041\032\036\234  
\045\364\363\075\136\036\322\034\371\263\055\266\367\067\134\306  
\313\041\116\260\367\231\107\030\205\301\053\272\125\256\006\352  
\320\007\262\334\253\320\202\226\165\316\322\120\376\231\347\317  
\057\237\347\166\321\141\052\373\041\273\061\320\252\237\107\244  
\262\042\312\026\072\120\127\304\133\103\147\305\145\142\003\111  
\001\353\103\331\330\370\236\255\317\261\143\016\105\364\240\132  
\054\233\055\305\246\300\255\250\107\364\047\114\070\015\056\033  
\111\073\122\364\350\210\203\053\124\050\324\362\065\122\264\062  
\203\142\151\144\014\221\234\237\227\352\164\026\375\037\021\006  
\232\233\364

END

CKA\_NSS\_Mozilla\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "Hongkong Post Root CA 3"

# Issuer: CN=Hongkong Post Root CA 3,O=Hongkong Post,L=Hong Kong,ST=Hong Kong,C=HK

# Serial Number:08:16:5f:8a:4c:a5:ec:00:c9:93:40:df:c4:c6:ae:23:b8:1c:5a:a4

# Subject: CN=Hongkong Post Root CA 3,O=Hongkong Post,L=Hong Kong,ST=Hong Kong,C=HK

# Not Valid Before: Sat Jun 03 02:29:46 2017

# Not Valid After : Tue Jun 03 02:29:46 2042

# Fingerprint (SHA-256):

5A:2F:C0:3F:0C:83:B0:90:BB:FA:40:60:4B:09:88:44:6C:76:36:18:3D:F9:84:6E:17:10:1A:44:7F:B8:EF:D6

#

Fingerprint (SHA1): 58:A2:D0:EC:20:52:81:5B:C1:F3:F8:64:02:24:4E:C2:8E:02:4B:02

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

```

CKA_LABEL UTF8 "Hongkong Post Root CA 3"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\130\242\320\354\040\122\201\133\301\363\370\144\002\044\116\302
\216\002\113\002
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\021\374\237\275\163\060\002\212\375\077\363\130\271\313\040\360
END
CKA_ISSUER MULTILINE_OCTAL
\060\157\061\013\060\011\006\003\125\004\006\023\002\110\113\061
\022\060\020\006\003\125\004\010\023\011\110\157\156\147\040\113
\157\156\147\061\022\060\020\006\003\125\004\007\023\011\110\157
\156\147\040\113\157\156\147\061\026\060\024\006\003\125\004\012
\023\015\110\157\156\147\153\157\156\147\040\120\157\163\164\061
\040\060\036\006\003\125\004\003\023\027\110\157\156\147\153\157
\156\147\040\120\157\163\164\040\122\157\157\164\040\103\101\040
\063
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\024\010\026\137\212\114\245\354\000\311\223\100\337\304\306
\256\043\270\034\132\244
END
CKA_TRUST_SERVER_AUTH
CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "Entrust Root Certification Authority - G4"
#
# Issuer: CN=Entrust Root Certification Authority - G4,OU="(c) 2015 Entrust, Inc. - for authorized use
only",OU=See www.entrust.net/legal-terms,O="Entrust, Inc.",C=US
# Serial Number:00:d9:b5:43:7f:af:a9:39:0f:00:00:00:00:55:65:ad:58
# Subject: CN=Entrust Root Certification Authority - G4,OU="(c) 2015 Entrust, Inc. - for authorized use
only",OU=See www.entrust.net/legal-terms,O="Entrust, Inc.",C=US
# Not Valid Before: Wed May 27 11:11:16 2015
# Not Valid After : Sun Dec 27 11:41:16 2037
# Fingerprint (SHA-256):
DB:35:17:D1:F6:73:2A:2D:5A:B9:7C:53:3E:C7:07:79:EE:32:70:A6:2F:B4:AC:42:38:37:24:60:E6:F0:1E:88
#
Fingerprint (SHA1): 14:88:4E:86:26:37:B0:26:AF:59:62:5C:40:77:EC:35:29:BA:96:01
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Entrust Root Certification Authority - G4"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509

```

CKA\_SUBJECT MULTILINE\_OCTAL

\060\201\276\061\013\060\011\006\003\125\004\006\023\002\125\123  
\061\026\060\024\006\003\125\004\012\023\015\105\156\164\162\165  
\163\164\054\040\111\156\143\056\061\050\060\046\006\003\125\004  
\013\023\037\123\145\145\040\167\167\167\056\145\156\164\162\165  
\163\164\056\156\145\164\057\154\145\147\141\154\055\164\145\162  
\155\163\061\071\060\067\006\003\125\004\013\023\060\050\143\051  
\040\062\060\061\065\040\105\156\164\162\165\163\164\054\040\111  
\156\143\056\040\055\040\146\157\162\040\141\165\164\150\157\162  
\151\172\145\144\040\165\163\145\040\157\156\154\171\061\062\060  
\060\006\003\125\004\003\023\051\105\156\164\162\165\163\164\040  
\122\157\157\164\040\103\145\162\164\151\146\151\143\141\164\151  
\157\156\040\101\165\164\150\157\162\151\164\171\040\055\040\107  
\064

END

CKA\_ID

UTF8 "0"

CKA\_ISSUER MULTILINE\_OCTAL

\060\201\276\061\013\060\011\006\003\125\004\006\023\002\125\123  
\061\026\060\024\006\003\125\004\012\023\015\105\156\164\162\165  
\163\164\054\040\111\156\143\056\061\050\060\046\006\003\125\004  
\013\023\037\123\145\145\040\167\167\167\056\145\156\164\162\165  
\163\164\056\156\145\164\057\154\145\147\141\154\055\164\145\162  
\155\163\061\071\060\067\006\003\125\004\013\023\060\050\143\051  
\040\062\060\061\065\040\105\156\164\162\165\163\164\054\040\111  
\156\143\056\040\055\040\146\157\162\040\141\165\164\150\157\162  
\151\172\145\144\040\165\163\145\040\157\156\154\171\061\062\060  
\060\006\003\125\004\003\023\051\105\156\164\162\165\163\164\040  
\122\157\157\164\040\103\145\162\164\151\146\151\143\141\164\151  
\157\156\040\101\165\164\150\157\162\151\164\171\040\055\040\107  
\064

END

CKA\_SERIAL\_NUMBER MULTILINE\_OCTAL

\002\021\000\331\265\103\177\257\251\071\017\000\000\000\000\125  
\145\255\130

END

CKA\_VALUE

MULTILINE\_OCTAL

\060\202\006\113\060\202\004\063\240\003\002\001\002\002\021\000  
\331\265\103\177\257\251\071\017\000\000\000\000\125\145\255\130  
\060\015\006\011\052\206\110\206\367\015\001\001\013\005\000\060  
\201\276\061\013\060\011\006\003\125\004\006\023\002\125\123\061  
\026\060\024\006\003\125\004\012\023\015\105\156\164\162\165\163  
\164\054\040\111\156\143\056\061\050\060\046\006\003\125\004\013  
\023\037\123\145\145\040\167\167\167\056\145\156\164\162\165\163  
\164\056\156\145\164\057\154\145\147\141\154\055\164\145\162\155  
\163\061\071\060\067\006\003\125\004\013\023\060\050\143\051\040  
\062\060\061\065\040\105\156\164\162\165\163\164\054\040\111\156

\143\056\040\055\040\146\157\162\040\141\165\164\150\157\162\151  
\172\145\144\040\165\163\145\040\157\156\154\171\061\062\060\060  
\006\003\125\004\003\023\051\105\156\164\162\165\163\164\040\122  
\157\157\164\040\103\145\162\164\151\146\151\143\141\164\151\157  
\156\040\101\165\164\150\157\162\151\164\171\040\055\040\107\064  
\060\036\027\015\061\065\060\065\062\067\061\061\061\061\061\066  
\132\027\015\063\067\061\062\062\067\061\061\064\061\061\066\132  
\060\201\276\061\013\060\011\006\003\125\004\006\023\002\125\123  
\061\026\060\024\006\003\125\004\012\023\015\105\156\164\162\165  
\163\164\054\040\111\156\143\056\061\050\060\046\006\003\125\004  
\013\023\037\123\145\145\040\167\167\167\056\145\156\164\162\165  
\163\164\056\156\145\164\057\154\145\147\141\154\055\164\145\162  
\155\163\061\071\060\067\006\003\125\004\013\023\060\050\143\051  
\040\062\060\061\065\040\105\156\164\162\165\163\164\054\040\111  
\156\143\056\040\055\040\146\157\162\040\141\165\164\150\157\162  
\151\172\145\144\040\165\163\145\040\157\156\154\171\061\062\060  
\060\006\003\125\004\003\023\051\105\156\164\162\165\163\164\040  
\122\157\157\164\040\103\145\162\164\151\146\151\143\141\164\151  
\157\156\040\101\165\164\150\157\162\151\164\171\040\055\040\107  
\064\060\202\002\042\060\015\006\011\052\206\110\206\367\015\001  
\001\001\005\000\003\202\002\017\000\060\202\002\012\002\202\002  
\001\000\261\354\054\102\356\342\321\060\377\245\222\107\342\055  
\303\272\144\227\155\312\367\015\265\131\301\263\313\250\150\031  
\330\257\204\155\060\160\135\176\363\056\322\123\231\341\376\037  
\136\331\110\257\135\023\215\333\377\143\063\115\323\000\002\274  
\304\370\321\006\010\224\171\130\212\025\336\051\263\375\375\304  
\117\350\252\342\240\073\171\315\277\153\103\062\335\331\164\020  
\271\367\364\150\324\273\320\207\325\252\113\212\052\157\052\004  
\265\262\246\307\240\172\346\110\253\322\321\131\314\326\176\043  
\346\227\154\360\102\345\334\121\113\025\101\355\111\112\311\336  
\020\227\326\166\301\357\245\265\066\024\227\065\330\170\042\065  
\122\357\103\275\333\047\333\141\126\202\064\334\313\210\140\014  
\013\132\345\054\001\306\124\257\327\252\301\020\173\322\005\132  
\270\100\236\206\247\303\220\206\002\126\122\011\172\234\322\047  
\202\123\112\145\122\152\365\074\347\250\362\234\257\213\275\323  
\016\324\324\136\156\207\236\152\075\105\035\321\135\033\364\351  
\012\254\140\231\373\211\264\377\230\054\317\174\035\351\002\252  
\004\232\036\270\334\210\156\045\263\154\146\367\074\220\363\127  
\301\263\057\365\155\362\373\312\241\370\051\235\106\213\263\152  
\366\346\147\007\276\054\147\012\052\037\132\262\076\127\304\323  
\041\041\143\145\122\221\033\261\231\216\171\176\346\353\215\000  
\331\132\252\352\163\350\244\202\002\107\226\376\133\216\124\141  
\243\353\057\113\060\260\213\043\165\162\174\041\074\310\366\361  
\164\324\034\173\243\005\125\356\273\115\073\062\276\232\167\146  
\236\254\151\220\042\007\037\141\072\226\276\345\232\117\314\005  
\074\050\131\323\301\014\124\250\131\141\275\310\162\114\350\334  
\237\207\177\275\234\110\066\136\225\243\016\271\070\044\125\374  
\165\146\353\002\343\010\064\051\112\306\343\053\057\063\240\332

\243\206\245\022\227\375\200\053\332\024\102\343\222\275\076\362  
\135\136\147\164\056\034\210\107\051\064\137\342\062\250\234\045  
\067\214\272\230\000\227\213\111\226\036\375\045\212\254\334\332  
\330\135\164\156\146\260\377\104\337\241\030\306\276\110\057\067  
\224\170\370\225\112\077\177\023\136\135\131\375\164\206\103\143  
\163\111\002\003\001\000\001\243\102\060\100\060\017\006\003\125  
\035\023\001\001\377\004\005\060\003\001\001\377\060\016\006\003  
\125\035\017\001\001\377\004\004\003\002\001\006\060\035\006\003  
\125\035\016\004\026\004\024\237\070\304\126\043\303\071\350\240  
\161\154\350\124\114\344\350\072\261\277\147\060\015\006\011\052  
\206\110\206\367\015\001\001\013\005\000\003\202\002\001\000\022  
\345\102\246\173\213\017\014\344\106\245\266\140\100\207\214\045  
\176\255\270\150\056\133\306\100\166\074\003\370\311\131\364\363  
\253\142\316\020\215\264\132\144\214\150\300\260\162\103\064\322  
\033\013\366\054\123\322\312\220\113\206\146\374\252\203\042\364  
\213\032\157\046\110\254\166\167\010\277\305\230\134\364\046\211  
\236\173\303\271\144\062\001\177\323\303\335\130\155\354\261\253  
\204\125\164\167\204\004\047\122\153\206\114\316\335\271\145\377  
\326\306\136\237\232\020\231\113\165\152\376\152\351\227\040\344  
\344\166\172\306\320\044\252\220\315\040\220\272\107\144\373\177  
\007\263\123\170\265\012\142\362\163\103\316\101\053\201\152\056  
\205\026\224\123\324\153\137\162\042\253\121\055\102\325\000\234  
\231\277\336\273\224\073\127\375\232\365\206\313\126\073\133\210  
\001\345\174\050\113\003\371\111\203\174\262\177\174\343\355\216  
\241\177\140\123\216\125\235\120\064\022\017\267\227\173\154\207  
\112\104\347\365\155\354\200\067\360\130\031\156\112\150\166\360  
\037\222\344\352\265\222\323\141\121\020\013\255\247\331\137\307  
\137\334\037\243\134\214\241\176\233\267\236\323\126\157\146\136  
\007\226\040\355\013\164\373\146\116\213\021\025\351\201\111\176  
\157\260\324\120\177\042\327\137\145\002\015\246\364\205\036\330  
\256\006\113\112\247\322\061\146\302\370\316\345\010\246\244\002  
\226\104\150\127\304\325\063\317\031\057\024\304\224\034\173\244  
\331\360\237\016\261\200\342\321\236\021\144\251\210\021\072\166  
\202\345\142\302\200\330\244\203\355\223\357\174\057\220\260\062  
\114\226\025\150\110\122\324\231\010\300\044\350\034\343\263\245  
\041\016\222\300\220\037\317\040\137\312\073\070\307\267\155\072  
\363\346\104\270\016\061\153\210\216\160\353\234\027\122\250\101  
\224\056\207\266\347\246\022\305\165\337\133\300\012\156\173\244  
\344\136\206\371\066\224\337\167\303\351\015\300\071\361\171\273  
\106\216\253\103\131\047\267\040\273\043\351\126\100\041\354\061  
\075\145\252\103\362\075\337\160\104\341\272\115\046\020\073\230  
\237\363\310\216\033\070\126\041\152\121\223\323\221\312\106\332  
\211\267\075\123\203\054\010\037\213\217\123\335\377\254\037

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

# Trust for "Entrust Root Certification Authority - G4"

```
# Issuer: CN=Entrust Root Certification Authority - G4,OU="(c) 2015 Entrust, Inc. - for authorized use
only",OU=See www.entrust.net/legal-terms,O="Entrust, Inc.",C=US
# Serial Number:00:d9:b5:43:7f:af:a9:39:0f:00:00:00:00:55:65:ad:58
#
Subject: CN=Entrust Root Certification Authority - G4,OU="(c) 2015 Entrust, Inc. - for authorized use
only",OU=See www.entrust.net/legal-terms,O="Entrust, Inc.",C=US
# Not Valid Before: Wed May 27 11:11:16 2015
# Not Valid After : Sun Dec 27 11:41:16 2037
# Fingerprint (SHA-256):
DB:35:17:D1:F6:73:2A:2D:5A:B9:7C:53:3E:C7:07:79:EE:32:70:A6:2F:B4:AC:42:38:37:24:60:E6:F0:1E:88
# Fingerprint (SHA1): 14:88:4E:86:26:37:B0:26:AF:59:62:5C:40:77:EC:35:29:BA:96:01
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Entrust Root Certification Authority - G4"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\024\210\116\206\046\067\260\046\257\131\142\134\100\167\354\065
\051\272\226\001
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\211\123\361\203\043\267\174\216\005\361\214\161\070\116\037\210
END
CKA_ISSUER MULTILINE_OCTAL
\060\201\276\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\026\060\024\006\003\125\004\012\023\015\105\156\164\162\165
\163\164\054\040\111\156\143\056\061\050\060\046\006\003\125\004
\013\023\037\123\145\145\040\167\167\167\056\145\156\164\162\165
\163\164\056\156\145\164\057\154\145\147\141\154\055\164\145\162
\155\163\061\071\060\067\006\003\125\004\013\023\060\050\143\051
\040\062\060\061\065\040\105\156\164\162\165\163\164\054\040\111
\156\143\056\040\055\040\146\157\162\040\141\165\164\150\157\162
\151\172\145\144\040\165\163\145\040\157\156\154\171\061\062\060
\060\006\003\125\004\003\023\051\105\156\164\162\165\163\164\040
\122\157\157\164\040\103\145\162\164\151\146\151\143\141\164\151
\157\156\040\101\165\164\150\157\162\151\164\171\040\055\040\107
\064
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\021\000\331\265\103\177\257\251\071\017\000\000\000\000\125
\145\255\130
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED
```



CK\_BBOOL CK\_FALSE

#

# Certificate "Microsoft ECC Root Certificate Authority 2017"

#

# Issuer: CN=Microsoft ECC Root Certificate Authority 2017,O=Microsoft Corporation,C=US

# Serial Number:66:f2:3d:af:87:de:8b:b1:4a:ea:0c:57:31:01:c2:ec

# Subject: CN=Microsoft ECC Root Certificate Authority 2017,O=Microsoft Corporation,C=US

# Not Valid Before: Wed Dec 18 23:06:45 2019

# Not Valid After : Fri Jul 18 23:16:04 2042

# Fingerprint (SHA-256):

35:8D:F3:9D:76:4A:F9:E1:B7:66:E9:C9:72:DF:35:2E:E1:5C:FA:C2:27:AF:6A:D1:D7:0E:8E:4A:6E:DC:BA:02

# Fingerprint (SHA1): 99:9A:64:C3:7F:F4:7D:9F:AB:95:F1:47:69:89:14:60:EE:C4:C3:C5

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_CERTIFICATE

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "Microsoft ECC Root Certificate Authority 2017"

CKA\_CERTIFICATE\_TYPE CK\_CERTIFICATE\_TYPE CKC\_X\_509

CKA\_SUBJECT MULTILINE\_OCTAL

\060\145\061\013\060\011\006\003\125\004\006\023\002\125\123\061  
\036\060\034\006\003\125\004\012\023\025\115\151\143\162\157\163  
\157\146\164\040\103\157\162\160\157\162\141\164\151\157\156\061  
\066\060\064\006\003\125\004\003\023\055\115\151\143\162\157\163  
\157\146\164\040\105\103\103\040\122\157\157\164\040\103\145\162  
\164\151\146\151\143\141\164\145\040\101\165\164\150\157\162\151  
\164\171\040\062\060\061\067

END

CKA\_ID

UTF8 "0"

CKA\_ISSUER MULTILINE\_OCTAL

\060\145\061\013\060\011\006\003\125\004\006\023\002\125\123\061  
\036\060\034\006\003\125\004\012\023\025\115\151\143\162\157\163  
\157\146\164\040\103\157\162\160\157\162\141\164\151\157\156\061  
\066\060\064\006\003\125\004\003\023\055\115\151\143\162\157\163  
\157\146\164\040\105\103\103\040\122\157\157\164\040\103\145\162  
\164\151\146\151\143\141\164\145\040\101\165\164\150\157\162\151  
\164\171\040\062\060\061\067

END

CKA\_SERIAL\_NUMBER MULTILINE\_OCTAL

\002\020\146\362\075\257\207\336\213\261\112\352\014\127\061\001  
\302\354

END

CKA\_VALUE MULTILINE\_OCTAL

\060\202\002\131\060\202\001\337\240\003\002\001\002\002\020\146  
\362\075\257\207\336\213\261\112\352\014\127\061\001\302\354\060  
\012\006\010\052\206\110\316\075\004\003\003\060\145\061\013\060  
\011\006\003\125\004\006\023\002\125\123\061\036\060\034\006\003

\125\004\012\023\025\115\151\143\162\157\163\157\146\164\040\103  
\157\162\160\157\162\141\164\151\157\156\061\066\060\064\006\003  
\125\004\003\023\055\115\151\143\162\157\163\157\146\164\040\105  
\103\103\040\122\157\157\164\040\103\145\162\164\151\146\151\143  
\141\164\145\040\101\165\164\150\157\162\151\164\171\040\062\060  
\061\067\060\036\027\015\061\071\061\062\061\070\062\063\060\066  
\064\065\132\027\015\064\062\060\067\061\070\062\063\061\066\060  
\064\132\060\145\061\013\060\011\006\003\125\004\006\023\002\125  
\123\061\036\060\034\006\003\125\004\012\023\025\115\151\143\162  
\157\163\157\146\164\040\103\157\162\160\157\162\141\164\151\157  
\156\061\066\060\064\006\003\125\004\003\023\055\115\151\143\162  
\157\163\157\146\164\040\105\103\103\040\122\157\157\164\040\103  
\145\162\164\151\146\151\143\141\164\145\040\101\165\164\150\157  
\162\151\164\171\040\062\060\061\067\060\166\060\020\006\007\052  
\206\110\316\075\002\001\006\005\053\201\004\000\042\003\142\000  
\004\324\274\075\002\102\165\101\023\043\315\200\004\206\002\121  
\057\152\250\201\142\013\145\314\366\312\235\036\157\112\146\121  
\242\003\331\235\221\372\266\026\261\214\156\336\174\315\333\171  
\246\057\316\273\316\161\057\345\245\253\050\354\143\004\146\231  
\370\372\362\223\020\005\341\201\050\102\343\306\150\364\346\033  
\204\140\112\211\257\355\171\017\073\316\361\366\104\365\001\170  
\300\243\124\060\122\060\016\006\003\125\035\017\001\001\377\004  
\004\003\002\001\206\060\017\006\003\125\035\023\001\001\377\004  
\005\060\003\001\001\377\060\035\006\003\125\035\016\004\026\004  
\024\310\313\231\162\160\122\014\370\346\276\262\004\127\051\052  
\317\102\020\355\065\060\020\006\011\053\006\001\004\001\202\067  
\025\001\004\003\002\001\000\060\012\006\010\052\206\110\316\075  
\004\003\003\003\150\000\060\145\002\060\130\362\115\352\014\371  
\137\136\356\140\051\313\072\362\333\326\062\204\031\077\174\325  
\057\302\261\314\223\256\120\273\011\062\306\306\355\176\311\066  
\224\022\344\150\205\006\242\033\320\057\002\061\000\231\351\026  
\264\016\372\126\110\324\244\060\026\221\170\333\124\214\145\001  
\212\347\120\146\302\061\267\071\272\270\032\042\007\116\374\153  
\124\026\040\377\053\265\347\114\014\115\246\117\163

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "Microsoft ECC Root Certificate Authority 2017"

# Issuer: CN=Microsoft ECC Root Certificate Authority 2017,O=Microsoft Corporation,C=US

# Serial Number:66:f2:3d:af:87:de:8b:b1:4a:ea:0c:57:31:01:c2:ec

# Subject: CN=Microsoft ECC Root Certificate Authority 2017,O=Microsoft Corporation,C=US

# Not Valid Before: Wed Dec 18 23:06:45 2019

# Not Valid After : Fri Jul 18 23:16:04 2042

# Fingerprint (SHA-256):

35:8D:F3:9D:76:4A:F9:E1:B7:66:E9:C9:72:DF:35:2E:E1:5C:FA:C2:27:AF:6A:D1:D7:0E:8E:4A:6E:DC:BA:02

```

#
Fingerprint (SHA1): 99:9A:64:C3:7F:F4:7D:9F:AB:95:F1:47:69:89:14:60:EE:C4:C3:C5
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Microsoft ECC Root Certificate Authority 2017"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\231\232\144\303\177\364\175\237\253\225\361\107\151\211\024\140
\356\304\303\305
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\335\241\003\346\112\223\020\321\277\360\031\102\313\376\355\147
END
CKA_ISSUER MULTILINE_OCTAL
\060\145\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\036\060\034\006\003\125\004\012\023\025\115\151\143\162\157\163
\157\146\164\040\103\157\162\160\157\162\141\164\151\157\156\061
\066\060\064\006\003\125\004\003\023\055\115\151\143\162\157\163
\157\146\164\040\105\103\103\040\122\157\157\164\040\103\145\162
\164\151\146\151\143\141\164\145\040\101\165\164\150\157\162\151
\164\171\040\062\060\061\067
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\020\146\362\075\257\207\336\213\261\112\352\014\127\061\001
\302\354
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

```

```

#
# Certificate "Microsoft RSA Root Certificate Authority 2017"
#
# Issuer: CN=Microsoft RSA Root Certificate Authority 2017,O=Microsoft Corporation,C=US
# Serial Number: 1e:d3:97:09:5f:d8:b4:b3:47:70:1e:aa:be:7f:45:b3
# Subject: CN=Microsoft RSA Root Certificate Authority 2017,O=Microsoft Corporation,C=US
# Not Valid Before: Wed Dec 18 22:51:22 2019
# Not Valid After : Fri Jul 18 23:00:23 2042
# Fingerprint (SHA-256):
C7:41:F7:0F:4B:2A:8D:88:BF:2E:71:C1:41:22:EF:53:EF:10:EB:A0:CF:A5:E6:4C:FA:20:F4:18:85:30:73:E0
# Fingerprint (SHA1): 73:A5:E6:4A:3B:FF:83:16:FF:0E:DC:CC:61:8A:90:6E:4E:AE:4D:74
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL
CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE

```

```
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Microsoft RSA Root Certificate Authority 2017"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\145\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\036\060\034\006\003\125\004\012\023\025\115\151\143\162\157\163
\157\146\164\040\103\157\162\160\157\162\141\164\151\157\156\061
\066\060\064\006\003\125\004\003\023\055\115\151\143\162\157\163
\157\146\164\040\122\123\101\040\122\157\157\164\040\103\145\162
\164\151\146\151\143\141\164\145\040\101\165\164\150\157\162\151
\164\171\040\062\060\061\067
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\145\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\036\060\034\006\003\125\004\012\023\025\115\151\143\162\157\163
\157\146\164\040\103\157\162\160\157\162\141\164\151\157\156\061
\066\060\064\006\003\125\004\003\023\055\115\151\143\162\157\163
\157\146\164\040\122\123\101\040\122\157\157\164\040\103\145\162
\164\151\146\151\143\141\164\145\040\101\165\164\150\157\162\151
\164\171\040\062\060\061\067
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\020\036\323\227\011\137\330\264\263\107\160\036\252\276\177
\105\263
END
CKA_VALUE MULTILINE_OCTAL
\060\202\005\250\060\202\003\220\240\003\002\001\002\002\020\036
\323\227\011\137\330\264\263\107\160\036\252\276\177\105\263\060
\015\006\011\052\206\110\206\367\015\001\001\014\005\000\060\145
\061\013\060\011\006\003\125\004\006\023\002\125\123\061\036\060
\034\006\003\125\004\012\023\025\115\151\143\162\157\163\157\146
\164\040\103\157\162\160\157\162\141\164\151\157\156\061\066\060
\064\006\003\125\004\003\023\055\115\151\143\162\157\163\157\146
\164\040\122\123\101\040\122\157\157\164\040\103\145\162\164\151
\146\151\143\141\164\145\040\101\165\164\150\157\162\151\164\171
\040\062\060\061\067\060\036\027\015\061\071\061\062\061\070\062
\062\065\061\062\062\132\027\015\064\062\060\067\061\070\062\063
\060\060\062\063\132\060\145\061\013\060\011\006\003\125\004\006
\023\002\125\123\061\036\060\034\006\003\125\004\012\023\025\115
\151\143\162\157\163\157\146\164\040\103\157\162\160\157\162\141
\164\151\157\156\061\066\060\064\006\003\125\004\003\023\055\115
\151\143\162\157\163\157\146\164\040\122\123\101\040\122\157\157
\164\040\103\145\162\164\151\146\151\143\141\164\145\040\101\165
\164\150\157\162\151\164\171\040\062\060\061\067\060\202\002\042
\060\015\006\011\052\206\110\206\367\015\001\001\001\005\000\003
\202\002\017\000\060\202\002\012\002\202\002\001\000\312\133\276
```

\224\063\214\051\225\221\026\012\225\275\107\142\301\211\363\231  
\066\337\106\220\311\245\355\170\152\157\107\221\150\370\047\147  
\120\063\035\241\246\373\340\345\103\243\204\002\127\001\135\234  
\110\100\202\123\020\274\277\307\073\150\220\266\202\055\345\364  
\145\320\314\155\031\314\225\371\173\254\112\224\255\016\336\113  
\103\035\207\007\222\023\220\200\203\144\065\071\004\374\345\351  
\154\263\266\037\120\224\070\145\120\134\027\106\271\266\205\265  
\034\265\027\350\326\105\235\330\262\046\260\312\304\160\112\256  
\140\244\335\263\331\354\374\073\325\127\162\274\077\310\311\262  
\336\113\153\370\043\154\003\300\005\275\225\307\315\163\073\146  
\200\144\343\032\254\056\371\107\005\362\006\266\233\163\365\170  
\063\133\307\241\373\047\052\241\264\232\221\214\221\323\072\202  
\076\166\100\264\315\122\141\121\160\050\077\305\305\132\362\311  
\214\111\273\024\133\115\310\377\147\115\114\022\226\255\365\376  
\170\250\227\207\327\375\136\040\200\334\241\113\042\373\324\211  
\255\272\316\107\227\107\125\173\217\105\310\147\050\204\225\034  
\150\060\357\357\111\340\065\173\144\347\230\260\224\332\115\205  
\073\076\125\304\050\257\127\363\236\023\333\106\047\237\036\242  
\136\104\203\244\245\312\325\023\263\113\077\304\343\302\346\206  
\141\244\122\060\271\172\040\117\157\017\070\123\313\063\014\023  
\053\217\326\232\275\052\310\055\261\034\175\113\121\312\107\321  
\110\047\162\135\207\353\325\105\346\110\145\235\257\122\220\272  
\133\242\030\145\127\022\237\150\271\324\025\153\224\304\151\042  
\230\364\063\340\355\371\121\216\101\120\311\064\117\166\220\254  
\374\070\301\330\341\173\271\343\343\224\341\106\151\313\016\012  
\120\153\023\272\254\017\067\132\267\022\265\220\201\036\126\256  
\127\042\206\331\311\322\321\327\121\343\253\073\306\125\375\036  
\016\323\164\012\321\332\252\352\151\270\227\050\217\110\304\007  
\370\122\103\072\364\312\125\065\054\260\246\152\300\234\371\362  
\201\341\022\152\300\105\331\147\263\316\377\043\242\211\012\124  
\324\024\271\052\250\327\354\371\253\315\045\130\062\171\217\220  
\133\230\071\304\010\006\301\254\177\016\075\000\245\002\003\001  
\000\001\243\124\060\122\060\016\006\003\125\035\017\001\001\377  
\004\004\003\002\001\206\060\017\006\003\125\035\023\001\001\377  
\004\005\060\003\001\001\377\060\035\006\003\125\035\016\004\026  
\004\024\011\313\131\177\206\262\160\217\032\303\071\343\300\331  
\351\277\273\115\262\043\060\020\006\011\053\006\001\004\001\202  
\067\025\001\004\003\002\001\000\060\015\006\011\052\206\110\206  
\367\015\001\001\014\005\000\003\202\002\001\000\254\257\076\135  
\302\021\226\211\216\243\347\222\326\227\025\270\023\242\246\102  
\056\002\315\026\005\131\047\312\040\350\272\270\350\032\354\115  
\250\227\126\256\145\103\261\217\000\233\122\315\125\315\123\071  
\155\142\114\213\015\133\174\056\104\277\203\020\217\363\123\202  
\200\303\117\072\307\156\021\077\346\343\026\221\204\373\155\204  
\177\064\164\255\211\247\316\271\327\327\237\204\144\222\276\225  
\241\255\011\123\063\335\356\012\352\112\121\216\157\125\253\272  
\265\224\106\256\214\177\330\242\120\045\145\140\200\106\333\063  
\004\256\154\265\230\164\124\045\334\223\344\370\343\125\025\075

\270\155\303\012\244\022\301\151\205\156\337\144\361\123\231\341  
\112\165\040\235\225\017\344\326\334\003\361\131\030\350\107\211  
\262\127\132\224\266\251\330\027\053\027\111\345\166\313\301\126  
\231\072\067\261\377\151\054\221\221\223\341\337\114\243\067\166  
\115\241\237\370\155\036\035\323\372\354\373\364\105\035\023\155  
\317\367\131\345\042\047\162\053\206\363\127\273\060\355\044\115  
\334\175\126\273\243\263\370\064\171\211\301\340\362\002\141\367  
\246\374\017\273\034\027\013\256\101\331\174\275\047\243\375\056  
\072\321\223\224\261\163\035\044\213\257\133\040\211\255\267\147  
\146\171\365\072\306\246\226\063\376\123\222\310\106\261\021\221  
\306\231\177\217\311\326\146\061\040\101\020\207\055\014\326\301  
\257\064\230\312\144\203\373\023\127\321\301\360\074\172\214\245  
\301\375\225\041\240\161\301\223\147\161\022\352\217\210\012\151  
\031\144\231\043\126\373\254\052\056\160\276\146\304\014\204\357  
\345\213\363\223\001\370\152\220\223\147\113\262\150\243\265\142  
\217\351\077\214\172\073\136\017\347\214\270\306\174\357\067\375  
\164\342\310\117\063\162\341\224\071\155\275\022\257\276\014\116  
\160\174\033\157\215\263\062\223\163\104\026\155\350\364\367\340  
\225\200\217\226\135\070\244\364\253\336\012\060\207\223\330\115  
\000\161\142\105\047\113\072\102\204\133\177\145\267\147\064\122  
\055\234\026\153\252\250\330\173\243\102\114\161\307\014\312\076  
\203\344\246\357\267\001\060\136\121\243\171\365\160\151\246\101  
\104\017\206\260\054\221\306\075\352\256\017\204

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "Microsoft RSA Root Certificate Authority 2017"

# Issuer: CN=Microsoft RSA Root Certificate Authority 2017,O=Microsoft Corporation,C=US

# Serial Number: 1e:d3:97:09:5f:d8:b4:b3:47:70:1e:aa:be:7f:45:b3

# Subject: CN=Microsoft RSA Root Certificate Authority 2017,O=Microsoft Corporation,C=US

# Not Valid Before: Wed Dec 18 22:51:22 2019

# Not Valid After : Fri Jul 18 23:00:23 2042

# Fingerprint (SHA-256):

C7:41:F7:0F:4B:2A:8D:88:BF:2E:71:C1:41:22:EF:53:EF:10:EB:A0:CF:A5:E6:4C:FA:20:F4:18:85:30:73:E0

# Fingerprint (SHA1): 73:A5:E6:4A:3B:FF:83:16:FF:0E:DC:CC:61:8A:90:6E:4E:AE:4D:74

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL

CK\_FALSE

CKA\_LABEL UTF8 "Microsoft RSA Root Certificate Authority 2017"

CKA\_CERT\_SHA1\_HASH MULTILINE\_OCTAL

\163\245\346\112\073\377\203\026\377\016\334\314\141\212\220\156

\116\256\115\164

END

```

CKA_CERT_MD5_HASH MULTILINE_OCTAL
\020\377\000\377\317\311\370\307\172\300\356\065\216\311\017\107
END
CKA_ISSUER MULTILINE_OCTAL
\060\145\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\036\060\034\006\003\125\004\012\023\025\115\151\143\162\157\163
\157\146\164\040\103\157\162\160\157\162\141\164\151\157\156\061
\066\060\064\006\003\125\004\003\023\055\115\151\143\162\157\163
\157\146\164\040\122\123\101\040\122\157\157\164\040\103\145\162
\164\151\146\151\143\141\164\145\040\101\165\164\150\157\162\151
\164\171\040\062\060\061\067
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\020\036\323\227\011\137\330\264\263\107\160\036\252\276\177
\105\263
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_CODE_SIGNING
CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "e-Szigno Root CA 2017"
#
# Issuer: CN=e-Szigno Root CA 2017,OID.2.5.4.97=VATHU-23584497,O=Microsec Ltd.,L=Budapest,C=HU
# Serial Number:01:54:48:ef:21:fd:97:59:0d:f5:04:0a
# Subject: CN=e-Szigno Root CA 2017,OID.2.5.4.97=VATHU-23584497,O=Microsec Ltd.,L=Budapest,C=HU
# Not Valid Before: Tue Aug 22 12:07:06 2017
# Not Valid After : Fri Aug 22 12:07:06 2042
# Fingerprint (SHA-256):
BE:B0:0B:30:83:9B:9B:C3:2C:32:E4:44:79:05:95:06:41:F2:64:21:B1:5E:D0:89:19:8B:51:8A:E2:EA:1B:99
# Fingerprint (SHA1): 89:D4:83:03:4F:9E:9A:48:80:5F:72:37:D4:A9:A6:EF:CB:7C:1F:D1
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "e-Szigno Root CA 2017"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\161\061\013\060\011\006\003\125\004\006\023\002\110\125\061
\021\060\017\006\003\125\004\007\014\010\102\165\144\141\160\145
\163\164\061\026\060\024\006\003\125\004\012\014\015\115\151\143
\162\157\163\145\143\040\114\164\144\056\061\027\060\025\006\003
\125\004\141\014\016\126\101\124\110\125\055\062\063\065\070\064
\064\071\067\061\036\060\034\006\003\125\004\003\014\025\145\055
\123\172\151\147\156\157\040\122\157\157\164\040\103\101\040\062
\060\061\067

```

END

CKA\_ID

UTF8 "0"

CKA\_ISSUER MULTILINE\_OCTAL

\060\161\061\013\060\011\006\003\125\004\006\023\002\110\125\061  
\021\060\017\006\003\125\004\007\014\010\102\165\144\141\160\145  
\163\164\061\026\060\024\006\003\125\004\012\014\015\115\151\143  
\162\157\163\145\143\040\114\164\144\056\061\027\060\025\006\003  
\125\004\141\014\016\126\101\124\110\125\055\062\063\065\070\064  
\064\071\067\061\036\060\034\006\003\125\004\003\014\025\145\055  
\123\172\151\147\156\157\040\122\157\157\164\040\103\101\040\062  
\060\061\067

END

CKA\_SERIAL\_NUMBER MULTILINE\_OCTAL

\002\014\001\124\110\357\041\375\227\131\015\365\004\012

END

CKA\_VALUE

MULTILINE\_OCTAL

\060\202\002\100\060\202\001\345\240\003\002\001\002\002\014\001  
\124\110\357\041\375\227\131\015\365\004\012\060\012\006\010\052  
\206\110\316\075\004\003\002\060\161\061\013\060\011\006\003\125  
\004\006\023\002\110\125\061\021\060\017\006\003\125\004\007\014  
\010\102\165\144\141\160\145\163\164\061\026\060\024\006\003\125  
\004\012\014\015\115\151\143\162\157\163\145\143\040\114\164\144  
\056\061\027\060\025\006\003\125\004\141\014\016\126\101\124\110  
\125\055\062\063\065\070\064\064\071\067\061\036\060\034\006\003  
\125\004\003\014\025\145\055\123\172\151\147\156\157\040\122\157  
\157\164\040\103\101\040\062\060\061\067\060\036\027\015\061\067  
\060\070\062\062\061\062\060\067\060\066\132\027\015\064\062\060  
\070\062\062\061\062\060\067\060\066\132\060\161\061\013\060\011  
\006\003\125\004\006\023\002\110\125\061\021\060\017\006\003\125  
\004\007\014\010\102\165\144\141\160\145\163\164\061\026\060\024  
\006\003\125\004\012\014\015\115\151\143\162\157\163\145\143\040  
\114\164\144\056\061\027\060\025\006\003\125\004\141\014\016\126  
\101\124\110\125\055\062\063\065\070\064\064\071\067\061\036\060  
\034\006\003\125\004\003\014\025\145\055\123\172\151\147\156\157  
\040\122\157\157\164\040\103\101\040\062\060\061\067\060\131\060  
\023\006\007\052\206\110\316\075\002\001\006\010\052\206\110\316  
\075\003\001\007\003\102\000\004\226\334\075\212\330\260\173\157  
\306\047\276\104\220\261\263\126\025\173\216\103\044\175\032\204  
\131\356\143\150\262\306\136\207\320\025\110\036\250\220\255\275  
\123\242\332\336\072\220\246\140\137\150\062\265\206\101\337\207  
\133\054\173\305\376\174\172\332\243\143\060\141\060\017\006\003  
\125\035\023\001\001\377\004\005\060\003\001\001\377\060\016\006  
\003\125\035\017\001\001\377\004\004\003\002\001\006\060\035\006  
\003\125\035\016\004\026\004\024\207\021\025\010\321\252\301\170  
\014\261\257\316\306\311\220\357\277\060\004\300\060\037\006\003  
\125\035\043\004\030\060\026\200\024\207\021\025\010\321\252\301



```
\170\014\261\257\316\306\311\220\357\277\060\004\300\060\012\006
\010\052\206\110\316\075\004\003\002\003\111\000\060\106\002\041
\000\265\127\335\327\212\125\013\066\341\206\104\372\324\331\150
\215\270\334\043\212\212\015\324\057\175\352\163\354\277\115\154
\250\002\041\000\313\245\264\022\372\347\265\350\317\176\223\374
\363\065\217\157\116\132\174\264\274\116\262\374\162\252\133\131
\371\347\334\061
```

END

CKA\_NSS\_Mozilla\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "e-Szigno Root CA 2017"

# Issuer: CN=e-Szigno Root CA 2017,OID.2.5.4.97=VATHU-23584497,O=Microsec Ltd.,L=Budapest,C=HU

# Serial Number:01:54:48:ef:21:fd:97:59:0d:f5:04:0a

# Subject: CN=e-Szigno Root CA 2017,OID.2.5.4.97=VATHU-23584497,O=Microsec Ltd.,L=Budapest,C=HU

# Not Valid Before: Tue Aug 22 12:07:06 2017

# Not Valid After : Fri Aug 22 12:07:06 2042

# Fingerprint (SHA-256):

BE:B0:0B:30:83:9B:9B:C3:2C:32:E4:44:79:05:95:06:41:F2:64:21:B1:5E:D0:89:19:8B:51:8A:E2:EA:1B:99

#

Fingerprint (SHA1): 89:D4:83:03:4F:9E:9A:48:80:5F:72:37:D4:A9:A6:EF:CB:7C:1F:D1

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "e-Szigno Root CA 2017"

CKA\_CERT\_SHA1\_HASH MULTILINE\_OCTAL

```
\211\324\203\003\117\236\232\110\200\137\162\067\324\251\246\357
\313\174\037\321
```

END

CKA\_CERT\_MD5\_HASH MULTILINE\_OCTAL

```
\336\037\366\236\204\256\247\264\041\316\036\130\175\321\204\230
```

CKA\_ISSUER MULTILINE\_OCTAL

```
\060\161\061\013\060\011\006\003\125\004\006\023\002\110\125\061
\021\060\017\006\003\125\004\007\014\010\102\165\144\141\160\145
\163\164\061\026\060\024\006\003\125\004\012\014\015\115\151\143
\162\157\163\145\143\040\114\164\144\056\061\027\060\025\006\003
\125\004\141\014\016\126\101\124\110\125\055\062\063\065\070\064
\064\071\067\061\036\060\034\006\003\125\004\003\014\025\145\055
\123\172\151\147\156\157\040\122\157\157\164\040\103\101\040\062
\060\061\067
```

END

CKA\_SERIAL\_NUMBER

MULTILINE\_OCTAL

```
\002\014\001\124\110\357\041\375\227\131\015\365\004\012
```

```

END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "certSIGN Root CA G2"
#
# Issuer: OU=certSIGN ROOT CA G2,O=CERTSIGN SA,C=RO
# Serial Number:11:00:34:b6:4e:c6:36:2d:36
# Subject: OU=certSIGN ROOT CA G2,O=CERTSIGN SA,C=RO
# Not Valid Before: Mon Feb 06 09:27:35 2017
# Not Valid After : Thu Feb 06 09:27:35 2042
# Fingerprint (SHA-256):
65:7C:FE:2F:A7:3F:AA:38:46:25:71:F3:32:A2:36:3A:46:FC:E7:02:09:51:71:07:02:CD:FB:B6:EE:DA:33:05
# Fingerprint (SHA1): 26:F9:93:B4:ED:3D:28:27:B0:B9:4B:A7:E9:15:1D:A3:8D:92:E5:32
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "certSIGN Root CA G2"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT
MULTILINE_OCTAL
\060\101\061\013\060\011\006\003\125\004\006\023\002\122\117\061
\024\060\022\006\003\125\004\012\023\013\103\105\122\124\123\111
\107\116\040\123\101\061\034\060\032\006\003\125\004\013\023\023
\143\145\162\164\123\111\107\116\040\122\117\117\124\040\103\101
\040\107\062
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\101\061\013\060\011\006\003\125\004\006\023\002\122\117\061
\024\060\022\006\003\125\004\012\023\013\103\105\122\124\123\111
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END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "certSIGN Root CA G2"

# Issuer: OU=certSIGN ROOT CA G2,O=CERTSIGN SA,C=RO

# Serial Number:11:00:34:b6:4e:c6:36:2d:36

# Subject: OU=certSIGN ROOT CA G2,O=CERTSIGN SA,C=RO

# Not Valid Before: Mon Feb 06 09:27:35 2017

# Not Valid After : Thu Feb 06 09:27:35 2042

# Fingerprint (SHA-256):

65:7C:FE:2F:A7:3F:AA:38:46:25:71:F3:32:A2:36:3A:46:FC:E7:02:09:51:71:07:02:CD:FB:B6:EE:DA:33:05

# Fingerprint (SHA1): 26:F9:93:B4:ED:3D:28:27:B0:B9:4B:A7:E9:15:1D:A3:8D:92:E5:32

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

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CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL
  UTF8 "certSIGN Root CA G2"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\046\371\223\264\355\075\050\047\260\271\113\247\351\025\035\243
\215\222\345\062
END
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CKA_ISSUER MULTILINE_OCTAL
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\107\116\040\123\101\061\034\060\032\006\003\125\004\013\023\023
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CKA_SERIAL_NUMBER MULTILINE_OCTAL
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CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "Trustwave Global Certification Authority"
#
# Issuer: CN=Trustwave Global Certification Authority,O="Trustwave Holdings,
Inc.",L=Chicago,ST=Illinois,C=US
#
  Serial Number:05:f7:0e:86:da:49:f3:46:35:2e:ba:b2
# Subject: CN=Trustwave Global Certification Authority,O="Trustwave Holdings,
Inc.",L=Chicago,ST=Illinois,C=US
# Not Valid Before: Wed Aug 23 19:34:12 2017
# Not Valid After : Sat Aug 23 19:34:12 2042
# Fingerprint (SHA-256):
97:55:20:15:F5:DD:FC:3C:87:88:C0:06:94:45:55:40:88:94:45:00:84:F1:00:86:70:86:BC:1A:2B:B5:8D:C8
# Fingerprint (SHA1): 2F:8F:36:4F:E1:58:97:44:21:59:87:A5:2A:9A:D0:69:95:26:7F:B5
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Trustwave Global Certification Authority"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL

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\157\151\163\061\020\060\016\006\003\125\004\007\014\007\103\150  
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CKA\_ID

UTF8 "0"

CKA\_ISSUER MULTILINE\_OCTAL

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END

CKA\_SERIAL\_NUMBER MULTILINE\_OCTAL

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END

CKA\_VALUE

MULTILINE\_OCTAL

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\126\047\006\151\345\162\101\201\323\266\001\211\240\057\072\162  
\171\376\072\060\277\101\354\307\142\076\221\113\307\331\061\166  
\102\371\367\074\143\354\046\214\163\014\175\032\035\352\250\174  
\207\250\302\047\174\341\063\101\017\317\317\374\000\240\042\200  
\236\112\247\157\000\260\101\105\267\042\312\150\110\305\102\242  
\256\335\035\362\340\156\116\005\130\261\300\220\026\052\244\075  
\020\100\276\217\142\143\203\251\234\202\175\055\002\351\203\060  
\174\313\047\311\375\036\146\000\260\056\323\041\057\216\063\026  
\154\230\355\020\250\007\326\314\223\317\333\321\151\034\344\312  
\311\340\266\234\351\316\161\161\336\154\077\026\244\171

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "Trustwave Global Certification Authority"

# Issuer: CN=Trustwave Global Certification Authority,O="Trustwave Holdings,  
Inc.",L=Chicago,ST=Illinois,C=US

# Serial Number:05:f7:0e:86:da:49:f3:46:35:2e:ba:b2

# Subject: CN=Trustwave Global Certification Authority,O="Trustwave Holdings,  
Inc.",L=Chicago,ST=Illinois,C=US

# Not Valid Before: Wed Aug 23 19:34:12 2017

# Not Valid After : Sat Aug 23 19:34:12 2042

# Fingerprint (SHA-256):

97:55:20:15:F5:DD:FC:3C:87:88:C0:06:94:45:55:40:88:94:45:00:84:F1:00:86:70:86:BC:1A:2B:B5:8D:C8

# Fingerprint (SHA1): 2F:8F:36:4F:E1:58:97:44:21:59:87:A5:2A:9A:D0:69:95:26:7F:B5

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE

CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE



```

CKA_LABEL UTF8 "Trustwave Global Certification Authority"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\057\217\066\117\341\130\227\104\041\131\207\245\052\232\320\151
\225\046\177\265
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\370\034\030\055\057\272\137\155\241\154\274\307\253\221\307\016
END
CKA_ISSUER MULTILINE_OCTAL
\060\201\210\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\021\060\017\006\003\125\004\010\014\010\111\154\154\151\156
\157\151\163\061\020\060\016\006\003\125\004\007\014\007\103\150
\151\143\141\147\157\061\041\060\037\006\003\125\004\012\014\030
\124\162\165\163\164\167\141\166\145\040\110\157\154\144\151\156
\147\163\054\040\111\156\143\056\061\061\060\057\006\003\125\004
\003\014\050\124\162\165\163\164\167\141\166\145\040\107\154\157
\142\141\154\040\103\145\162\164\151\146\151\143\141\164\151\157
\156\040\101\165\164\150\157\162\151\164\171
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\014\005\367\016\206\332\111\363\106\065\056\272\262
END
CKA_TRUST_SERVER_AUTH
CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "Trustwave Global ECC P256 Certification Authority"
#
# Issuer: CN=Trustwave Global ECC P256 Certification Authority,O="Trustwave Holdings,
Inc.",L=Chicago,ST=Illinois,C=US
# Serial Number:0d:6a:5f:08:3f:28:5c:3e:51:95:df:5d
# Subject: CN=Trustwave Global ECC P256 Certification Authority,O="Trustwave Holdings,
Inc.",L=Chicago,ST=Illinois,C=US
# Not Valid Before: Wed Aug 23 19:35:10 2017
# Not Valid After : Sat Aug 23 19:35:10 2042
# Fingerprint (SHA-256):
94:5B:BC:82:5E:A5:54:F4:89:D1:FD:51:A7:3D:DF:2E:A6:24:AC:70:19:A0:52:05:22:5C:22:A7:8C:CF:A8:B4
# Fingerprint (SHA1): B4:90:82:DD:45:0C:BE:8B:5B:B1:66:D3:E2:A4:08:26:CD:ED:42:CF
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE
CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Trustwave Global ECC P256 Certification Authority"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509

```

CKA\_SUBJECT MULTILINE\_OCTAL

\060\201\221\061\013\060\011\006\003\125\004\006\023\002\125\123  
\061\021\060\017\006\003\125\004\010\023\010\111\154\154\151\156  
\157\151\163\061\020\060\016\006\003\125\004\007\023\007\103\150  
\151\143\141\147\157\061\041\060\037\006\003\125\004\012\023\030  
\124\162\165\163\164\167\141\166\145\040\110\157\154\144\151\156  
\147\163\054\040\111\156\143\056\061\072\060\070\006\003\125\004  
\003\023\061\124\162\165\163\164\167\141\166\145\040\107\154\157  
\142\141\154\040\105\103\103\040\120\062\065\066\040\103\145\162  
\164\151\146\151\143\141\164\151\157\156\040\101\165\164\150\157  
\162\151\164\171

END

CKA\_ID UTF8 "0"

CKA\_ISSUER MULTILINE\_OCTAL

\060\201\221\061\013\060\011\006\003\125\004\006\023\002\125\123  
\061\021\060\017\006\003\125\004\010\023\010\111\154\154\151\156  
\157\151\163\061\020\060\016\006\003\125\004\007\023\007\103\150  
\151\143\141\147\157\061\041\060\037\006\003\125\004\012\023\030  
\124\162\165\163\164\167\141\166\145\040\110\157\154\144\151\156  
\147\163\054\040\111\156\143\056\061\072\060\070\006\003\125\004  
\003\023\061\124\162\165\163\164\167\141\166\145\040\107\154\157  
\142\141\154\040\105\103\103\040\120\062\065\066\040\103\145\162  
\164\151\146\151\143\141\164\151\157\156\040\101\165\164\150\157  
\162\151\164\171

END

CKA\_SERIAL\_NUMBER

MULTILINE\_OCTAL

\002\014\015\152\137\010\077\050\134\076\121\225\337\135

END

CKA\_VALUE MULTILINE\_OCTAL

\060\202\002\140\060\202\002\007\240\003\002\001\002\002\014\015  
\152\137\010\077\050\134\076\121\225\337\135\060\012\006\010\052  
\206\110\316\075\004\003\002\060\201\221\061\013\060\011\006\003  
\125\004\006\023\002\125\123\061\021\060\017\006\003\125\004\010  
\023\010\111\154\154\151\156\157\151\163\061\020\060\016\006\003  
\125\004\007\023\007\103\150\151\143\141\147\157\061\041\060\037  
\006\003\125\004\012\023\030\124\162\165\163\164\167\141\166\145  
\040\110\157\154\144\151\156\147\163\054\040\111\156\143\056\061  
\072\060\070\006\003\125\004\003\023\061\124\162\165\163\164\167  
\141\166\145\040\107\154\157\142\141\154\040\105\103\103\040\120  
\062\065\066\040\103\145\162\164\151\146\151\143\141\164\151\157  
\156\040\101\165\164\150\157\162\151\164\171\060\036\027\015\061  
\067\060\070\062\063\061\071\063\065\061\060\132\027\015\064\062  
\060\070\062\063\061\071\063\065\061\060\132\060\201\221\061\013  
\060\011\006\003\125\004\006\023\002\125\123\061\021\060\017\006  
\003\125\004\010\023\010\111\154\154\151\156\157\151\163\061\020  
\060\016\006\003\125\004\007\023\007\103\150\151\143\141\147\157  
\061\041\060\037\006\003\125\004\012\023\030\124\162\165\163\164

\167\141\166\145\040\110\157\154\144\151\156\147\163\054\040\111  
\156\143\056\061\072\060\070\006\003\125\004\003\023\061\124\162  
\165\163\164\167\141\166\145\040\107\154\157\142\141\154\040\105  
\103\103\040\120\062\065\066\040\103\145\162\164\151\146\151\143  
\141\164\151\157\156\040\101\165\164\150\157\162\151\164\171\060  
\131\060\023\006\007\052\206\110\316\075\002\001\006\010\052\206  
\110\316\075\003\001\007\003\102\000\004\176\373\154\346\043\343  
\163\062\010\312\140\346\123\234\272\164\215\030\260\170\220\122  
\200\335\070\300\112\035\321\250\314\223\244\227\006\070\312\015  
\025\142\306\216\001\052\145\235\252\337\064\221\056\201\301\344  
\063\222\061\304\375\011\072\246\077\255\243\103\060\101\060\017  
\006\003\125\035\023\001\001\377\004\005\060\003\001\001\377\060  
\017\006\003\125\035\017\001\001\377\004\005\003\003\007\006\000  
\060\035\006\003\125\035\016\004\026\004\024\243\101\006\254\220  
\155\321\112\353\165\245\112\020\231\263\261\241\213\112\367\060  
\012\006\010\052\206\110\316\075\004\003\002\003\107\000\060\104  
\002\040\007\346\124\332\016\240\132\262\256\021\237\207\305\266  
\377\151\336\045\276\370\240\267\010\363\104\316\052\337\010\041  
\014\067\002\040\055\046\003\240\005\275\153\321\366\134\370\145  
\314\206\155\263\234\064\110\143\204\011\305\215\167\032\342\314  
\234\341\164\173

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "Trustwave Global ECC P256 Certification Authority"

# Issuer: CN=Trustwave Global ECC P256 Certification Authority,O="Trustwave Holdings,  
Inc.",L=Chicago,ST=Illinois,C=US

# Serial Number:0d:6a:5f:08:3f:28:5c:3e:51:95:df:5d

# Subject: CN=Trustwave Global ECC P256 Certification Authority,O="Trustwave Holdings,  
Inc.",L=Chicago,ST=Illinois,C=US

# Not Valid Before: Wed Aug 23 19:35:10 2017

# Not Valid After : Sat Aug 23 19:35:10 2042

# Fingerprint (SHA-256):

94:5B:BC:82:5E:A5:54:F4:89:D1:FD:51:A7:3D:DF:2E:A6:24:AC:70:19:A0:52:05:22:5C:22:A7:8C:CF:A8:B4

# Fingerprint (SHA1): B4:90:82:DD:45:0C:BE:8B:5B:B1:66:D3:E2:A4:08:26:CD:ED:42:CF

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "Trustwave Global

ECC P256 Certification Authority"

CKA\_CERT\_SHA1\_HASH MULTILINE\_OCTAL

\264\220\202\335\105\014\276\213\133\261\146\323\342\244\010\046

\315\355\102\317

END

```

CKA_CERT_MD5_HASH MULTILINE_OCTAL
\133\104\343\215\135\066\206\046\350\015\005\322\131\247\203\124
END
CKA_ISSUER MULTILINE_OCTAL
\060\201\221\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\021\060\017\006\003\125\004\010\023\010\111\154\154\151\156
\157\151\163\061\020\060\016\006\003\125\004\007\023\007\103\150
\151\143\141\147\157\061\041\060\037\006\003\125\004\012\023\030
\124\162\165\163\164\167\141\166\145\040\110\157\154\144\151\156
\147\163\054\040\111\156\143\056\061\072\060\070\006\003\125\004
\003\023\061\124\162\165\163\164\167\141\166\145\040\107\154\157
\142\141\154\040\105\103\103\040\120\062\065\066\040\103\145\162
\164\151\146\151\143\141\164\151\157\156\040\101\165\164\150\157
\162\151\164\171
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\014\015\152\137\010\077\050\134\076\121\225\337\135
END
CKA_TRUST_SERVER_AUTH
CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "Trustwave Global ECC P384 Certification Authority"
#
# Issuer: CN=Trustwave Global ECC P384 Certification Authority,O="Trustwave Holdings,
Inc.",L=Chicago,ST=Illinois,C=US
# Serial Number:08:bd:85:97:6c:99:27:a4:80:68:47:3b
# Subject: CN=Trustwave Global ECC P384 Certification Authority,O="Trustwave Holdings,
Inc.",L=Chicago,ST=Illinois,C=US
# Not Valid Before: Wed Aug 23 19:36:43 2017
# Not Valid After : Sat Aug 23 19:36:43 2042
# Fingerprint (SHA-256):
55:90:38:59:C8:C0:C3:EB:B8:75:9E:CE:4E:25:57:22:5F:F5:75:8B:BD:38:EB:D4:82:76:60:1E:1B:D5:80:97
# Fingerprint (SHA1): E7:F3:A3:C8:CF:6F:C3:04:2E:6D:0E:67:32:C5:9E:68:95:0D:5E:D2
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL
UTF8 "Trustwave Global ECC P384 Certification Authority"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\201\221\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\021\060\017\006\003\125\004\010\023\010\111\154\154\151\156
\157\151\163\061\020\060\016\006\003\125\004\007\023\007\103\150

```

\151\143\141\147\157\061\041\060\037\006\003\125\004\012\023\030  
\124\162\165\163\164\167\141\166\145\040\110\157\154\144\151\156  
\147\163\054\040\111\156\143\056\061\072\060\070\006\003\125\004  
\003\023\061\124\162\165\163\164\167\141\166\145\040\107\154\157  
\142\141\154\040\105\103\103\040\120\063\070\064\040\103\145\162  
\164\151\146\151\143\141\164\151\157\156\040\101\165\164\150\157  
\162\151\164\171

END

CKA\_ID UTF8 "0"

CKA\_ISSUER MULTILINE\_OCTAL

\060\201\221\061\013\060\011\006\003\125\004\006\023\002\125\123  
\061\021\060\017\006\003\125\004\010\023\010\111\154\154\151\156  
\157\151\163\061\020\060\016\006\003\125\004\007\023\007\103\150  
\151\143\141\147\157\061\041\060\037\006\003\125\004\012\023\030  
\124\162\165\163\164\167\141\166\145\040\110\157\154\144\151\156  
\147\163\054\040\111\156\143\056\061\072\060\070\006\003\125\004  
\003\023\061\124\162\165\163\164\167\141\166\145\040\107\154\157  
\142\141\154\040\105\103\103\040\120\063\070\064\040\103\145\162  
\164\151\146\151\143\141\164\151\157\156\040\101\165\164\150\157  
\162\151\164\171

END

CKA\_SERIAL\_NUMBER

MULTILINE\_OCTAL

\002\014\010\275\205\227\154\231\047\244\200\150\107\073

END

CKA\_VALUE MULTILINE\_OCTAL

\060\202\002\235\060\202\002\044\240\003\002\001\002\002\014\010  
\275\205\227\154\231\047\244\200\150\107\073\060\012\006\010\052  
\206\110\316\075\004\003\003\060\201\221\061\013\060\011\006\003  
\125\004\006\023\002\125\123\061\021\060\017\006\003\125\004\010  
\023\010\111\154\154\151\156\157\151\163\061\020\060\016\006\003  
\125\004\007\023\007\103\150\151\143\141\147\157\061\041\060\037  
\006\003\125\004\012\023\030\124\162\165\163\164\167\141\166\145  
\040\110\157\154\144\151\156\147\163\054\040\111\156\143\056\061  
\072\060\070\006\003\125\004\003\023\061\124\162\165\163\164\167  
\141\166\145\040\107\154\157\142\141\154\040\105\103\103\040\120  
\063\070\064\040\103\145\162\164\151\146\151\143\141\164\151\157  
\156\040\101\165\164\150\157\162\151\164\171\060\036\027\015\061  
\067\060\070\062\063\061\071\063\066\064\063\132\027\015\064\062  
\060\070\062\063\061\071\063\066\064\063\132\060\201\221\061\013  
\060\011\006\003\125\004\006\023\002\125\123\061\021\060\017\006  
\003\125\004\010\023\010\111\154\154\151\156\157\151\163\061\020  
\060\016\006\003\125\004\007\023\007\103\150\151\143\141\147\157  
\061\041\060\037\006\003\125\004\012\023\030\124\162\165\163\164  
\167\141\166\145\040\110\157\154\144\151\156\147\163\054\040\111  
\156\143\056\061\072\060\070\006\003\125\004\003\023\061\124\162  
\165\163\164\167\141\166\145\040\107\154\157\142\141\154\040\105  
\103\103\040\120\063\070\064\040\103\145\162\164\151\146\151\143

```
\141\164\151\157\156\040\101\165\164\150\157\162\151\164\171\060
\166\060\020\006\007\052\206\110\316\075\002\001\006\005\053\201
\004\000\042\003\142\000\004\153\332\015\165\065\010\061\107\005
\256\105\231\125\361\021\023\056\112\370\020\061\043\243\176\203
\323\177\050\010\072\046\032\072\317\227\202\037\200\267\047\011
\217\321\216\060\304\012\233\016\254\130\004\253\367\066\175\224
\043\244\233\012\212\213\253\353\375\071\045\146\361\136\376\214
\256\215\101\171\235\011\140\316\050\251\323\212\155\363\326\105
\324\362\230\204\070\145\240\243\103\060\101\060\017\006\003\125
\035\023\001\001\377\004\005\060\003\001\001\377\060\017\006\003
\125\035\017\001\001\377\004\005\003\003\007\006\000\060\035\006
\003\125\035\016\004\026\004\024\125\251\204\211\322\301\062\275
\030\313\154\246\007\116\310\347\235\276\202\220\060\012\006\010
\052\206\110\316\075\004\003\003\003\147\000\060\144\002\060\067
\001\222\227\105\022\176\240\363\076\255\031\072\162\335\364\120
\223\003\022\276\104\322\117\101\244\214\234\235\037\243\366\302
\222\347\110\024\376\116\233\245\221\127\256\306\067\162\273\002
\060\147\045\012\261\014\136\356\251\143\222\157\345\220\013\376
\146\042\312\107\375\212\061\367\203\376\172\277\020\276\030\053
\036\217\366\051\036\224\131\357\216\041\067\313\121\230\245\156
\113
```

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "Trustwave Global ECC P384 Certification Authority"

# Issuer: CN=Trustwave Global ECC P384 Certification Authority,O="Trustwave Holdings, Inc.",L=Chicago,ST=Illinois,C=US

# Serial Number:08:bd:85:97:6c:99:27:a4:80:68:47:3b

# Subject: CN=Trustwave Global ECC P384 Certification Authority,O="Trustwave Holdings, Inc.",L=Chicago,ST=Illinois,C=US

# Not Valid Before: Wed Aug 23 19:36:43 2017

# Not Valid After : Sat Aug 23 19:36:43 2042

# Fingerprint (SHA-256):

55:90:38:59:C8:C0:C3:EB:B8:75:9E:CE:4E:25:57:22:5F:F5:75:8B:BD:38:EB:D4:82:76:60:1E:1B:D5:80:97

# Fingerprint (SHA1): E7:F3:A3:C8:CF:6F:C3:04:2E:6D:0E:67:32:C5:9E:68:95:0D:5E:D2

CKA\_CLASS

CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "Trustwave Global ECC P384 Certification Authority"

CKA\_CERT\_SHA1\_HASH MULTILINE\_OCTAL

```
\347\363\243\310\317\157\303\004\056\155\016\147\062\305\236\150
\225\015\136\322
```

END

```

CKA_CERT_MD5_HASH MULTILINE_OCTAL
\352\317\140\304\073\271\025\051\100\241\227\355\170\047\223\326
END
CKA_ISSUER MULTILINE_OCTAL
\060\201\221\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\021\060\017\006\003\125\004\010\023\010\111\154\154\151\156
\157\151\163\061\020\060\016\006\003\125\004\007\023\007\103\150
\151\143\141\147\157\061\041\060\037\006\003\125\004\012\023\030
\124\162\165\163\164\167\141\166\145\040\110\157\154\144\151\156
\147\163\054\040\111\156\143\056\061\072\060\070\006\003\125\004
\003\023\061\124\162\165\163\164\167\141\166\145\040\107\154\157
\142\141\154\040\105\103\103\040\120\063\070\064\040\103\145\162
\164\151\146\151\143\141\164\151\157\156\040\101\165\164\150\157
\162\151\164\171
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\014\010\275\205\227\154\231\047\244\200\150\107\073
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "NAVER Global Root Certification Authority"
#
# Issuer: CN=NAVER Global Root Certification Authority,O=NAVER BUSINESS PLATFORM Corp.,C=KR
# Serial Number:01:94:30:1e:a2:0b:dd:f5:c5:33:2a:b1:43:44:71:f8:d6:50:4d:0d
# Subject: CN=NAVER Global Root Certification Authority,O=NAVER BUSINESS PLATFORM Corp.,C=KR
# Not Valid Before: Fri Aug 18 08:58:42 2017
# Not Valid After : Tue Aug 18 23:59:59 2037
# Fingerprint (SHA-256):
88:F4:38:DC:F8:FF:D1:FA:8F:42:91:15:FF:E5:F8:2A:E1:E0:6E:0C:70:C3:75:FA:AD:71:7B:34:A4:9E:72:65
# Fingerprint (SHA1): 8F:6B:F2:A9:27:4A:DA:14:A0:C4:F4:8E:61:27:F9:C0:1E:78:5D:D1
CKA_CLASS
CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "NAVER Global Root Certification Authority"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\151\061\013\060\011\006\003\125\004\006\023\002\113\122\061
\046\060\044\006\003\125\004\012\014\035\116\101\126\105\122\040
\102\125\123\111\116\105\123\123\040\120\114\101\124\106\117\122
\115\040\103\157\162\160\056\061\062\060\060\006\003\125\004\003
\014\051\116\101\126\105\122\040\107\154\157\142\141\154\040\122

```

\157\157\164\040\103\145\162\164\151\146\151\143\141\164\151\157  
\156\040\101\165\164\150\157\162\151\164\171  
END  
CKA\_ID UTF8 "0"  
CKA\_ISSUER MULTILINE\_OCTAL  
\060\151\061\013\060\011\006\003\125\004\006\023\002\113\122\061  
\046\060\044\006\003\125\004\012\014\035\116\101\126\105\122\040  
\102\125\123\111\116\105\123\123\040\120\114\101\124\106\117\122  
\115\040\103\157\162\160\056\061\062\060\060\006\003\125\004\003  
\014\051\116\101\126\105\122\040\107\154\157\142\141\154\040\122  
\157\157\164\040\103\145\162\164\151\146\151\143\141\164\151\157  
\156\040\101\165\164\150\157\162\151\164\171  
END  
CKA\_SERIAL\_NUMBER  
MULTILINE\_OCTAL  
\002\024\001\224\060\036\242\013\335\365\305\063\052\261\103\104  
\161\370\326\120\115\015  
END  
CKA\_VALUE MULTILINE\_OCTAL  
\060\202\005\242\060\202\003\212\240\003\002\001\002\002\024\001  
\224\060\036\242\013\335\365\305\063\052\261\103\104\161\370\326  
\120\115\015\060\015\006\011\052\206\110\206\367\015\001\001\014  
\005\000\060\151\061\013\060\011\006\003\125\004\006\023\002\113  
\122\061\046\060\044\006\003\125\004\012\014\035\116\101\126\105  
\122\040\102\125\123\111\116\105\123\123\040\120\114\101\124\106  
\117\122\115\040\103\157\162\160\056\061\062\060\060\006\003\125  
\004\003\014\051\116\101\126\105\122\040\107\154\157\142\141\154  
\040\122\157\157\164\040\103\145\162\164\151\146\151\143\141\164  
\151\157\156\040\101\165\164\150\157\162\151\164\171\060\036\027  
\015\061\067\060\070\061\070\060\070\065\070\064\062\132\027\015  
\063\067\060\070\061\070\062\063\065\071\065\071\132\060\151\061  
\013\060\011\006\003\125\004\006\023\002\113\122\061\046\060\044  
\006\003\125\004\012\014\035\116\101\126\105\122\040\102\125\123  
\111\116\105\123\123\040\120\114\101\124\106\117\122\115\040\103  
\157\162\160\056\061\062\060\060\006\003\125\004\003\014\051\116  
\101\126\105\122\040\107\154\157\142\141\154\040\122\157\157\164  
\040\103\145\162\164\151\146\151\143\141\164\151\157\156\040\101  
\165\164\150\157\162\151\164\171\060\202\002\042\060\015\006\011  
\052\206\110\206\367\015\001\001\001\005\000\003\202\002\017\000  
\060\202\002\012\002\202\002\001\000\266\324\361\223\134\265\100  
\211\012\253\015\220\133\120\143\256\220\224\164\027\105\162\326  
\173\145\132\051\113\247\126\240\113\270\057\102\165\351\331\173  
\044\132\061\145\253\027\027\321\063\072\331\021\334\100\066\207  
\337\307\152\351\046\136\131\212\167\343\350\110\234\061\026\372  
\076\221\261\312\311\243\342\237\316\041\123\243\002\066\060\313  
\122\002\345\332\062\135\303\305\346\371\356\021\307\213\311\104  
\036\204\223\030\112\264\237\345\022\144\151\320\046\205\142\001  
\266\311\002\035\276\203\121\273\134\332\370\255\025\152\231\367



\222\124\367\064\133\351\277\352\051\201\022\324\123\221\226\263  
\221\132\335\376\220\163\050\373\060\106\265\312\010\007\307\161  
\162\311\146\323\064\227\366\214\364\030\112\341\320\075\132\105  
\266\151\247\051\373\043\316\210\330\022\234\000\110\250\246\017  
\263\073\222\215\161\016\164\305\213\310\114\371\364\233\216\270  
\074\151\355\157\073\120\057\130\355\304\260\320\034\033\152\014  
\342\274\104\252\330\315\024\135\224\170\141\277\016\156\332\052  
\274\057\014\013\161\246\263\026\077\234\346\371\314\237\123\065  
\342\003\240\240\030\277\273\361\276\364\326\214\207\015\102\367  
\006\271\361\155\355\004\224\250\376\266\323\006\306\100\141\337  
\235\235\363\124\166\316\123\072\001\246\222\101\354\004\243\217  
\015\242\325\011\312\326\313\232\361\357\103\135\300\253\245\101  
\317\134\123\160\160\311\210\246\055\324\153\141\163\120\046\206  
\141\016\137\033\302\053\342\214\325\273\235\301\003\102\272\224  
\332\137\251\260\312\314\115\012\357\107\151\003\057\042\373\361  
\050\316\277\135\120\145\250\220\155\263\164\260\010\307\254\250  
\321\353\076\234\374\135\032\203\056\053\313\265\363\104\235\072  
\247\027\141\226\242\161\323\160\226\025\115\267\114\163\356\031  
\134\305\133\076\101\376\254\165\140\073\033\143\316\000\335\332  
\010\220\142\264\345\055\356\110\247\153\027\231\124\276\207\112  
\343\251\136\004\114\353\020\155\124\326\357\361\350\362\142\026  
\313\200\153\355\075\355\365\037\060\245\256\113\311\023\355\212  
\001\001\311\270\121\130\300\146\072\261\146\113\304\325\061\002  
\142\351\164\204\014\333\115\106\055\002\003\001\000\001\243\102  
\060\100\060\035\006\003\125\035\016\004\026\004\024\322\237\210  
\337\241\315\054\275\354\365\073\001\001\223\063\047\262\353\140  
\113\060\016\006\003\125\035\017\001\001\377\004\004\003\002\001  
\006\060\017\006\003\125\035\023\001\001\377\004\005\060\003\001  
\001\377\060\015\006\011\052\206\110\206\367\015\001\001\014\005  
\000\003\202\002\001\000\062\312\200\263\235\075\124\006\335\322  
\322\056\360\244\001\041\013\147\110\312\155\216\340\310\252\015  
\252\215\041\127\217\306\076\172\312\333\121\324\122\263\324\226  
\204\245\130\140\177\345\013\216\037\365\334\012\025\201\345\073  
\266\267\042\057\011\234\023\026\261\154\014\065\010\155\253\143  
\162\355\334\276\354\307\127\346\060\040\161\326\327\020\301\023  
\125\001\214\052\103\344\101\361\317\072\172\123\222\316\242\003  
\005\015\070\337\002\273\020\056\331\073\322\233\172\300\241\246  
\370\265\061\346\364\165\311\271\123\231\165\107\042\132\024\025  
\307\170\033\266\235\351\014\370\033\166\361\205\204\336\241\332  
\022\357\244\342\020\227\172\170\336\014\121\227\250\041\100\213  
\206\275\015\360\136\116\113\066\273\073\040\037\212\102\126\341  
\013\032\277\173\320\042\103\054\104\214\373\345\052\264\154\034  
\034\272\224\340\023\176\041\346\232\302\313\305\102\144\264\036  
\224\173\010\045\310\161\314\207\105\127\205\323\237\051\142\042  
\203\121\227\000\030\227\167\152\230\222\311\174\140\154\337\154  
\175\112\344\160\114\302\236\270\035\367\320\064\307\017\314\373  
\247\377\003\276\255\160\220\332\013\335\310\155\227\137\232\177  
\011\062\101\375\315\242\314\132\155\114\362\252\111\376\146\370

```
\351\330\065\353\016\050\036\356\110\057\072\320\171\011\070\174
\246\042\202\223\225\320\003\276\276\002\240\005\335\040\042\343
\157\035\210\064\140\306\346\012\271\011\165\013\360\007\350\151
\226\065\307\373\043\201\216\070\071\270\105\053\103\170\242\321
\054\024\377\015\050\162\162\225\233\136\011\333\211\104\230\252
\241\111\273\161\122\362\277\366\377\047\241\066\257\270\266\167
\210\335\072\244\155\233\064\220\334\024\135\060\277\267\353\027
\344\207\267\161\320\241\327\167\025\324\102\327\362\363\061\231
\135\233\335\026\155\077\352\006\043\370\106\242\042\355\223\366
\335\232\346\052\207\261\230\124\361\042\367\153\105\343\342\216
\166\035\232\215\304\006\215\066\267\024\363\235\124\151\267\216
\074\325\244\155\223\201\267\255\366\275\144\173\302\311\150\071
\240\222\234\315\064\206\221\220\372\144\121\235\376\376\353\245
\365\165\336\211\367\162
```

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "NAVER Global Root Certification Authority"

# Issuer: CN=NAVER Global Root Certification Authority,O=NAVER BUSINESS PLATFORM Corp.,C=KR

# Serial Number:01:94:30:1e:a2:0b:dd:f5:c5:33:2a:b1:43:44:71:f8:d6:50:4d:0d

# Subject: CN=NAVER Global Root Certification Authority,O=NAVER BUSINESS PLATFORM Corp.,C=KR

# Not Valid Before: Fri Aug 18 08:58:42 2017

# Not Valid After : Tue Aug 18 23:59:59 2037

# Fingerprint (SHA-256):

88:F4:38:DC:F8:FF:D1:FA:8F:42:91:15:FF:E5:F8:2A:E1:E0:6E:0C:70:C3:75:FA:AD:71:7B:34:A4:9E:72:65

# Fingerprint (SHA1): 8F:6B:F2:A9:27:4A:DA:14:A0:C4:F4:8E:61:27:F9:C0:1E:78:5D:D1

CKA\_CLASS

CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "NAVER Global Root Certification Authority"

CKA\_CERT\_SHA1\_HASH MULTILINE\_OCTAL

```
\217\153\362\251\047\112\332\024\240\304\364\216\141\047\371\300
\036\170\135\321
```

END

CKA\_CERT\_MD5\_HASH MULTILINE\_OCTAL

```
\310\176\101\366\045\073\365\011\263\027\350\106\075\277\320\233
```

END

CKA\_ISSUER MULTILINE\_OCTAL

```
\060\151\061\013\060\011\006\003\125\004\006\023\002\113\122\061
\046\060\044\006\003\125\004\012\014\035\116\101\126\105\122\040
\102\125\123\111\116\105\123\123\040\120\114\101\124\106\117\122
\115\040\103\157\162\160\056\061\062\060\060\006\003\125\004\003
\014\051\116\101\126\105\122\040\107\154\157\142\141\154\040\122
```

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\157\157\164\040\103\145\162\164\151\146\151\143\141\164\151\157
\156\040\101\165\164\150\157\162\151\164\171
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\024\001\224\060\036\242\013\335\365\305\063\052\261\103\104
\161\370\326\120\115\015
END
CKA_TRUST_SERVER_AUTH
CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "AC RAIZ FNMT-RCM SERVIDORES SEGUROS"
#
# Issuer: CN=AC RAIZ FNMT-RCM SERVIDORES SEGUROS,OID.2.5.4.97=VATES-
Q2826004J,OU=Ceres,O=FNMT-RCM,C=ES
# Serial Number:62:f6:32:6c:e5:c4:e3:68:5c:1b:62:dd:9c:2e:9d:95
# Subject: CN=AC RAIZ FNMT-RCM SERVIDORES SEGUROS,OID.2.5.4.97=VATES-
Q2826004J,OU=Ceres,O=FNMT-RCM,C=ES
# Not Valid Before: Thu Dec 20 09:37:33 2018
# Not Valid After : Sun Dec 20 09:37:33 2043
# Fingerprint (SHA-256):
55:41:53:B1:3D:2C:F9:DD:B7:53:BF:BE:1A:4E:0A:E0:8D:0A:A4:18:70:58:FE:60:A2:B8:62:B2:E4:B8:7B:CB
# Fingerprint (SHA1): 62:FF:D9:9E:C0:65:0D:03:CE:75:93:D2:ED:3F:2D:32:C9:E3:E5:4A
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8
"AC RAIZ FNMT-RCM SERVIDORES SEGUROS"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\170\061\013\060\011\006\003\125\004\006\023\002\105\123\061
\021\060\017\006\003\125\004\012\014\010\106\116\115\124\055\122
\103\115\061\016\060\014\006\003\125\004\013\014\005\103\145\162
\145\163\061\030\060\026\006\003\125\004\141\014\017\126\101\124
\105\123\055\121\062\070\062\066\060\060\064\112\061\054\060\052
\006\003\125\004\003\014\043\101\103\040\122\101\111\132\040\106
\116\115\124\055\122\103\115\040\123\105\122\126\111\104\117\122
\105\123\040\123\105\107\125\122\117\123
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\170\061\013\060\011\006\003\125\004\006\023\002\105\123\061
\021\060\017\006\003\125\004\012\014\010\106\116\115\124\055\122
\103\115\061\016\060\014\006\003\125\004\013\014\005\103\145\162

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\145\163\061\030\060\026\006\003\125\004\141\014\017\126\101\124  
\105\123\055\121\062\070\062\066\060\060\064\112\061\054\060\052  
\006\003\125\004\003\014\043\101\103\040\122\101\111\132\040\106  
\116\115\124\055\122\103\115\040\123\105\122\126\111\104\117\122  
\105\123\040\123\105\107\125\122\117\123

END

CKA\_SERIAL\_NUMBER

MULTILINE\_OCTAL

\002\020\142\366\062\154\345\304\343\150\134\033\142\335\234\056  
\235\225

END

CKA\_VALUE MULTILINE\_OCTAL

\060\202\002\156\060\202\001\363\240\003\002\001\002\002\020\142  
\366\062\154\345\304\343\150\134\033\142\335\234\056\235\225\060  
\012\006\010\052\206\110\316\075\004\003\003\060\170\061\013\060  
\011\006\003\125\004\006\023\002\105\123\061\021\060\017\006\003  
\125\004\012\014\010\106\116\115\124\055\122\103\115\061\016\060  
\014\006\003\125\004\013\014\005\103\145\162\145\163\061\030\060  
\026\006\003\125\004\141\014\017\126\101\124\105\123\055\121\062  
\070\062\066\060\060\064\112\061\054\060\052\006\003\125\004\003  
\014\043\101\103\040\122\101\111\132\040\106\116\115\124\055\122  
\103\115\040\123\105\122\126\111\104\117\122\105\123\040\123\105  
\107\125\122\117\123\060\036\027\015\061\070\061\062\062\060\060  
\071\063\067\063\063\132\027\015\064\063\061\062\062\060\060\071  
\063\067\063\063\132\060\170\061\013\060\011\006\003\125\004\006  
\023\002\105\123\061\021\060\017\006\003\125\004\012\014\010\106  
\116\115\124\055\122\103\115\061\016\060\014\006\003\125\004\013  
\014\005\103\145\162\145\163\061\030\060\026\006\003\125\004\141  
\014\017\126\101\124\105\123\055\121\062\070\062\066\060\060\064  
\112\061\054\060\052\006\003\125\004\003\014\043\101\103\040\122  
\101\111\132\040\106\116\115\124\055\122\103\115\040\123\105\122  
\126\111\104\117\122\105\123\040\123\105\107\125\122\117\123\060  
\166\060\020\006\007\052\206\110\316\075\002\001\006\005\053\201  
\004\000\042\003\142\000\004\366\272\127\123\310\312\253\337\066  
\112\122\041\344\227\322\203\147\236\360\145\121\320\136\207\307  
\107\261\131\362\127\107\233\000\002\223\104\027\151\333\102\307  
\261\262\072\030\016\264\135\214\263\146\135\241\064\371\066\054  
\111\333\363\106\374\263\104\151\104\023\146\375\327\305\375\257  
\066\115\316\003\115\007\161\317\257\152\005\322\242\103\132\012  
\122\157\001\003\116\216\213\243\102\060\100\060\017\006\003\125  
\035\023\001\001\377\004\005\060\003\001\001\377\060\016\006\003  
\125\035\017\001\001\377\004\004\003\002\001\006\060\035\006\003  
\125\035\016\004\026\004\024\001\271\057\357\277\021\206\140\362  
\117\320\101\156\253\163\037\347\322\156\111\060\012\006\010\052  
\206\110\316\075\004\003\003\003\151\000\060\146\002\061\000\256  
\112\343\053\100\303\164\021\362\225\255\026\043\336\116\014\032  
\346\135\245\044\136\153\104\173\374\070\342\117\313\234\105\027  
\021\114\024\047\046\125\071\165\112\003\314\023\220\237\222\002

```
\061\000\372\112\154\140\210\163\363\356\270\230\142\251\316\053
\302\331\212\246\160\061\035\257\260\224\114\353\117\306\343\321
\363\142\247\074\377\223\056\007\134\111\001\147\151\022\002\162
\277\347
```

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "AC

RAIZ FNMT-RCM SERVIDORES SEGUROS"

# Issuer: CN=AC RAIZ FNMT-RCM SERVIDORES SEGUROS,OID.2.5.4.97=VATES-  
Q2826004J,OU=Ceres,O=FNMT-RCM,C=ES

# Serial Number:62:f6:32:6c:e5:c4:e3:68:5c:1b:62:dd:9c:2e:9d:95

# Subject: CN=AC RAIZ FNMT-RCM SERVIDORES SEGUROS,OID.2.5.4.97=VATES-  
Q2826004J,OU=Ceres,O=FNMT-RCM,C=ES

# Not Valid Before: Thu Dec 20 09:37:33 2018

# Not Valid After : Sun Dec 20 09:37:33 2043

# Fingerprint (SHA-256):

55:41:53:B1:3D:2C:F9:DD:B7:53:BF:BE:1A:4E:0A:E0:8D:0A:A4:18:70:58:FE:60:A2:B8:62:B2:E4:B8:7B:CB

# Fingerprint (SHA1): 62:FF:D9:9E:C0:65:0D:03:CE:75:93:D2:ED:3F:2D:32:C9:E3:E5:4A

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "AC RAIZ FNMT-RCM SERVIDORES SEGUROS"

CKA\_CERT\_SHA1\_HASH MULTILINE\_OCTAL

```
\142\377\331\236\300\145\015\003\316\165\223\322\355\077\055\062
\311\343\345\112
```

END

CKA\_CERT\_MD5\_HASH MULTILINE\_OCTAL

```
\031\066\234\122\003\057\322\321\273\043\314\335\036\022\125\273
```

END

CKA\_ISSUER

MULTILINE\_OCTAL

```
\060\170\061\013\060\011\006\003\125\004\006\023\002\105\123\061
\021\060\017\006\003\125\004\012\014\010\106\116\115\124\055\122
\103\115\061\016\060\014\006\003\125\004\013\014\005\103\145\162
\145\163\061\030\060\026\006\003\125\004\141\014\017\126\101\124
\105\123\055\121\062\070\062\066\060\060\064\112\061\054\060\052
\006\003\125\004\003\014\043\101\103\040\122\101\111\132\040\106
\116\115\124\055\122\103\115\040\123\105\122\126\111\104\117\122
\105\123\040\123\105\107\125\122\117\123
```

END

CKA\_SERIAL\_NUMBER MULTILINE\_OCTAL

```
\002\020\142\366\062\154\345\304\343\150\134\033\142\335\234\056
\235\225
```

```

END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "GlobalSign Secure Mail Root R45"
#
# Issuer: CN=GlobalSign Secure Mail Root R45,O=GlobalSign nv-sa,C=BE
# Serial Number:76:53:fe:a8:4c:50:ab:9f:8d:32:b5:1d:03:8f:57:dc
#
# Subject: CN=GlobalSign Secure Mail Root R45,O=GlobalSign nv-sa,C=BE
# Not Valid Before: Wed Mar 18 00:00:00 2020
# Not Valid After : Sat Mar 18 00:00:00 2045
# Fingerprint (SHA-256):
31:9A:F0:A7:72:9E:6F:89:26:9C:13:1E:A6:A3:A1:6F:CD:86:38:9F:DC:AB:3C:47:A4:A6:75:C1:61:A3:F9:74
# Fingerprint (SHA1): 76:18:D1:F3:80:24:3D:52:40:C6:11:6A:AD:57:77:09:7D:81:30:A0
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "GlobalSign Secure Mail Root R45"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\122\061\013\060\011\006\003\125\004\006\023\002\102\105\061
\031\060\027\006\003\125\004\012\023\020\107\154\157\142\141\154
\123\151\147\156\040\156\166\055\163\141\061\050\060\046\006\003
\125\004\003\023\037\107\154\157\142\141\154\123\151\147\156\040
\123\145\143\165\162\145\040\115\141\151\154\040\122\157\157\164
\040\122\064\065
END
CKA_ID
UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\122\061\013\060\011\006\003\125\004\006\023\002\102\105\061
\031\060\027\006\003\125\004\012\023\020\107\154\157\142\141\154
\123\151\147\156\040\156\166\055\163\141\061\050\060\046\006\003
\125\004\003\023\037\107\154\157\142\141\154\123\151\147\156\040
\123\145\143\165\162\145\040\115\141\151\154\040\122\157\157\164
\040\122\064\065
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\020\166\123\376\250\114\120\253\237\215\062\265\035\003\217
\127\334
END
CKA_VALUE MULTILINE_OCTAL
\060\202\005\160\060\202\003\130\240\003\002\001\002\002\020\166

```

\123\376\250\114\120\253\237\215\062\265\035\003\217\127\334\060  
\015\006\011\052\206\110\206\367\015\001\001\014\005\000\060\122  
\061\013\060\011\006\003\125\004\006\023\002\102\105\061\031\060  
\027\006\003\125\004\012\023\020\107\154\157\142\141\154\123\151  
\147\156\040\156\166\055\163\141\061\050\060\046\006\003\125\004  
\003\023\037\107\154\157\142\141\154\123\151\147\156\040\123\145  
\143\165\162\145\040\115\141\151\154\040\122\157\157\164\040\122  
\064\065\060\036\027\015\062\060\060\063\061\070\060\060\060\060  
\060\060\132\027\015\064\065\060\063\061\070\060\060\060\060\060  
\060\132\060\122\061\013\060\011\006\003\125\004\006\023\002\102  
\105\061\031\060\027\006\003\125\004\012\023\020\107\154\157\142  
\141\154\123\151\147\156\040\156\166\055\163\141\061\050\060\046  
\006\003\125\004\003\023\037\107\154\157\142\141\154\123\151\147  
\156\040\123\145\143\165\162\145\040\115\141\151\154\040\122\157  
\157\164\040\122\064\065\060\202\002\042\060\015\006\011\052\206  
\110\206\367\015\001\001\001\005\000\003\202\002\017\000\060\202  
\002\012\002\202\002\001\000\334\171\314\155\006\371\155\273\340  
\126\004\154\177\340\165\314\055\005\111\350\113\334\124\354\133  
\167\225\162\277\177\142\235\205\251\212\044\120\137\123\345\333  
\164\157\244\051\133\023\052\011\255\232\305\057\302\367\166\073  
\241\105\106\252\103\346\044\376\053\260\157\062\160\031\106\132  
\171\046\057\374\075\175\137\144\313\127\314\141\141\250\331\225  
\156\343\225\240\156\177\107\022\030\326\357\003\311\373\212\372  
\232\275\202\025\251\125\167\113\021\117\131\340\153\303\161\363  
\014\330\124\325\201\150\076\023\271\025\056\207\212\074\104\047  
\066\142\044\156\370\054\005\162\060\141\275\102\221\043\304\235  
\045\247\331\124\232\024\243\061\255\200\171\014\247\143\154\230  
\243\254\127\107\063\037\145\226\341\320\322\065\332\371\161\367  
\241\246\045\265\101\135\337\076\140\330\321\366\237\245\362\270  
\314\023\252\217\371\262\156\341\203\055\223\335\076\205\032\335  
\350\261\134\046\001\313\111\205\374\374\322\324\177\205\142\206  
\164\371\313\354\065\042\242\014\060\217\073\253\171\353\126\362  
\372\102\363\355\371\037\105\211\100\051\255\352\222\164\352\122  
\375\126\264\053\332\242\355\165\302\156\253\316\122\220\113\366  
\336\360\111\217\232\110\324\210\031\155\105\346\314\214\271\335  
\144\140\140\002\100\370\271\317\274\130\353\075\205\271\306\012  
\323\234\007\146\217\307\030\071\043\106\341\074\036\243\057\120  
\141\222\013\075\053\154\361\243\107\070\127\221\253\015\217\306  
\235\115\004\322\046\122\134\345\245\375\052\055\026\052\001\151  
\347\251\175\341\066\267\261\052\305\331\261\215\275\271\213\316  
\314\213\241\076\013\110\315\120\225\064\304\330\010\131\330\153  
\046\364\276\365\324\042\027\000\127\311\256\233\004\060\063\237  
\013\373\337\126\242\311\156\124\166\332\261\227\142\047\131\017  
\021\212\042\033\144\226\077\250\361\267\044\112\215\074\123\174  
\155\203\166\075\262\046\110\163\365\104\026\001\055\011\052\216  
\026\226\120\320\163\006\135\273\042\110\202\114\012\106\132\077  
\200\377\134\362\362\232\254\054\010\340\326\352\360\022\070\201  
\117\246\020\355\106\253\314\026\234\013\317\144\246\231\002\205

\104\147\106\255\375\115\347\002\003\001\000\001\243\102\060\100  
\060\016\006\003\125\035\017\001\001\377\004\004\003\002\001\206  
\060\017\006\003\125\035\023\001\001\377\004\005\060\003\001\001  
\377\060\035\006\003\125\035\016\004\026\004\024\240\223\025\050  
\156\356\217\010\262\065\306\236\142\171\164\247\261\016\053\173  
\060\015\006\011\052\206\110\206\367\015\001\001\014\005\000\003  
\202\002\001\000\105\012\370\321\134\254\142\201\320\004\327\266  
\377\127\121\211\013\014\313\336\044\145\067\373\253\236\355\146  
\364\352\014\031\151\211\270\031\261\060\126\264\331\366\367\276  
\306\256\227\313\105\366\021\214\072\060\144\114\301\237\131\300  
\106\102\010\006\107\144\027\170\340\225\007\006\326\214\242\254  
\251\331\077\323\173\126\117\374\304\207\050\337\266\053\026\043  
\300\237\037\133\343\326\104\136\042\117\043\004\214\065\026\265  
\171\007\206\134\057\227\342\366\010\144\246\334\333\250\212\343  
\244\173\167\015\321\051\223\050\040\264\123\243\113\116\137\336  
\301\366\165\043\374\037\074\170\117\160\061\170\057\242\065\124  
\161\004\254\310\304\155\303\366\221\261\376\315\356\104\156\201  
\366\100\305\076\052\001\277\253\114\261\003\077\015\021\344\017  
\322\044\343\042\210\233\237\137\107\075\121\111\340\011\067\176  
\027\041\061\166\267\147\161\110\050\113\045\327\020\350\237\141  
\131\026\305\076\062\116\037\014\316\243\314\017\344\307\021\007  
\042\057\070\010\335\133\227\353\102\154\131\232\232\356\172\320  
\235\337\305\333\011\103\056\012\252\031\075\153\350\152\060\172  
\127\346\277\263\152\071\251\217\343\361\117\145\150\266\275\237  
\050\217\241\026\132\011\120\072\062\056\035\057\104\021\102\246  
\000\346\061\230\377\055\241\017\346\244\140\126\317\171\327\262  
\116\327\260\372\156\014\127\043\307\316\037\245\261\114\155\031  
\111\236\016\177\160\217\161\077\130\050\237\165\335\141\340\072  
\267\071\266\356\227\324\065\121\373\213\111\140\310\074\146\256  
\227\356\215\046\131\127\273\170\360\172\120\060\011\260\140\252  
\237\116\334\311\076\036\072\334\142\223\063\260\072\124\164\157  
\054\061\105\321\153\021\062\152\150\166\366\075\366\152\023\136  
\044\230\347\352\035\232\317\170\202\007\140\367\115\020\323\201  
\232\105\215\236\257\233\334\200\307\103\262\225\150\244\303\016  
\350\012\107\025\277\124\063\334\001\347\325\246\036\163\330\172  
\262\277\057\255\343\125\060\236\337\016\101\274\340\021\365\241  
\014\250\042\341\343\000\243\116\160\174\222\343\004\321\172\102  
\212\165\220\131\343\233\321\114\242\144\275\163\171\233\157\362  
\263\301\366\074

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "GlobalSign Secure Mail Root R45"

# Issuer: CN=GlobalSign Secure Mail Root R45,O=GlobalSign nv-sa,C=BE

# Serial Number: 76:53:fe:a8:4c:50:ab:9f:8d:32:b5:1d:03:8f:57:dc



```
# Subject: CN=GlobalSign Secure Mail Root R45,O=GlobalSign nv-sa,C=BE
# Not Valid Before: Wed Mar 18 00:00:00 2020
# Not Valid After : Sat Mar 18 00:00:00 2045
# Fingerprint (SHA-256):
31:9A:F0:A7:72:9E:6F:89:26:9C:13:1E:A6:A3:A1:6F:CD:86:38:9F:DC:AB:3C:47:A4:A6:75:C1:61:A3:F9:74
# Fingerprint (SHA1): 76:18:D1:F3:80:24:3D:52:40:C6:11:6A:AD:57:77:09:7D:81:30:A0
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE
CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "GlobalSign Secure Mail Root R45"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\166\030\321\363\200\044\075\122\100\306\021\152\255\127\167\011
\175\201\060\240
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\223\304\173\263\016\124\107\034\103\054\213\276\160\205\142\051
END
CKA_ISSUER MULTILINE_OCTAL
\060\122\061\013\060\011\006\003\125\004\006\023\002\102\105\061
\031\060\027\006\003\125\004\012\023\020\107\154\157\142\141\154
\123\151\147\156\040\156\166\055\163\141\061\050\060\046\006\003
\125\004\003\023\037\107\154\157\142\141\154\123\151\147\156\040
\123\145\143\165\162\145\040\115\141\151\154\040\122\157\157\164
\040\122\064\065
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\020\166\123\376\250\114\120\253\237\215\062\265\035\003\217
\127\334
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL
CK_FALSE

#
# Certificate "GlobalSign Secure Mail Root E45"
#
# Issuer: CN=GlobalSign Secure Mail Root E45,O=GlobalSign nv-sa,C=BE
# Serial Number:76:53:fe:aa:27:1d:95:46:5d:d6:f1:9e:e5:b8:90:0a
# Subject: CN=GlobalSign Secure Mail Root E45,O=GlobalSign nv-sa,C=BE
# Not Valid Before: Wed Mar 18 00:00:00 2020
# Not Valid After : Sat Mar 18 00:00:00 2045
# Fingerprint (SHA-256):
5C:BF:6F:B8:1F:D4:17:EA:41:28:CD:6F:81:72:A3:C9:40:20:94:F7:4A:B2:ED:3A:06:B4:40:5D:04:F3:0B:19
# Fingerprint (SHA1): 18:2E:1F:32:4F:89:DF:BE:FE:88:89:F0:93:C2:C4:A0:2B:67:75:21
```

```
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "GlobalSign Secure Mail Root E45"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\122\061\013\060\011\006\003\125\004\006\023\002\102\105\061
\031\060\027\006\003\125\004\012\023\020\107\154\157\142\141\154
\123\151\147\156\040\156\166\055\163\141\061\050\060\046\006\003
\125\004\003\023\037\107\154\157\142\141\154\123\151\147\156\040
\123\145\143\165\162\145\040\115\141\151\154\040\122\157\157\164
\040\105\064\065
END
CKA_ID
UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\122\061\013\060\011\006\003\125\004\006\023\002\102\105\061
\031\060\027\006\003\125\004\012\023\020\107\154\157\142\141\154
\123\151\147\156\040\156\166\055\163\141\061\050\060\046\006\003
\125\004\003\023\037\107\154\157\142\141\154\123\151\147\156\040
\123\145\143\165\162\145\040\115\141\151\154\040\122\157\157\164
\040\105\064\065
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\020\166\123\376\252\047\035\225\106\135\326\361\236\345\270
\220\012
END
CKA_VALUE MULTILINE_OCTAL
\060\202\002\041\060\202\001\247\240\003\002\001\002\002\020\166
\123\376\252\047\035\225\106\135\326\361\236\345\270\220\012\060
\012\006\010\052\206\110\316\075\004\003\003\060\122\061\013\060
\011\006\003\125\004\006\023\002\102\105\061\031\060\027\006\003
\125\004\012\023\020\107\154\157\142\141\154\123\151\147\156\040
\156\166\055\163\141\061\050\060\046\006\003\125\004\003\023\037
\107\154\157\142\141\154\123\151\147\156\040\123\145\143\165\162
\145\040\115\141\151\154\040\122\157\157\164\040\105\064\065\060
\036\027\015\062\060\060\063\061\070\060\060\060\060\060\060\132
\027\015\064\065\060\063\061\070\060\060\060\060\060\060\132\060
\122\061\013\060\011\006\003\125\004\006\023\002\102\105\061\031
\060\027\006\003\125\004\012\023\020\107\154\157\142\141\154\123
\151\147\156\040\156\166\055\163\141\061\050\060\046\006\003\125
\004\003\023\037\107\154\157\142\141\154\123\151\147\156\040\123
\145\143\165\162\145\040\115\141\151\154\040\122\157\157\164\040
\105\064\065\060\166\060\020\006\007\052\206\110\316\075\002\001
\006\005\053\201\004\000\042\003\142\000\004\371\171\213\201\107
\067\211\226\077\105\111\120\177\032\046\013\223\062\176\056\300
\300\247\010\232\303\156\217\233\076\013\042\354\067\123\267\157
```

```
\212\260\274\047\067\113\155\251\106\073\331\037\377\245\241\104
\273\055\163\277\236\101\007\134\123\233\121\010\072\132\273\157
\070\307\026\221\170\302\112\023\151\035\202\337\132\057\000\210
\226\242\056\034\164\371\235\176\146\067\212\243\102\060\100\060
\016\006\003\125\035\017\001\001\377\004\004\003\002\001\206\060
\017\006\003\125\035\023\001\001\377\004\005\060\003\001\001\377
\060\035\006\003\125\035\016\004\026\004\024\337\023\136\213\137
\302\100\002\375\126\267\224\114\266\036\325\246\261\024\226\060
\012\006\010\052\206\110\316\075\004\003\003\003\150\000\060\145
\002\060\023\260\276\327\161\040\076\344\253\234\316\066\022\175
\137\114\037\052\265\151\105\063\137\323\055\132\262\344\210\307
\336\012\066\102\062\171\235\246\153\272\341\371\104\052\173\212
\303\022\002\061\000\240\146\034\116\207\235\207\311\355\231\114
\033\012\356\055\140\303\067\307\035\315\265\162\260\331\306\357
\274\362\377\077\360\122\335\010\347\252\144\171\303\344\151\127
\221\057\244\313\174
```

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER

CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "GlobalSign Secure Mail Root E45"

# Issuer: CN=GlobalSign Secure Mail Root E45,O=GlobalSign nv-sa,C=BE

# Serial Number: 76:53:fe:aa:27:1d:95:46:5d:d6:f1:9e:e5:b8:90:0a

# Subject: CN=GlobalSign Secure Mail Root E45,O=GlobalSign nv-sa,C=BE

# Not Valid Before: Wed Mar 18 00:00:00 2020

# Not Valid After : Sat Mar 18 00:00:00 2045

# Fingerprint (SHA-256):

5C:BF:6F:B8:1F:D4:17:EA:41:28:CD:6F:81:72:A3:C9:40:20:94:F7:4A:B2:ED:3A:06:B4:40:5D:04:F3:0B:19

# Fingerprint (SHA1): 18:2E:1F:32:4F:89:DF:BE:FE:88:89:F0:93:C2:C4:A0:2B:67:75:21

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "GlobalSign Secure Mail Root E45"

CKA\_CERT\_SHA1\_HASH MULTILINE\_OCTAL

```
\030\056\037\062\117\211\337\276\376\210\211\360\223\302\304\240
\053\147\165\041
```

END

CKA\_CERT\_MD5\_HASH MULTILINE\_OCTAL

```
\305\374\306\056\237\364\122\055\052\250\244\272\373\147\062\377
END
```

CKA\_ISSUER

MULTILINE\_OCTAL

```
\060\122\061\013\060\011\006\003\125\004\006\023\002\102\105\061
\031\060\027\006\003\125\004\012\023\020\107\154\157\142\141\154
```

```
\123\151\147\156\040\156\166\055\163\141\061\050\060\046\006\003
\125\004\003\023\037\107\154\157\142\141\154\123\151\147\156\040
\123\145\143\165\162\145\040\115\141\151\154\040\122\157\157\164
\040\105\064\065
```

END

CKA\_SERIAL\_NUMBER MULTILINE\_OCTAL

```
\002\020\166\123\376\252\047\035\225\106\135\326\361\236\345\270
\220\012
```

END

```
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE
```

#

# Certificate "GlobalSign Root R46"

#

# Issuer: CN=GlobalSign Root R46,O=GlobalSign nv-sa,C=BE

# Serial Number: 11:d2:bb:b9:d7:23:18:9e:40:5f:0a:9d:2d:d0:df:25:67:d1

# Subject: CN=GlobalSign Root R46,O=GlobalSign nv-sa,C=BE

# Not Valid Before: Wed Mar 20 00:00:00 2019

# Not

Valid After : Tue Mar 20 00:00:00 2046

# Fingerprint (SHA-256):

4F:A3:12:6D:8D:3A:11:D1:C4:85:5A:4F:80:7C:BA:D6:CF:91:9D:3A:5A:88:B0:3B:EA:2C:63:72:D9:3C:40:C9

# Fingerprint (SHA1): 53:A2:B0:4B:CA:6B:D6:45:E6:39:8A:8E:C4:0D:D2:BF:77:C3:A2:90

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_CERTIFICATE

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "GlobalSign Root R46"

CKA\_CERTIFICATE\_TYPE CK\_CERTIFICATE\_TYPE CKC\_X\_509

CKA\_SUBJECT MULTILINE\_OCTAL

```
\060\106\061\013\060\011\006\003\125\004\006\023\002\102\105\061
\031\060\027\006\003\125\004\012\023\020\107\154\157\142\141\154
\123\151\147\156\040\156\166\055\163\141\061\034\060\032\006\003
\125\004\003\023\023\107\154\157\142\141\154\123\151\147\156\040
\122\157\157\164\040\122\064\066
```

END

CKA\_ID UTF8 "0"

CKA\_ISSUER MULTILINE\_OCTAL

```
\060\106\061\013\060\011\006\003\125\004\006\023\002\102\105\061
\031\060\027\006\003\125\004\012\023\020\107\154\157\142\141\154
\123\151\147\156\040\156\166\055\163\141\061\034\060\032\006\003
\125\004\003\023\023\107\154\157\142\141\154\123\151\147\156\040
\122\157\157\164\040\122\064\066
```

END

CKA\_SERIAL\_NUMBER

MULTILINE\_OCTAL

\002\022\021\322\273\271\327\043\030\236\100\137\012\235\055\320  
\337\045\147\321

END

CKA\_VALUE MULTILINE\_OCTAL

\060\202\005\132\060\202\003\102\240\003\002\001\002\002\022\021  
\322\273\271\327\043\030\236\100\137\012\235\055\320\337\045\147  
\321\060\015\006\011\052\206\110\206\367\015\001\001\014\005\000  
\060\106\061\013\060\011\006\003\125\004\006\023\002\102\105\061  
\031\060\027\006\003\125\004\012\023\020\107\154\157\142\141\154  
\123\151\147\156\040\156\166\055\163\141\061\034\060\032\006\003  
\125\004\003\023\023\107\154\157\142\141\154\123\151\147\156\040  
\122\157\157\164\040\122\064\066\060\036\027\015\061\071\060\063  
\062\060\060\060\060\060\060\132\027\015\064\066\060\063\062  
\060\060\060\060\060\060\132\060\106\061\013\060\011\006\003  
\125\004\006\023\002\102\105\061\031\060\027\006\003\125\004\012  
\023\020\107\154\157\142\141\154\123\151\147\156\040\156\166\055  
\163\141\061\034\060\032\006\003\125\004\003\023\023\107\154\157  
\142\141\154\123\151\147\156\040\122\157\157\164\040\122\064\066  
\060\202\002\042\060\015\006\011\052\206\110\206\367\015\001\001  
\001\005\000\003\202\002\017\000\060\202\002\012\002\202\002\001  
\000\254\254\164\062\350\263\145\345\272\355\103\046\035\246\211  
\015\105\272\051\210\262\244\035\143\335\323\301\054\011\127\211  
\071\241\125\351\147\064\167\014\156\344\125\035\122\045\322\023  
\153\136\341\035\251\267\175\211\062\137\015\236\237\054\172\143  
\140\100\037\246\260\266\170\217\231\124\226\010\130\256\344\006  
\274\142\005\002\026\277\257\250\043\003\266\224\017\274\156\154  
\302\313\325\246\273\014\351\366\301\002\373\041\336\146\335\027  
\253\164\102\357\360\164\057\045\364\352\153\125\133\220\333\235  
\337\136\207\012\100\373\255\031\153\373\367\312\140\210\336\332  
\301\217\326\256\325\177\324\074\203\356\327\026\114\203\105\063  
\153\047\320\206\320\034\055\153\363\253\175\361\205\251\365\050  
\322\255\357\363\204\113\034\207\374\023\243\072\162\242\132\021  
\053\326\047\161\047\355\201\055\155\146\201\222\207\264\033\130  
\172\314\077\012\372\106\117\115\170\134\370\053\110\343\004\204  
\313\135\366\264\152\263\145\374\102\236\121\046\043\040\313\075  
\024\371\201\355\145\026\000\117\032\144\227\146\010\317\214\173  
\343\053\300\235\371\024\362\033\361\126\152\026\277\054\205\205  
\315\170\070\232\353\102\152\002\064\030\203\027\116\224\126\370  
\266\202\265\363\226\335\075\363\276\177\040\167\076\173\031\043  
\153\054\324\162\163\103\127\175\340\370\327\151\117\027\066\004  
\371\300\220\140\067\105\336\346\014\330\164\215\256\234\242\155  
\164\135\102\276\006\365\331\144\156\002\020\254\211\260\114\073  
\007\115\100\176\044\305\212\230\202\171\216\244\247\202\040\215  
\043\372\047\161\311\337\306\101\164\240\115\366\221\026\334\106  
\214\137\051\143\061\131\161\014\330\157\302\266\062\175\373\346  
\135\123\246\176\025\374\273\165\174\135\354\370\366\027\034\354  
\307\153\031\313\363\173\360\053\007\245\331\154\171\124\166\154

\235\034\246\156\016\351\171\014\250\043\152\243\337\033\060\061  
\237\261\124\173\376\152\313\146\252\334\145\320\242\236\112\232  
\007\041\153\201\217\333\304\131\372\336\042\300\004\234\343\252  
\133\066\223\350\075\275\172\241\235\013\166\261\013\307\235\375  
\317\230\250\006\302\370\052\243\241\203\240\267\045\162\245\002  
\343\002\003\001\000\001\243\102\060\100\060\016\006\003\125\035  
\017\001\001\377\004\004\003\002\001\206\060\017\006\003\125\035  
\023\001\001\377\004\005\060\003\001\001\377\060\035\006\003\125  
\035\016\004\026\004\024\003\134\253\163\201\207\250\314\260\246  
\325\224\342\066\226\111\377\005\231\054\060\015\006\011\052\206  
\110\206\367\015\001\001\014\005\000\003\202\002\001\000\174\170  
\354\366\002\054\273\133\176\222\053\135\071\334\276\330\035\242  
\102\063\115\371\357\244\052\073\104\151\036\254\331\105\243\116  
\074\247\330\044\121\262\124\034\223\116\304\357\173\223\205\140  
\046\352\011\110\340\365\273\307\351\150\322\273\152\061\161\314  
\171\256\021\250\360\231\375\345\037\274\057\250\314\127\353\166  
\304\041\246\107\123\125\115\150\277\005\244\356\327\046\253\142  
\332\103\067\113\342\306\265\345\262\203\031\072\307\323\333\115  
\236\010\172\363\356\317\076\142\373\254\350\140\314\321\307\241  
\134\203\105\304\105\314\363\027\153\024\311\004\002\076\322\044  
\246\171\351\036\316\242\347\301\131\025\237\035\342\113\232\076  
\237\166\010\055\153\330\272\127\024\332\203\352\376\214\125\351  
\320\116\251\314\167\061\261\104\021\172\134\261\076\323\024\105  
\025\030\142\044\023\322\313\115\316\134\203\301\066\362\020\265  
\016\210\155\270\341\126\237\211\336\226\146\071\107\144\054\156  
\115\256\142\173\277\140\164\031\270\126\254\222\254\026\062\355  
\255\150\125\376\230\272\323\064\336\364\311\141\303\016\206\366  
\113\204\140\356\015\173\265\062\130\171\221\125\054\201\103\263  
\164\037\172\252\045\236\035\327\241\213\271\315\102\056\004\244  
\146\203\115\211\065\266\154\250\066\112\171\041\170\042\320\102  
\274\321\100\061\220\241\276\004\317\312\147\355\365\360\200\323  
\140\311\203\052\042\005\320\007\073\122\277\014\236\252\053\371  
\273\346\037\217\045\272\205\215\027\036\002\376\135\120\004\127  
\317\376\055\274\357\134\300\032\253\266\237\044\306\337\163\150  
\110\220\054\024\364\077\122\032\344\322\313\024\303\141\151\317  
\342\371\030\305\272\063\237\024\243\004\135\271\161\367\265\224  
\330\366\063\301\132\301\064\213\174\233\335\223\072\347\023\242  
\160\141\237\257\217\353\330\305\165\370\063\146\324\164\147\072  
\067\167\234\347\335\244\017\166\103\146\212\103\362\237\373\014  
\102\170\143\321\342\017\157\173\324\241\075\164\227\205\267\110  
\071\101\326\040\374\320\072\263\372\350\157\304\212\272\161\067  
\276\213\227\261\170\061\117\263\347\266\003\023\316\124\235\256  
\045\131\314\177\065\137\010\367\100\105\061\170\052\172

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

```

#
Trust for "GlobalSign Root R46"
# Issuer: CN=GlobalSign Root R46,O=GlobalSign nv-sa,C=BE
# Serial Number:11:d2:bb:b9:d7:23:18:9e:40:5f:0a:9d:2d:d0:df:25:67:d1
# Subject: CN=GlobalSign Root R46,O=GlobalSign nv-sa,C=BE
# Not Valid Before: Wed Mar 20 00:00:00 2019
# Not Valid After : Tue Mar 20 00:00:00 2046
# Fingerprint (SHA-256):
4F:A3:12:6D:8D:3A:11:D1:C4:85:5A:4F:80:7C:BA:D6:CF:91:9D:3A:5A:88:B0:3B:EA:2C:63:72:D9:3C:40:C9
# Fingerprint (SHA1): 53:A2:B0:4B:CA:6B:D6:45:E6:39:8A:8E:C4:0D:D2:BF:77:C3:A2:90
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "GlobalSign Root R46"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\123\242\260\113\312\153\326\105\346\071\212\216\304\015\322\277
\167\303\242\220
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\304\024\060\344\372\146\103\224\052\152\033\044\137\031\320\357
END
CKA_ISSUER MULTILINE_OCTAL
\060\106\061\013\060\011\006\003\125\004\006\023\002\102\105\061
\031\060\027\006\003\125\004\012\023\020\107\154\157\142\141\154
\123\151\147\156\040\156\166\055\163\141\061\034\060\032\006\003
\125\004\003\023\023\107\154\157\142\141\154\123\151\147\156\040
\122\157\157\164\040\122\064\066
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\022\021\322\273\271\327\043\030\236\100\137\012\235\055\320
\337\045\147\321
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "GlobalSign Root E46"
#
# Issuer: CN=GlobalSign Root E46,O=GlobalSign nv-sa,C=BE
# Serial Number:11:d2:bb:ba:33:6e:d4:bc:e6:24:68:c5:0d:84:1d:98:e8:43
# Subject: CN=GlobalSign Root E46,O=GlobalSign nv-sa,C=BE
# Not Valid Before: Wed Mar 20 00:00:00 2019
# Not Valid After : Tue Mar 20 00:00:00 2046

```

# Fingerprint (SHA-256):

CB:B9:C4:4D:84:B8:04:3E:10:50:EA:31:A6:9F:51:49:55:D7:BF:D2:E2:C6:B4:93:01:01:9A:D6:1D:9F:50:58

#

Fingerprint (SHA1): 39:B4:6C:D5:FE:80:06:EB:E2:2F:4A:BB:08:33:A0:AF:DB:B9:DD:84

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_CERTIFICATE

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "GlobalSign Root E46"

CKA\_CERTIFICATE\_TYPE CK\_CERTIFICATE\_TYPE CKC\_X\_509

CKA\_SUBJECT MULTILINE\_OCTAL

\060\106\061\013\060\011\006\003\125\004\006\023\002\102\105\061  
\031\060\027\006\003\125\004\012\023\020\107\154\157\142\141\154  
\123\151\147\156\040\156\166\055\163\141\061\034\060\032\006\003  
\125\004\003\023\023\107\154\157\142\141\154\123\151\147\156\040  
\122\157\157\164\040\105\064\066

END

CKA\_ID UTF8 "0"

CKA\_ISSUER MULTILINE\_OCTAL

\060\106\061\013\060\011\006\003\125\004\006\023\002\102\105\061  
\031\060\027\006\003\125\004\012\023\020\107\154\157\142\141\154  
\123\151\147\156\040\156\166\055\163\141\061\034\060\032\006\003  
\125\004\003\023\023\107\154\157\142\141\154\123\151\147\156\040  
\122\157\157\164\040\105\064\066

END

CKA\_SERIAL\_NUMBER MULTILINE\_OCTAL

\002\022\021\322\273\272\063\156\324\274\346\044\150\305\015\204  
\035\230\350\103

END

CKA\_VALUE

MULTILINE\_OCTAL

\060\202\002\013\060\202\001\221\240\003\002\001\002\002\022\021  
\322\273\272\063\156\324\274\346\044\150\305\015\204\035\230\350  
\103\060\012\006\010\052\206\110\316\075\004\003\003\060\106\061  
\013\060\011\006\003\125\004\006\023\002\102\105\061\031\060\027  
\006\003\125\004\012\023\020\107\154\157\142\141\154\123\151\147  
\156\040\156\166\055\163\141\061\034\060\032\006\003\125\004\003  
\023\023\107\154\157\142\141\154\123\151\147\156\040\122\157\157  
\164\040\105\064\066\060\036\027\015\061\071\060\063\062\060\060  
\060\060\060\060\060\132\027\015\064\066\060\063\062\060\060\060  
\060\060\060\060\132\060\106\061\013\060\011\006\003\125\004\006  
\023\002\102\105\061\031\060\027\006\003\125\004\012\023\020\107  
\154\157\142\141\154\123\151\147\156\040\156\166\055\163\141\061  
\034\060\032\006\003\125\004\003\023\023\107\154\157\142\141\154  
\123\151\147\156\040\122\157\157\164\040\105\064\066\060\166\060  
\020\006\007\052\206\110\316\075\002\001\006\005\053\201\004\000  
\042\003\142\000\004\234\016\261\317\267\350\236\122\167\165\064  
\372\245\106\247\255\062\031\062\264\007\251\047\312\224\273\014



```
\322\012\020\307\332\211\260\227\014\160\023\011\001\216\330\352
\107\352\276\262\200\053\315\374\050\015\333\254\274\244\206\067
\355\160\010\000\165\352\223\013\173\056\122\234\043\150\043\006
\103\354\222\057\123\204\333\373\107\024\007\350\137\224\147\135
\311\172\201\074\040\243\102\060\100\060\016\006\003\125\035\017
\001\001\377\004\004\003\002\001\206\060\017\006\003\125\035\023
\001\001\377\004\005\060\003\001\001\377\060\035\006\003\125\035
\016\004\026\004\024\061\012\220\217\266\306\235\322\104\113\200
\265\242\346\037\261\022\117\033\225\060\012\006\010\052\206\110
\316\075\004\003\003\003\150\000\060\145\002\061\000\337\124\220
\355\233\357\213\224\002\223\027\202\231\276\263\236\054\366\013
\221\214\237\112\024\261\366\144\274\273\150\121\023\014\003\367
\025\213\204\140\271\213\377\122\216\347\214\274\034\002\060\074
\371\021\324\214\116\300\301\141\302\025\114\252\253\035\013\061
\137\073\034\342\000\227\104\061\346\376\163\226\057\332\226\323
\376\010\007\263\064\211\274\005\237\367\036\206\356\213\160
```

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "GlobalSign Root E46"

# Issuer: CN=GlobalSign Root E46,O=GlobalSign nv-sa,C=BE

# Serial Number:11:d2:bb:ba:33:6e:d4:bc:e6:24:68:c5:0d:84:1d:98:e8:43

# Subject: CN=GlobalSign Root E46,O=GlobalSign nv-sa,C=BE

# Not Valid Before: Wed Mar 20 00:00:00 2019

# Not Valid After : Tue Mar 20 00:00:00 2046

# Fingerprint (SHA-256):

CB:B9:C4:4D:84:B8:04:3E:10:50:EA:31:A6:9F:51:49:55:D7:BF:D2:E2:C6:B4:93:01:01:9A:D6:1D:9F:50:58

# Fingerprint (SHA1): 39:B4:6C:D5:FE:80:06:EB:E2:2F:4A:BB:08:33:A0:AF:DB:B9:DD:84

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL

CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "GlobalSign Root E46"

CKA\_CERT\_SHA1\_HASH MULTILINE\_OCTAL

```
\071\264\154\325\376\200\006\353\342\057\112\273\010\063\240\257
\333\271\335\204
```

END

CKA\_CERT\_MD5\_HASH MULTILINE\_OCTAL

```
\265\270\146\355\336\010\203\343\311\342\001\064\006\254\121\157
```

END

CKA\_ISSUER MULTILINE\_OCTAL

```
\060\106\061\013\060\011\006\003\125\004\006\023\002\102\105\061
\031\060\027\006\003\125\004\012\023\020\107\154\157\142\141\154
\123\151\147\156\040\156\166\055\163\141\061\034\060\032\006\003
```

\125\004\003\023\023\107\154\157\142\141\154\123\151\147\156\040

\122\157\157\164\040\105\064\066

END

CKA\_SERIAL\_NUMBER MULTILINE\_OCTAL

\002\022\021\322\273\272\063\156\324\274\346\044\150\305\015\204

\035\230\350\103

END

CKA\_TRUST\_SERVER\_AUTH CK\_TRUST CKT\_NSS\_TRUSTED\_DELEGATOR

CKA\_TRUST\_EMAIL\_PROTECTION CK\_TRUST CKT\_NSS\_MUST\_VERIFY\_TRUST

CKA\_TRUST\_CODE\_SIGNING CK\_TRUST CKT\_NSS\_MUST\_VERIFY\_TRUST

CKA\_TRUST\_STEP\_UP\_APPROVED CK\_BBOOL CK\_FALSE

#

# Certificate "GLOBALTRUST

2020"

#

# Issuer: CN=GLOBALTRUST 2020,O=e-commerce monitoring GmbH,C=AT

# Serial Number:5a:4b:bd:5a:fb:4f:8a:5b:fa:65:e5

# Subject: CN=GLOBALTRUST 2020,O=e-commerce monitoring GmbH,C=AT

# Not Valid Before: Mon Feb 10 00:00:00 2020

# Not Valid After : Sun Jun 10 00:00:00 2040

# Fingerprint (SHA-256):

9A:29:6A:51:82:D1:D4:51:A2:E3:7F:43:9B:74:DA:AF:A2:67:52:33:29:F9:0F:9A:0D:20:07:C3:34:E2:3C:9A

# Fingerprint (SHA1): D0:67:C1:13:51:01:0C:AA:D0:C7:6A:65:37:31:16:26:4F:53:71:A2

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_CERTIFICATE

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "GLOBALTRUST 2020"

CKA\_CERTIFICATE\_TYPE CK\_CERTIFICATE\_TYPE CKC\_X\_509

CKA\_SUBJECT MULTILINE\_OCTAL

\060\115\061\013\060\011\006\003\125\004\006\023\002\101\124\061

\043\060\041\006\003\125\004\012\023\032\145\055\143\157\155\155

\145\162\143\145\040\155\157\156\151\164\157\162\151\156\147\040

\107\155\142\110\061\031\060\027\006\003\125\004\003\023\020\107

\114\117\102\101\114\124\122\125\123\124\040\062\060\062\060

END

CKA\_ID

UTF8 "0"

CKA\_ISSUER MULTILINE\_OCTAL

\060\115\061\013\060\011\006\003\125\004\006\023\002\101\124\061

\043\060\041\006\003\125\004\012\023\032\145\055\143\157\155\155

\145\162\143\145\040\155\157\156\151\164\157\162\151\156\147\040

\107\155\142\110\061\031\060\027\006\003\125\004\003\023\020\107

\114\117\102\101\114\124\122\125\123\124\040\062\060\062\060

END

CKA\_SERIAL\_NUMBER MULTILINE\_OCTAL

\002\013\132\113\275\132\373\117\212\133\372\145\345

END

CKA\_VALUE MULTILINE\_OCTAL

\060\202\005\202\060\202\003\152\240\003\002\001\002\002\013\132  
\113\275\132\373\117\212\133\372\145\345\060\015\006\011\052\206  
\110\206\367\015\001\001\013\005\000\060\115\061\013\060\011\006  
\003\125\004\006\023\002\101\124\061\043\060\041\006\003\125\004  
\012\023\032\145\055\143\157\155\155\145\162\143\145\040\155\157  
\156\151\164\157\162\151\156\147\040\107\155\142\110\061\031\060  
\027\006\003\125\004\003\023\020\107\114\117\102\101\114\124\122  
\125\123\124\040\062\060\062\060\060\060\036\027\015\062\060\060\062  
\061\060\060\060\060\060\060\060\132\027\015\064\060\060\066\061  
\060\060\060\060\060\060\060\132\060\115\061\013\060\011\006\003  
\125\004\006\023\002\101\124\061\043\060\041\006\003\125\004\012  
\023\032\145\055\143\157\155\155\145\162\143\145\040\155\157\156  
\151\164\157\162\151\156\147\040\107\155\142\110\061\031\060\027  
\006\003\125\004\003\023\020\107\114\117\102\101\114\124\122\125  
\123\124\040\062\060\062\060\060\202\002\042\060\015\006\011\052  
\206\110\206\367\015\001\001\001\005\000\003\202\002\017\000\060  
\202\002\012\002\202\002\001\000\256\056\126\255\033\034\357\366  
\225\217\240\167\033\053\323\143\217\204\115\105\242\017\237\133  
\105\253\131\173\121\064\371\354\213\212\170\305\335\153\257\275  
\304\337\223\105\036\277\221\070\013\256\016\026\347\101\163\370  
\333\273\321\270\121\340\313\203\073\163\070\156\167\212\017\131  
\143\046\315\247\052\316\124\373\270\342\300\174\107\316\140\174  
\077\262\163\362\300\031\266\212\222\207\065\015\220\050\242\344  
\025\004\143\076\272\257\356\174\136\314\246\213\120\262\070\367  
\101\143\312\316\377\151\217\150\016\225\066\345\314\271\214\011  
\312\113\335\061\220\226\310\314\037\375\126\226\064\333\216\034  
\352\054\276\205\056\143\335\252\251\225\323\375\051\225\023\360  
\310\230\223\331\055\026\107\220\021\203\242\072\042\242\050\127  
\242\353\376\300\214\050\240\246\175\347\052\102\073\202\200\143  
\245\143\037\031\314\174\262\146\250\302\323\155\067\157\342\176  
\006\121\331\105\204\037\022\316\044\122\144\205\013\110\200\116  
\207\261\042\042\060\252\353\256\276\340\002\340\100\350\260\102  
\200\003\121\252\264\176\252\104\327\103\141\363\242\153\026\211  
\111\244\243\244\053\212\002\304\170\364\150\212\301\344\172\066  
\261\157\033\226\033\167\111\215\324\311\006\162\217\317\123\343  
\334\027\205\040\112\334\230\047\323\221\046\053\107\036\151\007  
\257\336\242\344\344\324\153\013\263\136\174\324\044\200\107\051  
\151\073\156\350\254\375\100\353\330\355\161\161\053\362\350\130  
\035\353\101\227\042\305\037\324\071\320\047\217\207\343\030\364  
\340\251\106\015\365\164\072\202\056\320\156\054\221\243\061\134  
\073\106\352\173\004\020\126\136\200\035\365\245\145\350\202\374  
\342\007\214\142\105\365\040\336\106\160\206\241\274\223\323\036  
\164\246\154\260\054\367\003\014\210\014\313\324\162\123\206\274  
\140\106\363\230\152\302\361\277\103\371\160\040\167\312\067\101  
\171\125\122\143\215\133\022\237\305\150\304\210\235\254\362\060  
\253\267\243\061\227\147\255\217\027\017\154\307\163\355\044\224

\153\310\203\232\320\232\067\111\004\253\261\026\310\154\111\111  
\055\253\241\320\214\222\362\101\112\171\041\045\333\143\327\266  
\234\247\176\102\151\373\072\143\002\003\001\000\001\243\143\060  
\141\060\017\006\003\125\035\023\001\001\377\004\005\060\003\001  
\001\377\060\016\006\003\125\035\017\001\001\377\004\004\003\002  
\001\006\060\035\006\003\125\035\016\004\026\004\024\334\056\037  
\321\141\067\171\344\253\325\325\263\022\161\150\075\152\150\234  
\042\060\037\006\003\125\035\043\004\030\060\026\200\024\334\056  
\037\321\141\067\171\344\253\325\325\263\022\161\150\075\152\150  
\234\042\060\015\006\011\052\206\110\206\367\015\001\001\013\005  
\000\003\202\002\001\000\221\360\102\002\150\100\356\303\150\300  
\124\057\337\354\142\303\303\236\212\240\061\050\252\203\216\244  
\126\226\022\020\206\126\272\227\162\322\124\060\174\255\031\325  
\035\150\157\373\024\102\330\215\016\363\265\321\245\343\002\102  
\136\334\350\106\130\007\065\002\060\340\274\164\112\301\103\052  
\377\333\032\320\260\257\154\303\375\313\263\365\177\155\003\056  
\131\126\235\055\055\065\214\262\326\103\027\054\222\012\313\135  
\350\214\017\113\160\103\320\202\377\250\314\277\244\224\300\276  
\207\275\212\343\223\173\306\217\233\026\235\047\145\274\172\305  
\102\202\154\134\007\320\251\301\210\140\104\351\230\205\026\137  
\370\217\312\001\020\316\045\303\371\140\033\240\305\227\303\323  
\054\210\061\242\275\060\354\320\320\300\022\361\301\071\343\345  
\365\370\326\112\335\064\315\373\157\301\117\343\000\213\126\342  
\222\367\050\262\102\167\162\043\147\307\077\021\025\262\304\003  
\005\276\273\021\173\012\277\250\156\347\377\130\103\317\233\147  
\240\200\007\266\035\312\255\155\352\101\021\176\055\164\223\373  
\302\274\276\121\104\305\357\150\045\047\200\343\310\240\324\022  
\354\331\245\067\035\067\174\264\221\312\332\324\261\226\201\357  
\150\134\166\020\111\257\176\245\067\200\261\034\122\275\063\201  
\114\217\371\335\145\331\024\315\212\045\130\364\342\305\203\245  
\011\220\324\154\024\143\265\100\337\353\300\374\304\130\176\015  
\024\026\207\124\047\156\126\344\160\204\270\154\062\022\176\202  
\061\103\276\327\335\174\241\255\256\326\253\040\022\357\012\303  
\020\214\111\226\065\334\013\165\136\261\117\325\117\064\016\021  
\040\007\165\103\105\351\243\021\332\254\243\231\302\266\171\047  
\342\271\357\310\342\366\065\051\172\164\372\305\177\202\005\142  
\246\012\352\150\262\171\107\006\156\362\127\250\025\063\306\367  
\170\112\075\102\173\153\176\376\367\106\352\321\353\216\357\210  
\150\133\350\301\331\161\176\375\144\357\377\147\107\210\130\045  
\057\076\206\007\275\373\250\345\202\250\254\245\323\151\103\315  
\061\210\111\204\123\222\300\261\071\033\071\203\001\060\304\362  
\251\372\320\003\275\162\067\140\126\037\066\174\275\071\221\365  
\155\015\277\173\327\222

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

```

# Trust for "GLOBALTRUST 2020"
# Issuer: CN=GLOBALTRUST 2020,O=e-commerce monitoring GmbH,C=AT
# Serial Number:5a:4b:bd:5a:fb:4f:8a:5b:fa:65:e5
# Subject: CN=GLOBALTRUST 2020,O=e-commerce monitoring GmbH,C=AT
# Not Valid Before: Mon Feb 10 00:00:00 2020
# Not Valid After : Sun Jun 10 00:00:00 2040
# Fingerprint (SHA-256):
9A:29:6A:51:82:D1:D4:51:A2:E3:7F:43:9B:74:DA:AF:A2:67:52:33:29:F9:0F:9A:0D:20:07:C3:34:E2:3C:9A
# Fingerprint (SHA1): D0:67:C1:13:51:01:0C:AA:D0:C7:6A:65:37:31:16:26:4F:53:71:A2
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE
CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "GLOBALTRUST 2020"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\320\147\301\023\121\001\014\252\320\307\152\145\067\061\026\046
\117\123\161\242
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\212\307\157\313\155\343\314\242\361\174\203\372\016\170\327\350
END
CKA_ISSUER MULTILINE_OCTAL
\060\115\061\013\060\011\006\003\125\004\006\023\002\101\124\061
\043\060\041\006\003\125\004\012\023\032\145\055\143\157\155\155
\145\162\143\145\040\155\157\156\151\164\157\162\151\156\147\040
\107\155\142\110\061\031\060\027\006\003\125\004\003\023\020\107
\114\117\102\101\114\124\122\125\123\124\040\062\060\062\060
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\013\132\113\275\132\373\117\212\133\372\145\345
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "ANF
Secure Server Root CA"
#
# Issuer: CN=ANF Secure Server Root CA,OU=ANF CA Raiz,O=ANF Autoridad de
Certificacion,C=ES,serialNumber=G63287510
# Serial Number:0d:d3:e3:bc:6c:f9:6b:b1
# Subject: CN=ANF Secure Server Root CA,OU=ANF CA Raiz,O=ANF Autoridad de
Certificacion,C=ES,serialNumber=G63287510
# Not Valid Before: Wed Sep 04 10:00:38 2019

```

```
# Not Valid After : Tue Aug 30 10:00:38 2039
# Fingerprint (SHA-256):
FB:8F:EC:75:91:69:B9:10:6B:1E:51:16:44:C6:18:C5:13:04:37:3F:6C:06:43:08:8D:8B:EF:FD:1B:99:75:99
# Fingerprint (SHA1): 5B:6E:68:D0:CC:15:B6:A0:5F:1E:C1:5F:AE:02:FC:6B:2F:5D:6F:74
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "ANF Secure Server Root CA"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\201\204\061\022\060\020\006\003\125\004\005\023\011\107\066
\063\062\070\067\065\061\060\061\013\060\011\006\003\125\004\006
\023\002\105\123\061\047\060\045\006\003\125\004\012\023\036\101
\116\106\040\101\165\164\157\162\151\144\141\144\040\144\145\040
\103\145\162\164\151\146\151\143\141\143\151\157\156\061\024\060
\022\006\003\125\004\013\023\013\101\116\106\040\103\101\040\122
\141\151\172\061\042\060\040\006\003\125\004\003\023\031\101\116
\106\040\123\145\143\165\162\145\040\123\145\162\166\145\162\040
\122\157\157\164\040\103\101
END
CKA_ID
UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\201\204\061\022\060\020\006\003\125\004\005\023\011\107\066
\063\062\070\067\065\061\060\061\013\060\011\006\003\125\004\006
\023\002\105\123\061\047\060\045\006\003\125\004\012\023\036\101
\116\106\040\101\165\164\157\162\151\144\141\144\040\144\145\040
\103\145\162\164\151\146\151\143\141\143\151\157\156\061\024\060
\022\006\003\125\004\013\023\013\101\116\106\040\103\101\040\122
\141\151\172\061\042\060\040\006\003\125\004\003\023\031\101\116
\106\040\123\145\143\165\162\145\040\123\145\162\166\145\162\040
\122\157\157\164\040\103\101
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\010\015\323\343\274\154\371\153\261
END
CKA_VALUE MULTILINE_OCTAL
\060\202\005\357\060\202\003\327\240\003\002\001\002\002\010\015
\323\343\274\154\371\153\261\060\015\006\011\052\206\110\206\367
\015\001\001\013\005\000\060\201\204\061\022\060\020\006\003\125
\004\005\023\011\107\066\063\062\070\067\065\061\060\061\013\060
\011\006\003\125\004\006\023\002\105\123\061\047\060\045\006\003
\125\004\012\023\036\101\116\106\040\101\165\164\157\162\151\144
\141\144\040\144\145\040\103\145\162\164\151\146\151\143\141\143
\151\157\156\061\024\060\022\006\003\125\004\013\023\013\101\116
\106\040\103\101\040\122\141\151\172\061\042\060\040\006\003\125
```

\004\003\023\031\101\116\106\040\123\145\143\165\162\145\040\123  
\145\162\166\145\162\040\122\157\157\164\040\103\101\060\036\027  
\015\061\071\060\071\060\064\061\060\060\060\063\070\132\027\015  
\063\071\060\070\063\060\061\060\060\060\063\070\132\060\201\204  
\061\022\060\020\006\003\125\004\005\023\011\107\066\063\062\070  
\067\065\061\060\061\013\060\011\006\003\125\004\006\023\002\105  
\123\061\047\060\045\006\003\125\004\012\023\036\101\116\106\040  
\101\165\164\157\162\151\144\141\144\040\144\145\040\103\145\162  
\164\151\146\151\143\141\143\151\157\156\061\024\060\022\006\003  
\125\004\013\023\013\101\116\106\040\103\101\040\122\141\151\172  
\061\042\060\040\006\003\125\004\003\023\031\101\116\106\040\123  
\145\143\165\162\145\040\123\145\162\166\145\162\040\122\157\157  
\164\040\103\101\060\202\002\042\060\015\006\011\052\206\110\206  
\367\015\001\001\001\005\000\003\202\002\017\000\060\202\002\012  
\002\202\002\001\000\333\353\153\053\346\144\124\225\202\220\243  
\162\244\031\001\235\234\013\201\137\163\111\272\247\254\363\004  
\116\173\226\013\354\021\340\133\246\034\316\033\322\015\203\034  
\053\270\236\035\176\105\062\140\017\007\351\167\130\176\237\152  
\310\141\116\266\046\301\114\215\377\114\357\064\262\037\145\330  
\271\170\365\255\251\161\271\357\117\130\035\245\336\164\040\227  
\241\355\150\114\336\222\027\113\274\253\377\145\232\236\373\107  
\331\127\162\363\011\241\256\166\104\023\156\234\055\104\071\274  
\371\307\073\244\130\075\101\275\264\302\111\243\310\015\322\227  
\057\007\145\122\000\247\156\310\257\150\354\364\024\226\266\127  
\037\126\303\071\237\053\155\344\363\076\366\065\144\332\014\034  
\241\204\113\057\113\113\342\054\044\235\155\223\100\353\265\043  
\216\062\312\157\105\323\250\211\173\036\317\036\372\133\103\213  
\315\315\250\017\152\312\014\136\271\236\107\217\360\331\266\012  
\013\130\145\027\063\271\043\344\167\031\175\313\112\056\222\173  
\117\057\020\167\261\215\057\150\234\142\314\340\120\370\354\221  
\247\124\114\127\011\325\166\143\305\350\145\036\356\155\152\317  
\011\235\372\174\117\255\140\010\375\126\231\017\025\054\173\251  
\200\253\214\141\217\112\007\166\102\336\075\364\335\262\044\063  
\133\270\265\243\104\311\254\177\167\074\035\043\354\202\251\246  
\342\310\006\114\002\376\254\134\231\231\013\057\020\212\246\364  
\177\325\207\164\015\131\111\105\366\360\161\134\071\051\326\277  
\112\043\213\365\137\001\143\322\207\163\050\265\113\012\365\370  
\253\202\054\176\163\045\062\035\013\143\012\027\201\000\377\266  
\166\136\347\264\261\100\312\041\273\325\200\121\345\110\122\147  
\054\322\141\211\007\015\017\316\102\167\300\104\163\234\104\120  
\240\333\020\012\055\225\034\201\257\344\034\345\024\036\361\066  
\101\001\002\057\175\163\247\336\102\314\114\351\211\015\126\367  
\237\221\324\003\306\154\311\217\333\330\034\340\100\230\135\146  
\231\230\200\156\055\377\001\305\316\313\106\037\254\002\306\103  
\346\256\242\204\074\305\116\036\075\155\311\024\114\343\056\101  
\273\312\071\277\066\074\052\031\252\101\207\116\245\316\113\062  
\171\335\220\111\177\002\003\001\000\001\243\143\060\141\060\037  
\006\003\125\035\043\004\030\060\026\200\024\234\137\320\154\143

\243\137\223\312\223\230\010\255\214\207\245\054\134\301\067\060  
\035\006\003\125\035\016\004\026\004\024\234\137\320\154\143\243  
\137\223\312\223\230\010\255\214\207\245\054\134\301\067\060\016  
\006\003\125\035\017\001\001\377\004\004\003\002\001\206\060\017  
\006\003\125\035\023\001\001\377\004\005\060\003\001\001\377\060  
\015\006\011\052\206\110\206\367\015\001\001\013\005\000\003\202  
\002\001\000\116\036\271\212\306\240\230\077\156\303\151\300\152  
\134\111\122\254\313\053\135\170\070\301\325\124\204\237\223\360  
\207\031\075\054\146\211\353\015\102\374\314\360\165\205\077\213  
\364\200\135\171\345\027\147\275\065\202\342\362\074\216\175\133  
\066\313\132\200\000\051\362\316\053\054\361\217\252\155\005\223  
\154\162\307\126\353\337\120\043\050\345\105\020\075\350\147\243  
\257\016\125\017\220\011\142\357\113\131\242\366\123\361\300\065  
\344\057\301\044\275\171\057\116\040\042\073\375\032\040\260\244  
\016\054\160\355\164\077\270\023\225\006\121\310\350\207\046\312  
\244\133\152\026\041\222\335\163\140\236\020\030\336\074\201\352  
\350\030\303\174\211\362\213\120\076\275\021\342\025\003\250\066  
\175\063\001\154\110\025\327\210\220\231\004\305\314\346\007\364  
\274\364\220\355\023\342\352\213\303\217\243\063\017\301\051\114  
\023\116\332\025\126\161\163\162\202\120\366\232\063\174\242\261  
\250\032\064\164\145\134\316\321\353\253\123\340\032\200\330\352  
\072\111\344\046\060\233\345\034\212\250\251\025\062\206\231\222  
\012\020\043\126\022\340\366\316\114\342\273\276\333\215\222\163  
\001\146\057\142\076\262\162\047\105\066\355\115\126\343\227\231  
\377\072\065\076\245\124\112\122\131\113\140\333\356\376\170\021  
\177\112\334\024\171\140\266\153\144\003\333\025\203\341\242\276  
\366\043\227\120\360\011\063\066\247\161\226\045\363\271\102\175  
\333\070\077\054\130\254\350\102\341\016\330\323\073\114\056\202  
\351\203\056\153\061\331\335\107\206\117\155\227\221\056\117\342  
\050\161\065\026\321\362\163\376\045\053\007\107\044\143\047\310  
\370\366\331\153\374\022\061\126\010\300\123\102\257\234\320\063  
\176\374\006\360\061\104\003\024\361\130\352\362\152\015\251\021  
\262\203\276\305\032\277\007\352\131\334\243\210\065\357\234\166  
\062\074\115\006\042\316\025\345\335\236\330\217\332\336\322\304  
\071\345\027\201\317\070\107\353\177\210\155\131\033\337\237\102  
\024\256\176\317\250\260\146\145\332\067\257\237\252\075\352\050  
\266\336\325\061\130\026\202\133\352\273\031\165\002\163\032\312  
\110\032\041\223\220\012\216\223\204\247\175\073\043\030\222\211  
\240\215\254

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "ANF Secure Server Root CA"

# Issuer: CN=ANF Secure Server Root CA,OU=ANF CA Raiz,O=ANF Autoridad de  
Certificacion,C=ES,serialNumber=G63287510



```
# Serial Number:0d:d3:e3:bc:6c:f9:6b:b1
# Subject: CN=ANF Secure Server Root CA,OU=ANF CA Raiz,O=ANF Autoridad de
Certificacion,C=ES,serialNumber=G63287510
# Not Valid Before: Wed Sep 04 10:00:38 2019
# Not Valid After : Tue Aug 30 10:00:38 2039
# Fingerprint (SHA-256):
FB:8F:EC:75:91:69:B9:10:6B:1E:51:16:44:C6:18:C5:13:04:37:3F:6C:06:43:08:8D:8B:EF:FD:1B:99:75:99
# Fingerprint (SHA1): 5B:6E:68:D0:CC:15:B6:A0:5F:1E:C1:5F:AE:02:FC:6B:2F:5D:6F:74
CKA_CLASS
CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "ANF Secure Server Root CA"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\133\156\150\320\314\025\266\240\137\036\301\137\256\002\374\153
\057\135\157\164
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\046\246\104\132\331\257\116\057\262\035\266\145\260\116\350\226
END
CKA_ISSUER MULTILINE_OCTAL
\060\201\204\061\022\060\020\006\003\125\004\005\023\011\107\066
\063\062\070\067\065\061\060\061\013\060\011\006\003\125\004\006
\023\002\105\123\061\047\060\045\006\003\125\004\012\023\036\101
\116\106\040\101\165\164\157\162\151\144\141\144\040\144\145\040
\103\145\162\164\151\146\151\143\141\143\151\157\156\061\024\060
\022\006\003\125\004\013\023\013\101\116\106\040\103\101\040\122
\141\151\172\061\042\060\040\006\003\125\004\003\023\031\101\116
\106\040\123\145\143\165\162\145\040\123\145\162\166\145\162\040
\122\157\157\164\040\103\101
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\010\015\323\343\274\154\371\153\261
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "Certum EC-384 CA"
#
# Issuer: CN=Certum EC-384 CA,OU=Certum Certification Authority,O=Asseco Data Systems S.A.,C=PL
# Serial Number:78:8f:27:5c:81:12:52:20:a5:04:d0:2d:dd:ba:73:f4
# Subject: CN=Certum EC-384 CA,OU=Certum Certification Authority,O=Asseco Data Systems S.A.,C=PL
# Not Valid Before: Mon Mar 26 07:24:54 2018
```

# Not Valid After : Thu Mar 26 07:24:54 2043

# Fingerprint (SHA-256):

6B:32:80:85:62:53:18:AA:50:D1:73:C9:8D:8B:DA:09:D5:7E:27:41:3D:11:4C:F7:87:A0:F5:D0:6C:03:0C:F6

# Fingerprint (SHA1): F3:3E:78:3C:AC:DF:F4:A2:CC:AC:67:55:69:56:D7:E5:16:3C:E1:ED

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_CERTIFICATE

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE

CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "Certum EC-384 CA"

CKA\_CERTIFICATE\_TYPE CK\_CERTIFICATE\_TYPE CKC\_X\_509

CKA\_SUBJECT MULTILINE\_OCTAL

\060\164\061\013\060\011\006\003\125\004\006\023\002\120\114\061  
\041\060\037\006\003\125\004\012\023\030\101\163\163\145\143\157  
\040\104\141\164\141\040\123\171\163\164\145\155\163\040\123\056  
\101\056\061\047\060\045\006\003\125\004\013\023\036\103\145\162  
\164\165\155\040\103\145\162\164\151\146\151\143\141\164\151\157  
\156\040\101\165\164\150\157\162\151\164\171\061\031\060\027\006  
\003\125\004\003\023\020\103\145\162\164\165\155\040\105\103\055  
\063\070\064\040\103\101

END

CKA\_ID UTF8 "0"

CKA\_ISSUER MULTILINE\_OCTAL

\060\164\061\013\060\011\006\003\125\004\006\023\002\120\114\061  
\041\060\037\006\003\125\004\012\023\030\101\163\163\145\143\157  
\040\104\141\164\141\040\123\171\163\164\145\155\163\040\123\056  
\101\056\061\047\060\045\006\003\125\004\013\023\036\103\145\162  
\164\165\155\040\103\145\162\164\151\146\151\143\141\164\151\157  
\156\040\101\165\164\150\157\162\151\164\171\061\031\060\027\006  
\003\125\004\003\023\020\103\145\162\164\165\155\040\105\103\055  
\063\070\064\040\103\101

END

CKA\_SERIAL\_NUMBER

MULTILINE\_OCTAL

\002\020\170\217\047\134\201\022\122\040\245\004\320\055\335\272  
\163\364

END

CKA\_VALUE MULTILINE\_OCTAL

\060\202\002\145\060\202\001\353\240\003\002\001\002\002\020\170  
\217\047\134\201\022\122\040\245\004\320\055\335\272\163\364\060  
\012\006\010\052\206\110\316\075\004\003\003\060\164\061\013\060  
\011\006\003\125\004\006\023\002\120\114\061\041\060\037\006\003  
\125\004\012\023\030\101\163\163\145\143\157\040\104\141\164\141  
\040\123\171\163\164\145\155\163\040\123\056\101\056\061\047\060  
\045\006\003\125\004\013\023\036\103\145\162\164\165\155\040\103  
\145\162\164\151\146\151\143\141\164\151\157\156\040\101\165\164  
\150\157\162\151\164\171\061\031\060\027\006\003\125\004\003\023  
\020\103\145\162\164\165\155\040\105\103\055\063\070\064\040\103

\101\060\036\027\015\061\070\060\063\062\066\060\067\062\064\065  
\064\132\027\015\064\063\060\063\062\066\060\067\062\064\065\064  
\132\060\164\061\013\060\011\006\003\125\004\006\023\002\120\114  
\061\041\060\037\006\003\125\004\012\023\030\101\163\163\145\143  
\157\040\104\141\164\141\040\123\171\163\164\145\155\163\040\123  
\056\101\056\061\047\060\045\006\003\125\004\013\023\036\103\145  
\162\164\165\155\040\103\145\162\164\151\146\151\143\141\164\151  
\157\156\040\101\165\164\150\157\162\151\164\171\061\031\060\027  
\006\003\125\004\003\023\020\103\145\162\164\165\155\040\105\103  
\055\063\070\064\040\103\101\060\166\060\020\006\007\052\206\110  
\316\075\002\001\006\005\053\201\004\000\042\003\142\000\004\304  
\050\216\253\030\133\152\276\156\144\067\143\344\315\354\253\072  
\367\314\241\270\016\202\111\327\206\051\237\241\224\362\343\140  
\170\230\201\170\006\115\362\354\232\016\127\140\203\237\264\346  
\027\057\032\263\135\002\133\211\043\074\302\021\005\052\247\210  
\023\030\363\120\204\327\275\064\054\047\211\125\377\316\114\347  
\337\246\037\050\304\360\124\303\271\174\267\123\255\353\302\243  
\102\060\100\060\017\006\003\125\035\023\001\001\377\004\005\060  
\003\001\001\377\060\035\006\003\125\035\016\004\026\004\024\215  
\006\146\164\044\166\072\363\211\367\274\326\275\107\175\057\274  
\020\137\113\060\016\006\003\125\035\017\001\001\377\004\004\003  
\002\001\006\060\012\006\010\052\206\110\316\075\004\003\003\003  
\150\000\060\145\002\060\003\125\055\246\346\030\304\174\357\311  
\120\156\301\047\017\234\207\257\156\325\033\010\030\275\222\051  
\301\357\224\221\170\322\072\034\125\211\142\345\033\011\036\272  
\144\153\361\166\264\324\002\061\000\264\102\204\231\377\253\347  
\236\373\221\227\047\135\334\260\133\060\161\316\136\070\032\152  
\331\045\347\352\367\141\222\126\370\352\332\066\302\207\145\226  
\056\162\045\057\177\337\303\023\311

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "Certum EC-384 CA"

# Issuer: CN=Certum EC-384

CA,OU=Certum Certification Authority,O=Asseco Data Systems S.A.,C=PL

# Serial Number:78:8f:27:5c:81:12:52:20:a5:04:d0:2d:dd:ba:73:f4

# Subject: CN=Certum EC-384 CA,OU=Certum Certification Authority,O=Asseco Data Systems S.A.,C=PL

# Not Valid Before: Mon Mar 26 07:24:54 2018

# Not Valid After : Thu Mar 26 07:24:54 2043

# Fingerprint (SHA-256):

6B:32:80:85:62:53:18:AA:50:D1:73:C9:8D:8B:DA:09:D5:7E:27:41:3D:11:4C:F7:87:A0:F5:D0:6C:03:0C:F6

# Fingerprint (SHA1): F3:3E:78:3C:AC:DF:F4:A2:CC:AC:67:55:69:56:D7:E5:16:3C:E1:ED

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

```

CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Certum EC-384 CA"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\363\076\170\074\254\337\364\242\314\254\147\125\151\126\327\345
\026\074\341\355
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\266\145\263\226\140\227\022\241\354\116\341\075\243\306\311\361
END
CKA_ISSUER MULTILINE_OCTAL
\060\164\061\013\060\011\006\003\125\004\006\023\002\120\114\061
\041\060\037\006\003\125\004\012\023\030\101\163\163\145\143\157
\040\104\141\164\141\040\123\171\163\164\145\155\163\040\123\056
\101\056\061\047\060\045\006\003\125\004\013\023\036\103\145\162
\164\165\155\040\103\145\162\164\151\146\151\143\141\164\151\157
\156\040\101\165\164\150\157\162\151\164\171\061\031\060\027\006
\003\125\004\003\023\020\103\145\162\164\165\155\040\105\103\055
\063\070\064\040\103\101
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\020\170\217\047\134\201\022\122\040\245\004\320\055\335\272
\163\364
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "Certum Trusted Root CA"
#
# Issuer: CN=Certum Trusted Root CA,OU=Certum Certification Authority,O=Asseco Data Systems S.A.,C=PL
# Serial Number: 1e:bf:59:50:b8:c9:80:37:4c:06:f7:eb:55:4f:b5:ed
# Subject: CN=Certum Trusted Root
CA,OU=Certum Certification Authority,O=Asseco Data Systems S.A.,C=PL
# Not Valid Before: Fri Mar 16 12:10:13 2018
# Not Valid After : Mon Mar 16 12:10:13 2043
# Fingerprint (SHA-256):
FE:76:96:57:38:55:77:3E:37:A9:5E:7A:D4:D9:CC:96:C3:01:57:C1:5D:31:76:5B:A9:B1:57:04:E1:AE:78:FD
# Fingerprint (SHA1): C8:83:44:C0:18:AE:9F:CC:F1:87:B7:8F:22:D1:C5:D7:45:84:BA:E5
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Certum Trusted Root CA"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL

```

\060\172\061\013\060\011\006\003\125\004\006\023\002\120\114\061  
\041\060\037\006\003\125\004\012\023\030\101\163\163\145\143\157  
\040\104\141\164\141\040\123\171\163\164\145\155\163\040\123\056  
\101\056\061\047\060\045\006\003\125\004\013\023\036\103\145\162  
\164\165\155\040\103\145\162\164\151\146\151\143\141\164\151\157  
\156\040\101\165\164\150\157\162\151\164\171\061\037\060\035\006  
\003\125\004\003\023\026\103\145\162\164\165\155\040\124\162\165  
\163\164\145\144\040\122\157\157\164\040\103\101

END

CKA\_ID

UTF8 "0"

CKA\_ISSUER MULTILINE\_OCTAL

\060\172\061\013\060\011\006\003\125\004\006\023\002\120\114\061  
\041\060\037\006\003\125\004\012\023\030\101\163\163\145\143\157  
\040\104\141\164\141\040\123\171\163\164\145\155\163\040\123\056  
\101\056\061\047\060\045\006\003\125\004\013\023\036\103\145\162  
\164\165\155\040\103\145\162\164\151\146\151\143\141\164\151\157  
\156\040\101\165\164\150\157\162\151\164\171\061\037\060\035\006  
\003\125\004\003\023\026\103\145\162\164\165\155\040\124\162\165  
\163\164\145\144\040\122\157\157\164\040\103\101

END

CKA\_SERIAL\_NUMBER MULTILINE\_OCTAL

\002\020\036\277\131\120\270\311\200\067\114\006\367\353\125\117  
\265\355

END

CKA\_VALUE MULTILINE\_OCTAL

\060\202\005\300\060\202\003\250\240\003\002\001\002\002\020\036  
\277\131\120\270\311\200\067\114\006\367\353\125\117\265\355\060  
\015\006\011\052\206\110\206\367\015\001\001\015\005\000\060\172  
\061\013\060\011\006\003\125\004\006\023\002\120\114\061\041\060  
\037\006\003\125\004\012\023\030\101\163\163\145\143\157\040\104  
\141\164\141\040\123\171\163\164\145\155\163\040\123\056\101\056  
\061\047\060\045\006\003\125\004\013\023\036\103\145\162\164\165  
\155\040\103\145\162\164\151\146\151\143\141\164\151\157\156\040  
\101\165\164\150\157\162\151\164\171\061\037\060\035\006\003\125  
\004\003\023\026\103\145\162\164\165\155\040\124\162\165\163\164  
\145\144\040\122\157\157\164\040\103\101\060\036\027\015\061\070  
\060\063\061\066\061\062\061\060\061\063\132\027\015\064\063\060  
\063\061\066\061\062\061\060\061\063\132\060\172\061\013\060\011  
\006\003\125\004\006\023\002\120\114\061\041\060\037\006\003\125  
\004\012\023\030\101\163\163\145\143\157\040\104\141\164\141\040  
\123\171\163\164\145\155\163\040\123\056\101\056\061\047\060\045  
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\162\164\151\146\151\143\141\164\151\157\156\040\101\165\164\150  
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\103\145\162\164\165\155\040\124\162\165\163\164\145\144\040\122  
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\002\012\002\202\002\001\000\321\055\216\273\267\066\352\155\067  
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\237\101\006\315\355\243\272\300\333\011\054\301\174\337\051\176  
\113\145\057\223\247\324\001\153\003\050\030\243\330\235\005\301  
\052\330\105\361\221\336\337\073\320\200\002\214\317\070\017\352  
\247\134\170\021\244\301\310\205\134\045\323\323\262\347\045\317  
\021\124\227\253\065\300\036\166\034\357\000\123\237\071\334\024  
\245\054\042\045\263\162\162\374\215\263\345\076\010\036\024\052  
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\125\342\374\255\131\134\376\275\127\054\260\220\215\302\355\067  
\266\174\231\210\265\325\003\232\075\025\015\075\072\250\250\105  
\360\225\116\045\131\035\315\230\151\273\323\314\062\311\215\357  
\201\376\255\175\211\273\272\140\023\312\145\225\147\240\363\031  
\366\003\126\324\152\323\047\342\241\255\203\360\112\022\042\167  
\034\005\163\342\031\161\102\300\354\165\106\232\220\130\340\152  
\216\053\245\106\060\004\216\031\262\027\343\276\251\272\177\126  
\361\044\003\327\262\041\050\166\016\066\060\114\171\325\101\232  
\232\250\270\065\272\014\072\362\104\033\040\210\367\305\045\327  
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\131\130\376\235\046\372\070\206\076\235\212\207\144\127\345\027  
\072\342\371\215\271\343\063\170\301\220\330\270\335\267\203\121  
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\273\013\255\374\075\020\005\052\073\112\221\045\356\214\324\204
\207\200\052\274\011\214\252\072\023\137\350\064\171\120\301\020
\031\371\323\050\036\324\321\121\060\051\263\256\220\147\326\037
\012\143\261\305\251\306\102\061\143\027\224\357\151\313\057\372
\214\024\175\304\103\030\211\331\360\062\100\346\200\342\106\137
\345\343\301\000\131\250\371\350\040\274\211\054\016\107\064\013
\352\127\302\123\066\374\247\324\257\061\315\376\002\345\165\372
\271\047\011\371\363\365\073\312\175\237\251\042\313\210\311\252
\321\107\075\066\167\250\131\144\153\047\317\357\047\301\343\044
\265\206\367\256\176\062\115\260\171\150\321\071\350\220\130\303
\203\274\017\054\326\227\353\316\014\341\040\307\332\267\076\303
\077\277\057\334\064\244\373\053\041\315\147\217\113\364\343\352
\324\077\347\117\272\271\245\223\105\034\146\037\041\372\144\136
\157\340\166\224\062\313\165\365\156\345\366\217\307\270\244\314
\250\226\175\144\373\044\132\112\003\154\153\070\306\350\003\103
\232\367\127\271\263\051\151\223\070\364\003\362\273\373\202\153
\007\040\321\122\037\232\144\002\173\230\146\333\134\115\132\017
\320\204\225\240\074\024\103\006\312\312\333\270\101\066\332\152
\104\147\207\257\257\343\105\021\025\151\010\262\276\026\071\227
\044\157\022\105\321\147\135\011\250\311\025\332\372\322\246\137
\023\141\037\277\205\254\264\255\255\005\224\010\203\036\165\027
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\303\270\070\333
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END

CKA\_NSS\_Mozilla\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "Certum Trusted Root CA"

# Issuer: CN=Certum

Trusted Root CA,OU=Certum Certification Authority,O=Asseco Data Systems S.A.,C=PL

# Serial Number:1e:bf:59:50:b8:c9:80:37:4c:06:f7:eb:55:4f:b5:ed

# Subject: CN=Certum Trusted Root CA,OU=Certum Certification Authority,O=Asseco Data Systems S.A.,C=PL

# Not Valid Before: Fri Mar 16 12:10:13 2018

# Not Valid After : Mon Mar 16 12:10:13 2043

# Fingerprint (SHA-256):

FE:76:96:57:38:55:77:3E:37:A9:5E:7A:D4:D9:CC:96:C3:01:57:C1:5D:31:76:5B:A9:B1:57:04:E1:AE:78:FD

# Fingerprint (SHA1): C8:83:44:C0:18:AE:9F:CC:F1:87:B7:8F:22:D1:C5:D7:45:84:BA:E5

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "Certum Trusted Root CA"

CKA\_CERT\_SHA1\_HASH MULTILINE\_OCTAL

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\310\203\104\300\030\256\237\314\361\207\267\217\042\321\305\327
\105\204\272\345
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END

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CKA_CERT_MD5_HASH MULTILINE_OCTAL
\121\341\302\347\376\114\204\257\131\016\057\364\124\157\352\051
END
CKA_ISSUER MULTILINE_OCTAL
\060\172\061\013\060\011\006\003\125\004\006\023\002\120\114\061
\041\060\037\006\003\125\004\012\023\030\101\163\163\145\143\157
\040\104\141\164\141\040\123\171\163\164\145\155\163\040\123\056
\101\056\061\047\060\045\006\003\125\004\013\023\036\103\145\162
\164\165\155\040\103\145\162\164\151\146\151\143\141\164\151\157
\156\040\101\165\164\150\157\162\151\164\171\061\037\060\035\006
\003\125\004\003\023\026\103\145\162\164\165\155\040\124\162\165
\163\164\145\144\040\122\157\157\164\040\103\101
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\020\036\277\131\120\270\311\200\067\114\006\367\353\125\117
\265\355
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "TunTrust Root CA"
#
# Issuer: CN=TunTrust Root CA,O=Agence Nationale de Certification Electronique,C=TN
# Serial Number: 13:02:d5:e2:40:4c:92:46:86:16:67:5d:b4:bb:bb:b2:6b:3e:fc:13
#
# Subject: CN=TunTrust Root CA,O=Agence Nationale de Certification Electronique,C=TN
# Not Valid Before: Fri Apr 26 08:57:56 2019
# Not Valid After : Tue Apr 26 08:57:56 2044
# Fingerprint (SHA-256):
2E:44:10:2A:B5:8C:B8:54:19:45:1C:8E:19:D9:AC:F3:66:2C:AF:BC:61:4B:6A:53:96:0A:30:F7:D0:E2:EB:41
# Fingerprint (SHA1): CF:E9:70:84:0F:E0:73:0F:9D:F6:0C:7F:2C:4B:EE:20:46:34:9C:BB
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "TunTrust Root CA"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\141\061\013\060\011\006\003\125\004\006\023\002\124\116\061
\067\060\065\006\003\125\004\012\014\056\101\147\145\156\143\145
\040\116\141\164\151\157\156\141\154\145\040\144\145\040\103\145
\162\164\151\146\151\143\141\164\151\157\156\040\105\154\145\143
\164\162\157\156\151\161\165\145\061\031\060\027\006\003\125\004
\003\014\020\124\165\156\124\162\165\163\164\040\122\157\157\164

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\040\103\101
END
CKA_ID
UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\141\061\013\060\011\006\003\125\004\006\023\002\124\116\061
\067\060\065\006\003\125\004\012\014\056\101\147\145\156\143\145
\040\116\141\164\151\157\156\141\154\145\040\144\145\040\103\145
\162\164\151\146\151\143\141\164\151\157\156\040\105\154\145\143
\164\162\157\156\151\161\165\145\061\031\060\027\006\003\125\004
\003\014\020\124\165\156\124\162\165\163\164\040\122\157\157\164
\040\103\101
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\024\023\002\325\342\100\114\222\106\206\026\147\135\264\273
\273\262\153\076\374\023
END
CKA_VALUE MULTILINE_OCTAL
\060\202\005\263\060\202\003\233\240\003\002\001\002\002\024\023
\002\325\342\100\114\222\106\206\026\147\135\264\273\273\262\153
\076\374\023\060\015\006\011\052\206\110\206\367\015\001\001\013
\005\000\060\141\061\013\060\011\006\003\125\004\006\023\002\124
\116\061\067\060\065\006\003\125\004\012\014\056\101\147\145\156
\143\145\040\116\141\164\151\157\156\141\154\145\040\144\145\040
\103\145\162\164\151\146\151\143\141\164\151\157\156\040\105\154
\145\143\164\162\157\156\151\161\165\145\061\031\060\027\006\003
\125\004\003\014\020\124\165\156\124\162\165\163\164\040\122\157
\157\164\040\103\101\060\036\027\015\061\071\060\064\062\066\060
\070\065\067\065\066\132\027\015\064\064\060\064\062\066\060\070
\065\067\065\066\132\060\141\061\013\060\011\006\003\125\004\006
\023\002\124\116\061\067\060\065\006\003\125\004\012\014\056\101
\147\145\156\143\145\040\116\141\164\151\157\156\141\154\145\040
\144\145\040\103\145\162\164\151\146\151\143\141\164\151\157\156
\040\105\154\145\143\164\162\157\156\151\161\165\145\061\031\060
\027\006\003\125\004\003\014\020\124\165\156\124\162\165\163\164
\040\122\157\157\164\040\103\101\060\202\002\042\060\015\006\011
\052\206\110\206\367\015\001\001\001\005\000\003\202\002\017\000
\060\202\002\012\002\202\002\001\000\303\315\323\374\275\004\123
\335\014\040\072\325\210\056\005\113\101\365\203\202\176\367\131
\237\236\236\143\350\163\332\366\006\251\117\037\264\371\013\037
\071\214\232\040\320\176\006\324\354\064\331\206\274\165\133\207
\210\360\322\331\324\243\012\262\154\033\353\111\054\076\254\135
\330\224\003\240\354\064\345\060\304\065\175\373\046\115\033\156
\060\124\330\365\200\105\234\071\255\234\311\045\004\115\232\220
\076\116\100\156\212\153\315\051\147\306\314\055\340\164\350\005
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\352\235\035\205\162\354\021\273\065\350\037\047\277\301\241\307
\273\110\026\335\126\327\314\116\240\341\271\254\333\325\203\031
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\032\205\321\224\227\327\312\243\145\013\363\070\371\002\256\335  
\366\147\317\311\077\365\212\054\107\032\231\157\005\015\375\320  
\035\202\061\374\051\314\000\130\227\221\114\200\000\034\063\205  
\226\057\313\101\302\213\020\204\303\011\044\211\037\265\017\331  
\331\167\107\030\222\224\140\134\307\231\003\074\376\367\225\247  
\175\120\241\200\302\251\203\255\130\226\125\041\333\206\131\324  
\257\306\274\335\201\156\007\333\140\142\376\354\020\156\332\150  
\001\364\203\033\251\076\242\133\043\327\144\306\337\334\242\175  
\330\113\272\202\322\121\370\146\277\006\106\344\171\052\046\066  
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\014\214\325\233\326\310\361\126\077\032\200\211\172\251\342\033  
\062\121\054\076\362\337\173\366\135\172\051\031\216\345\310\275  
\066\161\213\135\114\302\035\077\255\130\242\317\075\160\115\246  
\120\230\045\334\043\371\270\130\101\010\161\277\117\270\204\240  
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\153\242\241\206\254\015\174\124\346\146\114\146\137\220\276\041  
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\060\141\060\035\006\003\125\035\016\004\026\004\024\006\232\233  
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\001\377\060\037\006\003\125\035\043\004\030\060\026\200\024\006  
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\267\335\002\216\370\201\050\134\314\334\155\257\137\024\234\175  
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\357\172\102\235\133\132\013\324\306\225\116\052\316\377\007\327  
\117\176\030\006\210\361\031\265\331\230\273\256\161\304\034\347  
\164\131\130\357\014\211\317\213\037\165\223\032\004\024\222\110  
\120\251\353\127\051\000\026\343\066\034\310\370\277\360\063\325  
\101\017\304\314\074\335\351\063\103\001\221\020\053\036\321\271

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\122\244\004\077\334\075\240\273\257\063\236\012\060\140\216\333
\235\135\224\250\275\140\347\142\200\166\201\203\014\214\314\060
\106\111\342\014\322\250\257\353\141\161\357\347\042\142\251\367
\134\144\154\237\026\214\147\066\047\105\365\011\173\277\366\020
\012\361\260\215\124\103\214\004\272\243\077\357\342\065\307\371
\164\340\157\064\101\320\277\163\145\127\040\371\233\147\172\146
\150\044\116\200\145\275\020\231\006\131\362\145\257\270\306\107
\273\375\220\170\213\101\163\056\257\125\037\334\073\222\162\156
\204\323\320\141\114\015\314\166\127\342\055\205\042\025\066\015
\353\001\235\353\330\353\304\204\231\373\300\014\314\062\350\343
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\000\361\025\255\203\053\232
```

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "TunTrust Root CA"

# Issuer: CN=TunTrust Root CA,O=Agence Nationale de Certification Electronique,C=TN

# Serial Number:13:02:d5:e2:40:4c:92:46:86:16:67:5d:b4:bb:bb:b2:6b:3e:fc:13

# Subject: CN=TunTrust Root CA,O=Agence Nationale de Certification Electronique,C=TN

#

Not Valid Before: Fri Apr 26 08:57:56 2019

# Not Valid After : Tue Apr 26 08:57:56 2044

# Fingerprint (SHA-256):

2E:44:10:2A:B5:8C:B8:54:19:45:1C:8E:19:D9:AC:F3:66:2C:AF:BC:61:4B:6A:53:96:0A:30:F7:D0:E2:EB:41

# Fingerprint (SHA1): CF:E9:70:84:0F:E0:73:0F:9D:F6:0C:7F:2C:4B:EE:20:46:34:9C:BB

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "TunTrust Root CA"

CKA\_CERT\_SHA1\_HASH MULTILINE\_OCTAL

```
\317\351\160\204\017\340\163\017\235\366\014\177\054\113\356\040
\106\064\234\273
```

END

CKA\_CERT\_MD5\_HASH MULTILINE\_OCTAL

```
\205\023\271\220\133\066\134\266\136\270\132\370\340\061\127\264
```

END

CKA\_ISSUER MULTILINE\_OCTAL

```
\060\141\061\013\060\011\006\003\125\004\006\023\002\124\116\061
\067\060\065\006\003\125\004\012\014\056\101\147\145\156\143\145
\040\116\141\164\151\157\156\141\154\145\040\144\145\040\103\145
\162\164\151\146\151\143\141\164\151\157\156\040\105\154\145\143
\164\162\157\156\151\161\165\145\061\031\060\027\006\003\125\004
```

\003\014\020\124\165\156\124\162\165\163\164\040\122\157\157\164  
\040\103\101

END

CKA\_SERIAL\_NUMBER

MULTILINE\_OCTAL

\002\024\023\002\325\342\100\114\222\106\206\026\147\135\264\273

\273\262\153\076\374\023

END

CKA\_TRUST\_SERVER\_AUTH CK\_TRUST CKT\_NSS\_TRUSTED\_DELEGATOR

CKA\_TRUST\_EMAIL\_PROTECTION CK\_TRUST CKT\_NSS\_MUST\_VERIFY\_TRUST

CKA\_TRUST\_CODE\_SIGNING CK\_TRUST CKT\_NSS\_MUST\_VERIFY\_TRUST

CKA\_TRUST\_STEP\_UP\_APPROVED CK\_BBOOL CK\_FALSE

#

# Certificate "HARICA TLS RSA Root CA 2021"

#

# Issuer: CN=HARICA TLS RSA Root CA 2021,O=Hellenic Academic and Research Institutions CA,C=GR

# Serial Number:39:ca:93:1c:ef:43:f3:c6:8e:93:c7:f4:64:89:38:7e

# Subject: CN=HARICA TLS RSA Root CA 2021,O=Hellenic Academic and Research Institutions CA,C=GR

# Not Valid Before: Fri Feb 19 10:55:38 2021

# Not Valid After : Mon Feb 13 10:55:37 2045

# Fingerprint (SHA-256):

D9:5D:0E:8E:DA:79:52:5B:F9:BE:B1:1B:14:D2:10:0D:32:94:98:5F:0C:62:D9:FA:BD:9C:D9:99:EC:CB:7B:1D

# Fingerprint

(SHA1): 02:2D:05:82:FA:88:CE:14:0C:06:79:DE:7F:14:10:E9:45:D7:A5:6D

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_CERTIFICATE

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "HARICA TLS RSA Root CA 2021"

CKA\_CERTIFICATE\_TYPE CK\_CERTIFICATE\_TYPE CKC\_X\_509

CKA\_SUBJECT MULTILINE\_OCTAL

\060\154\061\013\060\011\006\003\125\004\006\023\002\107\122\061

\067\060\065\006\003\125\004\012\014\056\110\145\154\154\145\156

\151\143\040\101\143\141\144\145\155\151\143\040\141\156\144\040

\122\145\163\145\141\162\143\150\040\111\156\163\164\151\164\165

\164\151\157\156\163\040\103\101\061\044\060\042\006\003\125\004

\003\014\033\110\101\122\111\103\101\040\124\114\123\040\122\123

\101\040\122\157\157\164\040\103\101\040\062\060\062\061

END

CKA\_ID UTF8 "0"

CKA\_ISSUER MULTILINE\_OCTAL

\060\154\061\013\060\011\006\003\125\004\006\023\002\107\122\061

\067\060\065\006\003\125\004\012\014\056\110\145\154\154\145\156

\151\143\040\101\143\141\144\145\155\151\143\040\141\156\144\040

\122\145\163\145\141\162\143\150\040\111\156\163\164\151\164\165

\164\151\157\156\163\040\103\101\061\044\060\042\006\003\125\004

\003\014\033\110\101\122\111\103\101\040\124\114\123\040\122\123

\101\040\122\157\157\164\040\103\101\040\062\060\062\061  
END  
CKA\_SERIAL\_NUMBER  
MULTILINE\_OCTAL  
\002\020\071\312\223\034\357\103\363\306\216\223\307\364\144\211  
\070\176  
END  
CKA\_VALUE MULTILINE\_OCTAL  
\060\202\005\244\060\202\003\214\240\003\002\001\002\002\020\071  
\312\223\034\357\103\363\306\216\223\307\364\144\211\070\176\060  
\015\006\011\052\206\110\206\367\015\001\001\013\005\000\060\154  
\061\013\060\011\006\003\125\004\006\023\002\107\122\061\067\060  
\065\006\003\125\004\012\014\056\110\145\154\154\145\156\151\143  
\040\101\143\141\144\145\155\151\143\040\141\156\144\040\122\145  
\163\145\141\162\143\150\040\111\156\163\164\151\164\165\164\151  
\157\156\163\040\103\101\061\044\060\042\006\003\125\004\003\014  
\033\110\101\122\111\103\101\040\124\114\123\040\122\123\101\040  
\122\157\157\164\040\103\101\040\062\060\062\061\060\036\027\015  
\062\061\060\062\061\071\061\060\065\065\063\070\132\027\015\064  
\065\060\062\061\063\061\060\065\065\063\067\132\060\154\061\013  
\060\011\006\003\125\004\006\023\002\107\122\061\067\060\065\006  
\003\125\004\012\014\056\110\145\154\154\145\156\151\143\040\101  
\143\141\144\145\155\151\143\040\141\156\144\040\122\145\163\145  
\141\162\143\150\040\111\156\163\164\151\164\165\164\151\157\156  
\163\040\103\101\061\044\060\042\006\003\125\004\003\014\033\110  
\101\122\111\103\101\040\124\114\123\040\122\123\101\040\122\157  
\157\164\040\103\101\040\062\060\062\061\060\202\002\042\060\015  
\006\011\052\206\110\206\367\015\001\001\001\005\000\003\202\002  
\017\000\060\202\002\012\002\202\002\001\000\213\302\347\257\145  
\233\005\147\226\311\015\044\271\320\016\144\374\316\342\044\030  
\054\204\177\167\121\313\004\021\066\270\136\355\151\161\247\236  
\344\045\011\227\147\301\107\302\317\221\026\066\142\075\070\004  
\341\121\202\377\254\322\264\151\335\056\354\021\243\105\356\153  
\153\073\114\277\214\215\244\036\235\021\271\351\070\371\172\016  
\014\230\342\043\035\321\116\143\324\347\270\101\104\373\153\257  
\153\332\037\323\305\221\210\133\244\211\222\321\201\346\214\071  
\130\240\326\151\103\251\255\230\122\130\156\333\012\373\153\317  
\150\372\343\244\136\072\105\163\230\007\352\137\002\162\336\014  
\245\263\237\256\251\035\267\035\263\374\212\131\347\156\162\145  
\255\365\060\224\043\007\363\202\026\113\065\230\234\123\273\057  
\312\344\132\331\307\215\035\374\230\231\373\054\244\202\153\360  
\052\037\216\013\137\161\134\134\256\102\173\051\211\201\313\003  
\243\231\312\210\236\013\100\011\101\063\333\346\130\172\375\256  
\231\160\300\132\017\326\023\206\161\057\166\151\374\220\335\333  
\055\156\321\362\233\365\032\153\236\157\025\214\172\360\113\050  
\240\042\070\200\044\154\066\244\073\362\060\221\363\170\023\317  
\301\077\065\253\361\035\021\043\265\103\042\236\001\222\267\030  
\002\345\021\321\202\333\025\000\314\141\067\301\052\174\232\341

\320\272\263\120\106\356\202\254\235\061\370\373\043\342\003\000  
\110\160\243\011\046\171\025\123\140\363\070\134\255\070\352\201  
\000\143\024\271\063\136\335\013\333\240\105\007\032\063\011\370  
\115\264\247\002\246\151\364\302\131\005\210\145\205\126\256\113  
\313\340\336\074\175\055\032\310\351\373\037\243\141\112\326\052  
\023\255\167\114\032\030\233\221\017\130\330\006\124\305\227\370  
\252\077\040\212\246\205\246\167\366\246\374\034\342\356\156\224  
\063\052\203\120\204\012\345\117\206\370\120\105\170\000\201\353  
\133\150\343\046\215\314\173\134\121\364\024\054\100\276\032\140  
\035\172\162\141\035\037\143\055\210\252\316\242\105\220\010\374  
\153\276\263\120\052\132\375\250\110\030\106\326\220\100\222\220  
\012\204\136\150\061\370\353\355\015\323\035\306\175\231\030\125  
\126\047\145\056\215\105\305\044\354\316\343\002\003\001\000\001  
\243\102\060\100\060\017\006\003\125\035\023\001\001\377\004\005  
\060\003\001\001\377\060\035\006\003\125\035\016\004\026\004\024  
\012\110\043\246\140\244\222\012\063\352\223\133\305\127\352\045  
\115\275\022\356\060\016\006\003\125\035\017\001\001\377\004\004  
\003\002\001\206\060\015\006\011\052\206\110\206\367\015\001\001  
\013\005\000\003\202\002\001\000\076\220\110\252\156\142\025\045  
\146\173\014\325\214\213\211\235\327\355\116\007\357\234\320\024  
\137\136\120\275\150\226\220\244\024\021\252\150\155\011\065\071  
\100\011\332\364\011\054\064\245\173\131\204\111\051\227\164\310  
\007\036\107\155\362\316\034\120\046\343\236\075\100\123\077\367  
\177\226\166\020\305\106\245\320\040\113\120\364\065\073\030\364  
\125\152\101\033\107\006\150\074\273\011\010\142\331\137\125\102  
\252\254\123\205\254\225\126\066\126\253\344\005\214\305\250\332  
\037\243\151\275\123\017\304\377\334\312\343\176\362\114\210\206  
\107\106\032\363\000\365\200\221\242\334\103\102\224\233\040\360  
\321\315\262\353\054\123\302\123\170\112\117\004\224\101\232\217  
\047\062\301\345\111\031\277\361\362\302\213\250\012\071\061\050  
\264\175\142\066\054\115\354\037\063\266\176\167\155\176\120\360  
\237\016\327\021\217\317\030\305\343\047\376\046\357\005\235\317  
\317\067\305\320\173\332\073\260\026\204\014\072\223\326\276\027  
\333\017\076\016\031\170\011\307\251\002\162\042\113\367\067\166  
\272\165\304\205\003\132\143\325\261\165\005\302\271\275\224\255  
\214\025\231\247\223\175\366\305\363\252\164\317\004\205\224\230  
\000\364\342\371\312\044\145\277\340\142\257\310\305\372\262\311  
\236\126\110\332\171\375\226\166\025\276\243\216\126\304\263\064  
\374\276\107\364\301\264\250\374\325\060\210\150\356\313\256\311  
\143\304\166\276\254\070\030\341\136\134\317\256\072\042\121\353  
\321\213\263\363\053\063\007\124\207\372\264\262\023\173\272\123  
\004\142\001\235\361\300\117\356\341\072\324\213\040\020\372\002  
\127\346\357\301\013\267\220\106\234\031\051\214\334\157\240\112  
\151\151\224\267\044\145\240\377\254\077\316\001\373\041\056\375  
\150\370\233\362\245\317\061\070\134\025\252\346\227\000\301\337  
\132\245\247\071\252\351\204\177\074\121\250\072\331\224\133\214  
\277\117\010\161\345\333\250\134\324\322\246\376\000\243\306\026  
\307\017\350\200\316\034\050\144\164\031\010\323\102\343\316\000

```
\135\177\261\334\023\260\341\005\313\321\040\252\206\164\236\071
\347\221\375\377\133\326\367\255\246\057\003\013\155\343\127\124
\353\166\123\030\215\021\230\272
```

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "HARICA TLS RSA Root CA 2021"

# Issuer: CN=HARICA TLS RSA Root CA 2021,O=Hellenic Academic and Research Institutions CA,C=GR

# Serial Number:39:ca:93:1c:ef:43:f3:c6:8e:93:c7:f4:64:89:38:7e

# Subject: CN=HARICA TLS RSA Root CA 2021,O=Hellenic Academic and Research Institutions CA,C=GR

# Not Valid Before: Fri Feb 19 10:55:38 2021

# Not Valid After : Mon Feb 13 10:55:37 2045

# Fingerprint (SHA-256):

D9:5D:0E:8E:DA:79:52:5B:F9:BE:B1:1B:14:D2:10:0D:32:94:98:5F:0C:62:D9:FA:BD:9C:D9:99:EC:CB:7B:1D

# Fingerprint (SHA1): 02:2D:05:82:FA:88:CE:14:0C:06:79:DE:7F:14:10:E9:45:D7:A5:6D

CKA\_CLASS

CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "HARICA TLS RSA Root CA 2021"

CKA\_CERT\_SHA1\_HASH MULTILINE\_OCTAL

```
\002\055\005\202\372\210\316\024\014\006\171\336\177\024\020\351
\105\327\245\155
```

END

CKA\_CERT\_MD5\_HASH MULTILINE\_OCTAL

```
\145\107\233\130\206\335\054\360\374\242\204\037\036\226\304\221
END
```

CKA\_ISSUER MULTILINE\_OCTAL

```
\060\154\061\013\060\011\006\003\125\004\006\023\002\107\122\061
\067\060\065\006\003\125\004\012\014\056\110\145\154\154\145\156
\151\143\040\101\143\141\144\145\155\151\143\040\141\156\144\040
\122\145\163\145\141\162\143\150\040\111\156\163\164\151\164\165
\164\151\157\156\163\040\103\101\061\044\060\042\006\003\125\004
\003\014\033\110\101\122\111\103\101\040\124\114\123\040\122\123
\101\040\122\157\157\164\040\103\101\040\062\060\062\061
```

END

CKA\_SERIAL\_NUMBER MULTILINE\_OCTAL

```
\002\020\071\312\223\034\357\103\363\306\216\223\307\364\144\211
\070\176
```

END

CKA\_TRUST\_SERVER\_AUTH

CK\_TRUST CKT\_NSS\_TRUSTED\_DELEGATOR

CKA\_TRUST\_EMAIL\_PROTECTION CK\_TRUST CKT\_NSS\_MUST\_VERIFY\_TRUST

CKA\_TRUST\_CODE\_SIGNING CK\_TRUST CKT\_NSS\_MUST\_VERIFY\_TRUST

CKA\_TRUST\_STEP\_UP\_APPROVED CK\_BBOOL CK\_FALSE

#

# Certificate "HARICA TLS ECC Root CA 2021"

#

# Issuer: CN=HARICA TLS ECC Root CA 2021,O=Hellenic Academic and Research Institutions CA,C=GR

# Serial Number:67:74:9d:8d:77:d8:3b:6a:db:22:f4:ff:59:e2:bf:ce

# Subject: CN=HARICA TLS ECC Root CA 2021,O=Hellenic Academic and Research Institutions CA,C=GR

# Not Valid Before: Fri Feb 19 11:01:10 2021

# Not Valid After : Mon Feb 13 11:01:09 2045

# Fingerprint (SHA-256):

3F:99:CC:47:4A:CF:CE:4D:FE:D5:87:94:66:5E:47:8D:15:47:73:9F:2E:78:0F:1B:B4:CA:9B:13:30:97:D4:01

# Fingerprint (SHA1): BC:B0:C1:9D:E9:98:92:70:19:38:57:E9:8D:A7:B4:5D:6E:EE:01:48

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_CERTIFICATE

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "HARICA TLS ECC Root  
CA 2021"

CKA\_CERTIFICATE\_TYPE CK\_CERTIFICATE\_TYPE CKC\_X\_509

CKA\_SUBJECT MULTILINE\_OCTAL

\060\154\061\013\060\011\006\003\125\004\006\023\002\107\122\061  
\067\060\065\006\003\125\004\012\014\056\110\145\154\154\145\156  
\151\143\040\101\143\141\144\145\155\151\143\040\141\156\144\040  
\122\145\163\145\141\162\143\150\040\111\156\163\164\151\164\165  
\164\151\157\156\163\040\103\101\061\044\060\042\006\003\125\004  
\003\014\033\110\101\122\111\103\101\040\124\114\123\040\105\103  
\103\040\122\157\157\164\040\103\101\040\062\060\062\061

END

CKA\_ID UTF8 "0"

CKA\_ISSUER MULTILINE\_OCTAL

\060\154\061\013\060\011\006\003\125\004\006\023\002\107\122\061  
\067\060\065\006\003\125\004\012\014\056\110\145\154\154\145\156  
\151\143\040\101\143\141\144\145\155\151\143\040\141\156\144\040  
\122\145\163\145\141\162\143\150\040\111\156\163\164\151\164\165  
\164\151\157\156\163\040\103\101\061\044\060\042\006\003\125\004  
\003\014\033\110\101\122\111\103\101\040\124\114\123\040\105\103  
\103\040\122\157\157\164\040\103\101\040\062\060\062\061

END

CKA\_SERIAL\_NUMBER

MULTILINE\_OCTAL

\002\020\147\164\235\215\167\330\073\152\333\042\364\377\131\342  
\277\316

END

CKA\_VALUE MULTILINE\_OCTAL

\060\202\002\124\060\202\001\333\240\003\002\001\002\002\020\147  
\164\235\215\167\330\073\152\333\042\364\377\131\342\277\316\060  
\012\006\010\052\206\110\316\075\004\003\003\060\154\061\013\060



\011\006\003\125\004\006\023\002\107\122\061\067\060\065\006\003  
\125\004\012\014\056\110\145\154\154\145\156\151\143\040\101\143  
\141\144\145\155\151\143\040\141\156\144\040\122\145\163\145\141  
\162\143\150\040\111\156\163\164\151\164\165\164\151\157\156\163  
\040\103\101\061\044\060\042\006\003\125\004\003\014\033\110\101  
\122\111\103\101\040\124\114\123\040\105\103\103\040\122\157\157  
\164\040\103\101\040\062\060\062\061\060\036\027\015\062\061\060  
\062\061\071\061\061\060\061\061\060\132\027\015\064\065\060\062  
\061\063\061\061\060\061\060\071\132\060\154\061\013\060\011\006  
\003\125\004\006\023\002\107\122\061\067\060\065\006\003\125\004  
\012\014\056\110\145\154\154\145\156\151\143\040\101\143\141\144  
\145\155\151\143\040\141\156\144\040\122\145\163\145\141\162\143  
\150\040\111\156\163\164\151\164\165\164\151\157\156\163\040\103  
\101\061\044\060\042\006\003\125\004\003\014\033\110\101\122\111  
\103\101\040\124\114\123\040\105\103\103\040\122\157\157\164\040  
\103\101\040\062\060\062\061\060\166\060\020\006\007\052\206\110  
\316\075\002\001\006\005\053\201\004\000\042\003\142\000\004\070  
\010\376\261\240\226\322\172\254\257\111\072\320\300\340\303\073  
\050\252\361\162\155\145\000\107\210\204\374\232\046\153\252\113  
\272\154\004\012\210\136\027\362\125\207\374\060\260\064\342\064  
\130\127\032\204\123\351\060\331\251\362\226\164\303\121\037\130  
\111\061\314\230\116\140\021\207\165\323\162\224\220\117\233\020  
\045\052\250\170\055\276\220\101\130\220\025\162\247\241\267\243  
\102\060\100\060\017\006\003\125\035\023\001\001\377\004\005\060  
\003\001\001\377\060\035\006\003\125\035\016\004\026\004\024\311  
\033\123\201\022\376\004\325\026\321\252\274\232\157\267\240\225  
\031\156\312\060\016\006\003\125\035\017\001\001\377\004\004\003  
\002\001\206\060\012\006\010\052\206\110\316\075\004\003\003\003  
\147\000\060\144\002\060\021\336\256\370\334\116\210\260\251\360  
\042\255\302\121\100\357\140\161\055\356\217\002\304\135\003\160  
\111\244\222\352\305\024\210\160\246\323\015\260\252\312\054\100  
\234\373\351\202\156\232\002\060\053\107\232\007\306\321\302\201  
\174\312\013\226\030\101\033\243\364\060\011\236\265\043\050\015  
\237\024\266\074\123\242\114\006\151\175\372\154\221\306\052\111  
\105\346\354\267\023\341\072\154

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "HARICA TLS ECC Root CA 2021"

# Issuer: CN=HARICA TLS ECC Root CA 2021,O=Hellenic Academic and Research Institutions CA,C=GR

# Serial Number:67:74:9d:8d:77:d8:3b:6a:db:22:f4:ff:59:e2:bf:ce

# Subject: CN=HARICA TLS ECC Root CA 2021,O=Hellenic  
Academic and Research Institutions CA,C=GR

# Not Valid Before: Fri Feb 19 11:01:10 2021

# Not Valid After : Mon Feb 13 11:01:09 2045

```

# Fingerprint (SHA-256):
3F:99:CC:47:4A:CF:CE:4D:FE:D5:87:94:66:5E:47:8D:15:47:73:9F:2E:78:0F:1B:B4:CA:9B:13:30:97:D4:01
# Fingerprint (SHA1): BC:B0:C1:9D:E9:98:92:70:19:38:57:E9:8D:A7:B4:5D:6E:EE:01:48
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "HARICA TLS ECC Root CA 2021"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\274\260\301\235\351\230\222\160\031\070\127\351\215\247\264\135
\156\356\001\110
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\256\367\114\345\146\065\321\267\233\214\042\223\164\323\113\260
END
CKA_ISSUER MULTILINE_OCTAL
\060\154\061\013\060\011\006\003\125\004\006\023\002\107\122\061
\067\060\065\006\003\125\004\012\014\056\110\145\154\154\145\156
\151\143\040\101\143\141\144\145\155\151\143\040\141\156\144\040
\122\145\163\145\141\162\143\150\040\111\156\163\164\151\164\165
\164\151\157\156\163\040\103\101\061\044\060\042\006\003\125\004
\003\014\033\110\101\122\111\103\101\040\124\114\123\040\105\103
\103\040\122\157\157\164\040\103\101\040\062\060\062\061
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\020\147\164\235\215\167\330\073\152\333\042\364\377\131\342
\277\316
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "HARICA Client RSA Root CA 2021"
#
# Issuer: CN=HARICA Client RSA Root CA 2021,O=Hellenic Academic and Research Institutions CA,C=GR
# Serial Number:55:52:f8:1e:db:1b:24:2c:9e:bb:96:18:cd:02:28:3e
# Subject: CN=HARICA Client RSA Root CA 2021,O=Hellenic Academic and Research Institutions CA,C=GR
# Not Valid Before: Fri Feb 19 10:58:46 2021
# Not Valid After : Mon Feb 13 10:58:45 2045
# Fingerprint (SHA-256):
1B:E7:AB:E3:06:86:B1:63:48:AF:D1:C6:1B:68:66:A0:EA:7F:48:21:E6:7D:5E:8A:F9:37:CF:80:11:BC:75:0D
#
Fingerprint (SHA1): 46:C6:90:0A:77:3A:B6:BC:F4:65:AD:AC:FC:E3:F7:07:00:6E:DE:6E
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE

```

```
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "HARICA Client RSA Root CA 2021"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\157\061\013\060\011\006\003\125\004\006\023\002\107\122\061
\067\060\065\006\003\125\004\012\014\056\110\145\154\154\145\156
\151\143\040\101\143\141\144\145\155\151\143\040\141\156\144\040
\122\145\163\145\141\162\143\150\040\111\156\163\164\151\164\165
\164\151\157\156\163\040\103\101\061\047\060\045\006\003\125\004
\003\014\036\110\101\122\111\103\101\040\103\154\151\145\156\164
\040\122\123\101\040\122\157\157\164\040\103\101\040\062\060\062
\061
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\157\061\013\060\011\006\003\125\004\006\023\002\107\122\061
\067\060\065\006\003\125\004\012\014\056\110\145\154\154\145\156
\151\143\040\101\143\141\144\145\155\151\143\040\141\156\144\040
\122\145\163\145\141\162\143\150\040\111\156\163\164\151\164\165
\164\151\157\156\163\040\103\101\061\047\060\045\006\003\125\004
\003\014\036\110\101\122\111\103\101\040\103\154\151\145\156\164
\040\122\123\101\040\122\157\157\164\040\103\101\040\062\060\062
\061
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\020\125\122\370\036\333\033\044\054\236\273\226\030\315\002
\050\076
END
CKA_VALUE MULTILINE_OCTAL
\060\202\005\252\060\202\003\222\240\003\002\001\002\002\020\125
\122\370\036\333\033\044\054\236\273\226\030\315\002\050\076\060
\015\006\011\052\206\110\206\367\015\001\001\013\005\000\060\157
\061\013\060\011\006\003\125\004\006\023\002\107\122\061\067\060
\065\006\003\125\004\012\014\056\110\145\154\154\145\156\151\143
\040\101\143\141\144\145\155\151\143\040\141\156\144\040\122\145
\163\145\141\162\143\150\040\111\156\163\164\151\164\165\164\151
\157\156\163\040\103\101\061\047\060\045\006\003\125\004\003\014
\036\110\101\122\111\103\101\040\103\154\151\145\156\164\040\122
\123\101\040\122\157\157\164\040\103\101\040\062\060\062\061\060
\036\027\015\062\061\060\062\061\071\061\060\065\070\064\066\132
\027\015\064\065\060\062\061\063\061\060\065\070\064\065\132\060
\157\061\013\060\011\006\003\125\004\006\023\002\107\122\061\067
\060\065\006\003\125\004\012\014\056\110\145\154\154\145\156\151
\143\040\101\143\141\144\145\155\151\143\040\141\156\144\040\122
\145\163\145\141\162\143\150\040\111\156\163\164\151\164\165\164
\151\157\156\163\040\103\101\061\047\060\045\006\003\125\004\003
```

\014\036\110\101\122\111\103\101\040\103\154\151\145\156\164\040  
\122\123\101\040\122\157\157\164\040\103\101\040\062\060\062\061  
\060\202\002\042\060\015\006\011\052\206\110\206\367\015\001\001  
\001\005\000\003\202\002\017\000\060\202\002\012\002\202\002\001  
\000\201\333\127\102\220\054\164\065\364\370\270\164\031\115\253  
\011\132\167\105\201\163\142\260\065\237\370\320\267\063\000\207  
\023\266\226\253\016\124\022\060\007\274\233\267\110\327\321\031  
\203\256\216\330\251\361\251\000\204\260\214\136\236\350\014\217  
\124\151\277\366\324\010\117\046\160\376\030\101\143\032\263\062  
\213\100\370\007\253\127\061\360\306\026\166\147\232\264\335\057  
\362\321\153\305\320\222\204\221\161\156\017\056\143\351\037\123  
\244\335\122\023\314\011\203\051\201\014\305\123\165\104\261\016  
\147\123\030\320\303\037\210\113\237\224\044\264\051\274\273\350  
\116\375\157\322\025\035\111\334\215\160\362\021\032\040\121\125  
\021\272\210\157\304\367\120\171\326\252\061\342\204\075\136\062  
\310\167\052\120\161\345\013\057\351\266\352\357\253\012\063\071  
\016\375\217\245\147\103\202\216\230\151\011\011\033\100\315\070  
\147\107\352\311\354\227\161\022\336\044\365\162\074\321\367\103  
\114\046\367\220\262\211\351\105\113\125\075\061\005\172\101\342  
\225\272\103\300\027\305\266\205\075\031\215\144\160\363\133\254  
\315\237\323\051\165\207\113\225\147\152\246\370\321\335\274\220  
\206\211\103\051\251\067\133\365\135\260\046\132\123\102\166\220  
\053\317\236\126\154\053\124\317\134\232\145\337\133\213\110\140  
\070\174\373\305\013\317\166\004\143\002\063\052\175\365\203\147  
\347\372\306\103\375\053\017\324\046\057\167\244\062\301\044\352  
\144\235\277\263\070\161\061\104\362\107\270\242\146\101\241\373  
\233\173\274\307\106\152\165\277\132\242\214\350\152\104\301\270  
\226\265\300\062\010\055\173\164\065\163\262\312\306\376\257\021  
\162\030\366\347\310\302\317\245\052\352\173\326\131\350\174\240  
\262\152\100\011\151\016\245\226\333\321\000\271\361\210\156\066  
\360\210\262\235\361\122\362\303\174\277\060\211\074\012\151\371  
\042\244\145\341\233\340\164\306\261\205\227\226\054\256\224\217  
\120\246\071\022\037\276\107\362\201\170\323\165\066\236\175\132  
\040\227\342\122\256\231\237\306\174\233\146\363\376\330\317\356  
\275\227\006\035\055\205\334\076\066\123\226\173\040\272\350\310  
\341\255\226\142\076\021\174\263\000\204\236\247\114\161\253\112  
\067\002\003\001\000\001\243\102\060\100\060\017\006\003\125\035  
\023\001\001\377\004\005\060\003\001\001\377\060\035\006\003\125  
\035\016\004\026\004\024\240\326\007\075\136\044\367\173\240\104  
\056\044\122\015\031\252\053\004\221\247\060\016\006\003\125\035  
\017\001\001\377\004\004\003\002\001\206\060\015\006\011\052\206  
\110\206\367\015\001\001\013\005\000\003\202\002\001\000\015\107  
\371\011\146\061\122\354\171\356\302\250\362\150\076\355\226\105  
\313\072\246\230\143\077\352\053\115\116\003\320\034\202\341\313  
\323\345\326\253\133\147\050\274\235\376\014\231\012\200\125\247  
\316\033\043\141\015\260\127\360\376\340\312\276\346\220\333\203  
\054\276\203\216\364\171\266\376\320\015\102\247\130\037\151\352  
\201\365\005\245\376\106\150\353\154\170\311\340\352\347\346\336

\061\305\322\325\054\202\143\050\235\135\250\032\176\210\346\347  
\053\361\054\325\320\005\236\334\055\275\067\146\324\004\242\247  
\255\277\072\302\250\073\255\377\215\235\063\340\271\232\204\241  
\207\037\166\364\202\164\327\016\371\060\110\076\133\210\076\252  
\134\153\326\057\014\350\216\163\302\030\221\203\071\266\146\132  
\320\037\140\047\135\115\343\366\072\015\146\120\234\170\173\253  
\363\023\020\256\017\057\253\350\144\263\030\040\235\106\065\144  
\045\163\352\233\020\134\130\065\211\261\106\110\247\364\254\324  
\035\236\133\314\251\245\032\023\117\044\120\252\331\033\155\261  
\100\373\235\335\130\164\304\302\157\024\162\354\333\065\237\270  
\124\165\105\303\246\310\032\050\065\072\256\145\362\251\230\316  
\257\133\311\070\214\061\073\177\314\334\226\375\342\133\326\320  
\131\364\166\272\013\313\117\203\020\307\100\320\035\140\351\052  
\345\110\130\167\014\105\151\276\031\161\004\044\342\343\044\037  
\112\310\301\076\231\365\226\230\070\110\045\241\025\260\033\327  
\342\204\030\133\366\161\065\232\150\173\100\314\030\134\014\044  
\235\324\225\365\231\252\106\352\256\254\277\364\024\031\044\350  
\214\354\343\365\274\006\150\212\052\014\005\137\012\227\165\247  
\334\176\300\375\327\172\030\337\060\321\070\113\037\260\230\160  
\277\314\174\163\360\156\304\061\245\244\227\035\254\277\316\154  
\041\112\276\047\043\147\363\006\126\201\012\221\216\266\341\003  
\005\063\054\332\064\010\115\116\120\043\255\037\245\305\324\172  
\376\352\011\354\247\050\140\213\106\174\265\352\233\335\117\371  
\347\153\025\306\210\317\103\333\345\047\334\004\126\156\157\106  
\025\361\126\055\350\134\014\163\303\043\201\070\040\313\311\014  
\151\317\054\253\073\204\140\063\031\122\375\151\024\063

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "HARICA Client RSA Root CA 2021"

# Issuer: CN=HARICA Client RSA Root CA 2021,O=Hellenic Academic and Research Institutions CA,C=GR

# Serial Number:55:52:f8:1e:db:1b:24:2c:9e:bb:96:18:cd:02:28:3e

# Subject: CN=HARICA Client RSA Root CA 2021,O=Hellenic Academic and Research Institutions CA,C=GR

# Not Valid Before: Fri Feb 19 10:58:46 2021

# Not Valid After : Mon Feb 13 10:58:45 2045

# Fingerprint (SHA-256):

1B:E7:AB:E3:06:86:B1:63:48:AF:D1:C6:1B:68:66:A0:EA:7F:48:21:E6:7D:5E:8A:F9:37:CF:80:11:BC:75:0D

#

Fingerprint (SHA1): 46:C6:90:0A:77:3A:B6:BC:F4:65:AD:AC:FC:E3:F7:07:00:6E:DE:6E

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "HARICA Client RSA Root CA 2021"

CKA\_CERT\_SHA1\_HASH MULTILINE\_OCTAL

\106\306\220\012\167\072\266\274\364\145\255\254\374\343\367\007  
\000\156\336\156

END

CKA\_CERT\_MD5\_HASH MULTILINE\_OCTAL

\157\355\134\327\210\314\070\251\334\351\335\331\135\333\330\355

END

CKA\_ISSUER MULTILINE\_OCTAL

\060\157\061\013\060\011\006\003\125\004\006\023\002\107\122\061  
\067\060\065\006\003\125\004\012\014\056\110\145\154\154\145\156  
\151\143\040\101\143\141\144\145\155\151\143\040\141\156\144\040  
\122\145\163\145\141\162\143\150\040\111\156\163\164\151\164\165  
\164\151\157\156\163\040\103\101\061\047\060\045\006\003\125\004  
\003\014\036\110\101\122\111\103\101\040\103\154\151\145\156\164  
\040\122\123\101\040\122\157\157\164\040\103\101\040\062\060\062  
\061

END

CKA\_SERIAL\_NUMBER

MULTILINE\_OCTAL

\002\020\125\122\370\036\333\033\044\054\236\273\226\030\315\002  
\050\076

END

CKA\_TRUST\_SERVER\_AUTH CK\_TRUST CKT\_NSS\_MUST\_VERIFY\_TRUST

CKA\_TRUST\_EMAIL\_PROTECTION CK\_TRUST CKT\_NSS\_TRUSTED\_DELEGATOR

CKA\_TRUST\_CODE\_SIGNING CK\_TRUST CKT\_NSS\_MUST\_VERIFY\_TRUST

CKA\_TRUST\_STEP\_UP\_APPROVED CK\_BBOOL CK\_FALSE

#

# Certificate "HARICA Client ECC Root CA 2021"

#

# Issuer: CN=HARICA Client ECC Root CA 2021,O=Hellenic Academic and Research Institutions CA,C=GR

# Serial Number:31:68:d9:d8:e1:62:57:1e:d2:19:44:88:e6:10:7d:f0

# Subject: CN=HARICA Client ECC Root CA 2021,O=Hellenic Academic and Research Institutions CA,C=GR

# Not Valid Before: Fri Feb 19 11:03:34 2021

# Not Valid After : Mon Feb 13 11:03:33 2045

# Fingerprint (SHA-256):

8D:D4:B5:37:3C:B0:DE:36:76:9C:12:33:92:80:D8:27:46:B3:AA:6C:D4:26:E7:97:A3:1B:AB:E4:27:9C:F0:0B

# Fingerprint (SHA1): BE:64:D3:DA:14:4B:D2:6B:CD:AF:8F:DB:A6:A6:72:F8:DE:26:F9:00

CKA\_CLASS

CK\_OBJECT\_CLASS CKO\_CERTIFICATE

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "HARICA Client ECC Root CA 2021"

CKA\_CERTIFICATE\_TYPE CK\_CERTIFICATE\_TYPE CKC\_X\_509

CKA\_SUBJECT MULTILINE\_OCTAL

\060\157\061\013\060\011\006\003\125\004\006\023\002\107\122\061  
\067\060\065\006\003\125\004\012\014\056\110\145\154\154\145\156  
\151\143\040\101\143\141\144\145\155\151\143\040\141\156\144\040

\122\145\163\145\141\162\143\150\040\111\156\163\164\151\164\165  
\164\151\157\156\163\040\103\101\061\047\060\045\006\003\125\004  
\003\014\036\110\101\122\111\103\101\040\103\154\151\145\156\164  
\040\105\103\103\040\122\157\157\164\040\103\101\040\062\060\062  
\061

END

CKA\_ID UTF8 "0"

CKA\_ISSUER MULTILINE\_OCTAL

\060\157\061\013\060\011\006\003\125\004\006\023\002\107\122\061  
\067\060\065\006\003\125\004\012\014\056\110\145\154\154\145\156  
\151\143\040\101\143\141\144\145\155\151\143\040\141\156\144\040  
\122\145\163\145\141\162\143\150\040\111\156\163\164\151\164\165  
\164\151\157\156\163\040\103\101\061\047\060\045\006\003\125\004  
\003\014\036\110\101\122\111\103\101\040\103\154\151\145\156\164  
\040\105\103\103\040\122\157\157\164\040\103\101\040\062\060\062  
\061

END

CKA\_SERIAL\_NUMBER

MULTILINE\_OCTAL

\002\020\061\150\331\330\341\142\127\036\322\031\104\210\346\020  
\175\360

END

CKA\_VALUE MULTILINE\_OCTAL

\060\202\002\132\060\202\001\341\240\003\002\001\002\002\020\061  
\150\331\330\341\142\127\036\322\031\104\210\346\020\175\360\060  
\012\006\010\052\206\110\316\075\004\003\003\060\157\061\013\060  
\011\006\003\125\004\006\023\002\107\122\061\067\060\065\006\003  
\125\004\012\014\056\110\145\154\154\145\156\151\143\040\101\143  
\141\144\145\155\151\143\040\141\156\144\040\122\145\163\145\141  
\162\143\150\040\111\156\163\164\151\164\165\164\151\157\156\163  
\040\103\101\061\047\060\045\006\003\125\004\003\014\036\110\101  
\122\111\103\101\040\103\154\151\145\156\164\040\105\103\103\040  
\122\157\157\164\040\103\101\040\062\060\062\061\060\036\027\015  
\062\061\060\062\061\071\061\061\060\063\063\064\132\027\015\064  
\065\060\062\061\063\061\061\060\063\063\063\132\060\157\061\013  
\060\011\006\003\125\004\006\023\002\107\122\061\067\060\065\006  
\003\125\004\012\014\056\110\145\154\154\145\156\151\143\040\101  
\143\141\144\145\155\151\143\040\141\156\144\040\122\145\163\145  
\141\162\143\150\040\111\156\163\164\151\164\165\164\151\157\156  
\163\040\103\101\061\047\060\045\006\003\125\004\003\014\036\110  
\101\122\111\103\101\040\103\154\151\145\156\164\040\105\103\103  
\040\122\157\157\164\040\103\101\040\062\060\062\061\060\166\060  
\020\006\007\052\206\110\316\075\002\001\006\005\053\201\004\000  
\042\003\142\000\004\007\030\255\225\226\224\320\134\017\202\367  
\052\100\372\002\311\311\075\066\246\243\004\152\301\155\225\001  
\210\140\022\124\154\134\242\053\156\023\072\210\225\014\034\046  
\206\066\112\211\031\267\030\336\073\350\250\120\037\312\337\133  
\277\111\200\025\333\343\060\341\035\132\307\052\212\001\007\376

```
\155\054\064\357\050\050\227\274\301\371\127\206\225\213\065\317
\236\132\321\150\225\243\102\060\100\060\017\006\003\125\035\023
\001\001\377\004\005\060\003\001\001\377\060\035\006\003\125\035
\016\004\026\004\024\122\010\322\276\062\201\045\375\365\032\227
\354\116\137\032\273\123\315\220\255\060\016\006\003\125\035\017
\001\001\377\004\004\003\002\001\206\060\012\006\010\052\206\110
\316\075\004\003\003\003\147\000\060\144\002\060\114\061\105\106
\117\250\346\276\303\167\262\032\030\113\055\210\173\130\346\253
\224\153\104\003\260\027\377\337\202\163\104\121\054\375\223\035
\006\173\024\322\211\354\100\014\357\041\001\056\002\060\057\311
\056\132\154\054\035\331\225\340\236\260\271\134\122\174\366\370
\070\312\056\361\324\035\362\242\111\242\225\370\301\130\136\117
\376\163\012\357\061\260\253\043\130\023\214\213\336\073
```

END

CKA\_NSS\_Mozilla\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "HARICA

Client ECC Root CA 2021"

# Issuer: CN=HARICA Client ECC Root CA 2021,O=Hellenic Academic and Research Institutions CA,C=GR

# Serial Number:31:68:d9:d8:e1:62:57:1e:d2:19:44:88:e6:10:7d:f0

# Subject: CN=HARICA Client ECC Root CA 2021,O=Hellenic Academic and Research Institutions CA,C=GR

# Not Valid Before: Fri Feb 19 11:03:34 2021

# Not Valid After : Mon Feb 13 11:03:33 2045

# Fingerprint (SHA-256):

8D:D4:B5:37:3C:B0:DE:36:76:9C:12:33:92:80:D8:27:46:B3:AA:6C:D4:26:E7:97:A3:1B:AB:E4:27:9C:F0:0B

# Fingerprint (SHA1): BE:64:D3:DA:14:4B:D2:6B:CD:AF:8F:DB:A6:A6:72:F8:DE:26:F9:00

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "HARICA Client ECC Root CA 2021"

CKA\_CERT\_SHA1\_HASH MULTILINE\_OCTAL

```
\276\144\323\332\024\113\322\153\315\257\217\333\246\246\162\370
```

```
\336\046\371\000
```

END

CKA\_CERT\_MD5\_HASH MULTILINE\_OCTAL

```
\255\270\120\246\251\202\172\154\075\032\252\244\322\143\244\104
```

END

CKA\_ISSUER MULTILINE\_OCTAL

```
\060\157\061\013\060\011\006\003\125\004\006\023\002\107\122\061
```

```
\067\060\065\006\003\125\004\012\014\056\110\145\154\154\145\156
```

```
\151\143\040\101\143\141\144\145\155\151\143\040\141\156\144\040
```

```
\122\145\163\145\141\162\143\150\040\111\156\163\164\151\164\165
```

```
\164\151\157\156\163\040\103\101\061\047\060\045\006\003\125\004
```

```
\003\014\036\110\101\122\111\103\101\040\103\154\151\145\156\164
```



```
\040\105\103\103\040\122\157\157\164\040\103\101\040\062\060\062
\061
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\020\061\150\331\330\341\142\127\036\322\031\104\210\346\020
\175\360
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "Autoridad de Certificacion Firmaprofesional CIF A62634068"
#
# Issuer: CN=Autoridad de Certificacion Firmaprofesional CIF A62634068,C=ES
# Serial Number:1b:70:e9:d2:ff:ae:6c:71
#
Subject: CN=Autoridad de Certificacion Firmaprofesional CIF A62634068,C=ES
# Not Valid Before: Tue Sep 23 15:22:07 2014
# Not Valid After : Mon May 05 15:22:07 2036
# Fingerprint (SHA-256):
57:DE:05:83:EF:D2:B2:6E:03:61:DA:99:DA:9D:F4:64:8D:EF:7E:E8:44:1C:3B:72:8A:FA:9B:CD:E0:F9:B2:6A
# Fingerprint (SHA1): 0B:BE:C2:27:22:49:CB:39:AA:DB:35:5C:53:E3:8C:AE:78:FF:B6:FE
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Autoridad de Certificacion Firmaprofesional CIF A62634068"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\121\061\013\060\011\006\003\125\004\006\023\002\105\123\061
\102\060\100\006\003\125\004\003\014\071\101\165\164\157\162\151
\144\141\144\040\144\145\040\103\145\162\164\151\146\151\143\141
\143\151\157\156\040\106\151\162\155\141\160\162\157\146\145\163
\151\157\156\141\154\040\103\111\106\040\101\066\062\066\063\064
\060\066\070
END
CKA_ID
UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\121\061\013\060\011\006\003\125\004\006\023\002\105\123\061
\102\060\100\006\003\125\004\003\014\071\101\165\164\157\162\151
\144\141\144\040\144\145\040\103\145\162\164\151\146\151\143\141
\143\151\157\156\040\106\151\162\155\141\160\162\157\146\145\163
\151\157\156\141\154\040\103\111\106\040\101\066\062\066\063\064
\060\066\070
```

END

CKA\_SERIAL\_NUMBER MULTILINE\_OCTAL

\002\010\033\160\351\322\377\256\154\161

END

CKA\_VALUE MULTILINE\_OCTAL

\060\202\006\024\060\202\003\374\240\003\002\001\002\002\010\033  
\160\351\322\377\256\154\161\060\015\006\011\052\206\110\206\367  
\015\001\001\013\005\000\060\121\061\013\060\011\006\003\125\004  
\006\023\002\105\123\061\102\060\100\006\003\125\004\003\014\071  
\101\165\164\157\162\151\144\141\144\040\144\145\040\103\145\162  
\164\151\146\151\143\141\143\151\157\156\040\106\151\162\155\141  
\160\162\157\146\145\163\151\157\156\141\154\040\103\111\106\040  
\101\066\062\066\063\064\060\066\070\060\036\027\015\061\064\060  
\071\062\063\061\065\062\062\060\067\132\027\015\063\066\060\065  
\060\065\061\065\062\062\060\067\132\060\121\061\013\060\011\006  
\003\125\004\006\023\002\105\123\061\102\060\100\006\003\125\004  
\003\014\071\101\165\164\157\162\151\144\141\144\040\144\145\040  
\103\145\162\164\151\146\151\143\141\143\151\157\156\040\106\151  
\162\155\141\160\162\157\146\145\163\151\157\156\141\154\040\103  
\111\106\040\101\066\062\066\063\064\060\066\070\060\202\002\042  
\060\015\006\011\052\206\110\206\367\015\001\001\001\005\000\003  
\202\002\017\000\060\202\002\012\002\202\002\001\000\312\226\153  
\216\352\370\373\361\242\065\340\177\114\332\340\303\122\327\175  
\266\020\310\002\136\263\103\052\304\117\152\262\312\034\135\050  
\232\170\021\032\151\131\127\257\265\040\102\344\213\017\346\337  
\133\246\003\222\057\365\021\344\142\327\062\161\070\331\004\014  
\161\253\075\121\176\017\007\337\143\005\134\351\277\224\157\301  
\051\202\300\264\332\121\260\301\074\273\255\067\112\134\312\361  
\113\066\016\044\253\277\303\204\167\375\250\120\364\261\347\306  
\057\322\055\131\215\172\012\116\226\151\122\002\252\066\230\354  
\374\372\024\203\014\067\037\311\222\067\177\327\201\055\345\304  
\271\340\076\064\376\147\364\076\146\321\323\364\100\317\136\142  
\064\017\160\006\076\040\030\132\316\367\162\033\045\154\223\164  
\024\223\243\163\261\016\252\207\020\043\131\137\040\005\031\107  
\355\150\216\222\022\312\135\374\326\053\262\222\074\040\317\341  
\137\257\040\276\240\166\177\166\345\354\032\206\141\063\076\347  
\173\264\077\240\017\216\242\271\152\157\271\207\046\157\101\154  
\210\246\120\375\152\143\013\365\223\026\033\031\217\262\355\233  
\233\311\220\365\001\014\337\031\075\017\076\070\043\311\057\217  
\014\321\002\376\033\125\326\116\320\215\074\257\117\244\363\376  
\257\052\323\005\235\171\010\241\313\127\061\264\234\310\220\262  
\147\364\030\026\223\072\374\107\330\321\170\226\061\037\272\053  
\014\137\135\231\255\143\211\132\044\040\166\330\337\375\253\116  
\246\042\252\235\136\346\047\212\175\150\051\243\347\212\270\332  
\021\273\027\055\231\235\023\044\106\367\305\342\330\237\216\177  
\307\217\164\155\132\262\350\162\365\254\356\044\020\255\057\024  
\332\377\055\232\106\161\107\276\102\337\273\001\333\364\177\323  
\050\217\061\131\133\323\311\002\246\264\122\312\156\227\373\103

\305\010\046\157\212\364\273\375\237\050\252\015\325\105\363\023  
\072\035\330\300\170\217\101\147\074\036\224\144\256\173\013\305  
\350\331\001\210\071\032\227\206\144\101\325\073\207\014\156\372  
\017\306\275\110\024\277\071\115\324\236\101\266\217\226\035\143  
\226\223\331\225\006\170\061\150\236\067\006\073\200\211\105\141  
\071\043\307\033\104\243\025\345\034\370\222\060\273\002\003\001  
\000\001\243\201\357\060\201\354\060\035\006\003\125\035\016\004  
\026\004\024\145\315\353\253\065\036\000\076\176\325\164\300\034  
\264\163\107\016\032\144\057\060\022\006\003\125\035\023\001\001  
\377\004\010\060\006\001\001\377\002\001\001\060\201\246\006\003  
\125\035\040\004\201\236\060\201\233\060\201\230\006\004\125\035  
\040\000\060\201\217\060\057\006\010\053\006\001\005\005\007\002  
\001\026\043\150\164\164\160\072\057\057\167\167\167\056\146\151  
\162\155\141\160\162\157\146\145\163\151\157\156\141\154\056\143  
\157\155\057\143\160\163\060\134\006\010\053\006\001\005\005\007  
\002\002\060\120\036\116\000\120\000\141\000\163\000\145\000\157  
\000\040\000\144\000\145\000\040\000\154\000\141\000\040\000\102  
\000\157\000\156\000\141\000\156\000\157\000\166\000\141\000\040  
\000\064\000\067\000\040\000\102\000\141\000\162\000\143\000\145  
\000\154\000\157\000\156\000\141\000\040\000\060\000\070\000\060  
\000\061\000\067\060\016\006\003\125\035\017\001\001\377\004\004  
\003\002\001\006\060\015\006\011\052\206\110\206\367\015\001\001  
\013\005\000\003\202\002\001\000\164\207\050\002\053\167\037\146  
\211\144\355\217\164\056\106\034\273\250\370\370\013\035\203\266  
\072\247\350\105\212\007\267\340\076\040\313\341\010\333\023\010  
\370\050\241\065\262\200\263\013\121\300\323\126\232\215\063\105  
\111\257\111\360\340\075\007\172\105\023\132\377\310\227\330\323  
\030\054\175\226\370\335\242\145\103\160\223\220\025\272\220\337  
\350\031\260\333\054\212\140\017\267\157\224\007\036\035\246\311  
\205\366\275\064\370\100\170\142\020\160\072\276\175\113\071\201  
\251\020\324\226\101\273\370\137\034\013\035\010\362\261\260\211  
\172\362\367\240\340\304\217\213\170\265\073\130\245\043\216\117  
\125\376\066\073\340\014\267\312\052\060\101\040\264\200\315\256  
\374\166\146\163\250\256\156\341\174\332\003\350\224\040\346\042  
\243\320\037\220\135\040\123\024\046\127\332\124\227\337\026\104  
\020\001\036\210\146\217\162\070\223\335\040\267\064\276\327\361  
\356\143\216\107\171\050\006\374\363\131\105\045\140\042\063\033  
\243\137\250\272\052\332\032\075\315\100\352\214\356\005\025\225  
\325\245\054\040\057\247\230\050\356\105\374\361\270\210\000\054  
\217\102\332\121\325\234\345\023\150\161\105\103\213\236\013\041  
\074\113\134\005\334\032\237\230\216\332\275\042\236\162\315\255  
\012\313\314\243\147\233\050\164\304\233\327\032\074\004\130\246  
\202\235\255\307\173\157\377\200\226\351\370\215\152\275\030\220  
\035\377\111\032\220\122\067\223\057\074\002\135\202\166\013\121  
\347\026\307\127\370\070\371\247\315\233\042\124\357\143\260\025  
\155\123\145\003\112\136\112\240\262\247\216\111\000\131\070\325  
\307\364\200\144\365\156\225\120\270\021\176\025\160\070\112\260  
\177\320\304\062\160\300\031\377\311\070\055\024\054\146\364\102

```
\104\346\125\166\033\200\025\127\377\300\247\247\252\071\252\330
\323\160\320\056\272\353\224\152\372\137\064\206\347\142\265\375
\212\360\060\205\224\311\257\044\002\057\157\326\335\147\376\343
\260\125\117\004\230\117\244\101\126\342\223\320\152\350\326\363
\373\145\340\316\165\304\061\131\014\356\202\310\014\140\063\112
\031\272\204\147\047\017\274\102\135\275\044\124\015\354\035\160
\006\137\244\274\372\040\174\125
```

END

CKA\_NSS\_Mozilla\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "Autoridad de Certificacion

Firmaprofesional CIF A62634068"

# Issuer: CN=Autoridad de Certificacion Firmaprofesional CIF A62634068,C=ES

# Serial Number:1b:70:e9:d2:ff:ae:6c:71

# Subject: CN=Autoridad de Certificacion Firmaprofesional CIF A62634068,C=ES

# Not Valid Before: Tue Sep 23 15:22:07 2014

# Not Valid After : Mon May 05 15:22:07 2036

# Fingerprint (SHA-256):

57:DE:05:83:EF:D2:B2:6E:03:61:DA:99:DA:9D:F4:64:8D:EF:7E:E8:44:1C:3B:72:8A:FA:9B:CD:E0:F9:B2:6A

# Fingerprint (SHA1): 0B:BE:C2:27:22:49:CB:39:AA:DB:35:5C:53:E3:8C:AE:78:FF:B6:FE

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "Autoridad de Certificacion Firmaprofesional CIF A62634068"

CKA\_CERT\_SHA1\_HASH MULTILINE\_OCTAL

```
\013\276\302\047\042\111\313\071\252\333\065\134\123\343\214\256
\170\377\266\376
```

END

CKA\_CERT\_MD5\_HASH MULTILINE\_OCTAL

```
\116\156\233\124\114\312\267\372\110\344\220\261\025\113\034\243
```

CKA\_ISSUER MULTILINE\_OCTAL

```
\060\121\061\013\060\011\006\003\125\004\006\023\002\105\123\061
\102\060\100\006\003\125\004\003\014\071\101\165\164\157\162\151
\144\141\144\040\144\145\040\103\145\162\164\151\146\151\143\141
\143\151\157\156\040\106\151\162\155\141\160\162\157\146\145\163
\151\157\156\141\154\040\103\111\106\040\101\066\062\066\063\064
\060\066\070
```

END

CKA\_SERIAL\_NUMBER

MULTILINE\_OCTAL

```
\002\010\033\160\351\322\377\256\154\161
```

END

CKA\_TRUST\_SERVER\_AUTH CK\_TRUST CKT\_NSS\_TRUSTED\_DELEGATOR

CKA\_TRUST\_EMAIL\_PROTECTION CK\_TRUST CKT\_NSS\_TRUSTED\_DELEGATOR  
CKA\_TRUST\_CODE\_SIGNING CK\_TRUST CKT\_NSS\_MUST\_VERIFY\_TRUST  
CKA\_TRUST\_STEP\_UP\_APPROVED CK\_BBOOL CK\_FALSE

#

# Certificate "vTrus ECC Root CA"

#

# Issuer: CN=vTrus ECC Root CA,O="iTrusChina Co.,Ltd.",C=CN

# Serial Number:6e:6a:bc:59:aa:53:be:98:39:67:a2:d2:6b:a4:3b:e6:6d:1c:d6:da

# Subject: CN=vTrus ECC Root CA,O="iTrusChina Co.,Ltd.",C=CN

# Not Valid Before: Tue Jul 31 07:26:44 2018

# Not Valid After : Fri Jul 31 07:26:44 2043

# Fingerprint (SHA-256):

30:FB:BA:2C:32:23:8E:2A:98:54:7A:F9:79:31:E5:50:42:8B:9B:3F:1C:8E:EB:66:33:DC:FA:86:C5:B2:7D:D3

#

Fingerprint (SHA1): F6:9C:DB:B0:FC:F6:02:13:B6:52:32:A6:A3:91:3F:16:70:DA:C3:E1

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_CERTIFICATE

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "vTrus ECC Root CA"

CKA\_CERTIFICATE\_TYPE CK\_CERTIFICATE\_TYPE CKC\_X\_509

CKA\_SUBJECT MULTILINE\_OCTAL

\060\107\061\013\060\011\006\003\125\004\006\023\002\103\116\061  
\034\060\032\006\003\125\004\012\023\023\151\124\162\165\163\103  
\150\151\156\141\040\103\157\056\054\114\164\144\056\061\032\060  
\030\006\003\125\004\003\023\021\166\124\162\165\163\040\105\103  
\103\040\122\157\157\164\040\103\101

END

CKA\_ID UTF8 "0"

CKA\_ISSUER MULTILINE\_OCTAL

\060\107\061\013\060\011\006\003\125\004\006\023\002\103\116\061  
\034\060\032\006\003\125\004\012\023\023\151\124\162\165\163\103  
\150\151\156\141\040\103\157\056\054\114\164\144\056\061\032\060  
\030\006\003\125\004\003\023\021\166\124\162\165\163\040\105\103  
\103\040\122\157\157\164\040\103\101

END

CKA\_SERIAL\_NUMBER

MULTILINE\_OCTAL

\002\024\156\152\274\131\252\123\276\230\071\147\242\322\153\244  
\073\346\155\034\326\332

END

CKA\_VALUE MULTILINE\_OCTAL

\060\202\002\017\060\202\001\225\240\003\002\001\002\002\024\156  
\152\274\131\252\123\276\230\071\147\242\322\153\244\073\346\155  
\034\326\332\060\012\006\010\052\206\110\316\075\004\003\003\060  
\107\061\013\060\011\006\003\125\004\006\023\002\103\116\061\034  
\060\032\006\003\125\004\012\023\023\151\124\162\165\163\103\150

```
\151\156\141\040\103\157\056\054\114\164\144\056\061\032\060\030
\006\003\125\004\003\023\021\166\124\162\165\163\040\105\103\103
\040\122\157\157\164\040\103\101\060\036\027\015\061\070\060\067
\063\061\060\067\062\066\064\064\132\027\015\064\063\060\067\063
\061\060\067\062\066\064\064\132\060\107\061\013\060\011\006\003
\125\004\006\023\002\103\116\061\034\060\032\006\003\125\004\012
\023\023\151\124\162\165\163\103\150\151\156\141\040\103\157\056
\054\114\164\144\056\061\032\060\030\006\003\125\004\003\023\021
\166\124\162\165\163\040\105\103\103\040\122\157\157\164\040\103
\101\060\166\060\020\006\007\052\206\110\316\075\002\001\006\005
\053\201\004\000\042\003\142\000\004\145\120\112\256\214\171\226
\112\252\034\010\303\243\242\315\376\131\126\101\167\375\046\224
\102\273\035\315\010\333\163\262\133\165\363\317\234\116\202\364
\277\370\141\046\205\154\326\205\133\162\160\322\375\333\142\264
\337\123\213\275\261\104\130\142\102\011\307\372\177\133\020\347
\376\100\375\300\330\303\053\062\347\160\246\267\246\040\125\035
\173\200\135\113\217\147\114\361\020\243\102\060\100\060\035\006
\003\125\035\016\004\026\004\024\230\071\315\276\330\262\214\367
\262\253\341\255\044\257\173\174\241\333\037\317\060\017\006\003
\125\035\023\001\001\377\004\005\060\003\001\001\377\060\016\006
\003\125\035\017\001\001\377\004\004\003\002\001\006\060\012\006
\010\052\206\110\316\075\004\003\003\003\150\000\060\145\002\060
\127\235\335\126\361\307\343\351\270\111\120\153\233\151\303\157
\354\303\175\045\344\127\225\023\100\233\122\323\073\363\100\031
\274\046\307\055\006\236\265\173\066\237\365\045\324\143\153\000
\002\061\000\351\323\306\236\126\232\052\314\241\332\077\310\146
\053\323\130\234\040\205\372\253\221\212\160\160\021\070\140\144
\013\142\011\221\130\000\371\115\373\064\150\332\011\255\041\006
\030\224\316
```

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRUST\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRUST\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "vTrus ECC Root CA"

# Issuer: CN=vTrus ECC Root CA,O="iTrusChina Co.,Ltd.",C=CN

# Serial Number:6e:6a:bc:59:aa:53:be:98:39:67:a2:d2:6b:a4:3b:e6:6d:1c:d6:da

# Subject: CN=vTrus ECC Root CA,O="iTrusChina Co.,Ltd.",C=CN

# Not Valid Before: Tue Jul 31 07:26:44 2018

# Not Valid After : Fri Jul 31 07:26:44 2043

# Fingerprint (SHA-256):

30:FB:BA:2C:32:23:8E:2A:98:54:7A:F9:79:31:E5:50:42:8B:9B:3F:1C:8E:EB:66:33:DC:FA:86:C5:B2:7D:D3

# Fingerprint (SHA1): F6:9C:DB:B0:FC:F6:02:13:B6:52:32:A6:A3:91:3F:16:70:DA:C3:E1

CKA\_CLASS

CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

```

CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "vTrus ECC Root CA"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\366\234\333\260\374\366\002\023\266\122\062\246\243\221\077\026
\160\332\303\341
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\336\113\301\365\122\214\233\103\341\076\217\125\124\027\215\205
END
CKA_ISSUER MULTILINE_OCTAL
\060\107\061\013\060\011\006\003\125\004\006\023\002\103\116\061
\034\060\032\006\003\125\004\012\023\023\151\124\162\165\163\103
\150\151\156\141\040\103\157\056\054\114\164\144\056\061\032\060
\030\006\003\125\004\003\023\021\166\124\162\165\163\040\105\103
\103\040\122\157\157\164\040\103\101
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\024\156\152\274\131\252\123\276\230\071\147\242\322\153\244
\073\346\155\034\326\332
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_CODE_SIGNING
CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "vTrus Root CA"
#
# Issuer: CN=vTrus Root CA,O="iTrusChina Co.,Ltd.",C=CN
# Serial Number:43:e3:71:13:d8:b3:59:14:5d:b7:ce:8c:fd:35:fd:6f:bc:05:8d:45
# Subject: CN=vTrus Root CA,O="iTrusChina Co.,Ltd.",C=CN
# Not Valid Before: Tue Jul 31 07:24:05 2018
# Not Valid After : Fri Jul 31 07:24:05 2043
# Fingerprint (SHA-256):
8A:71:DE:65:59:33:6F:42:6C:26:E5:38:80:D0:0D:88:A1:8D:A4:C6:A9:1F:0D:CB:61:94:E2:06:C5:C9:63:87
# Fingerprint (SHA1): 84:1A:69:FB:F5:CD:1A:25:34:13:3D:E3:F8:FC:B8:99:D0:C9:14:B7
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "vTrus Root CA"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\103\061\013\060\011\006\003\125\004\006\023\002\103\116\061
\034\060\032\006\003\125\004\012\023\023\151\124\162\165\163\103
\150\151\156\141\040\103\157\056\054\114\164\144\056\061\026\060
\024\006\003\125\004\003\023\015\166\124\162\165\163\040\122\157

```

```
\157\164\040\103\101
END
CKA_ID
UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\103\061\013\060\011\006\003\125\004\006\023\002\103\116\061
\034\060\032\006\003\125\004\012\023\023\151\124\162\165\163\103
\150\151\156\141\040\103\157\056\054\114\164\144\056\061\026\060
\024\006\003\125\004\003\023\015\166\124\162\165\163\040\122\157
\157\164\040\103\101
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\024\103\343\161\023\330\263\131\024\135\267\316\214\375\065
\375\157\274\005\215\105
END
CKA_VALUE MULTILINE_OCTAL
\060\202\005\126\060\202\003\076\240\003\002\001\002\002\024\103
\343\161\023\330\263\131\024\135\267\316\214\375\065\375\157\274
\005\215\105\060\015\006\011\052\206\110\206\367\015\001\001\013
\005\000\060\103\061\013\060\011\006\003\125\004\006\023\002\103
\116\061\034\060\032\006\003\125\004\012\023\023\151\124\162\165
\163\103\150\151\156\141\040\103\157\056\054\114\164\144\056\061
\026\060\024\006\003\125\004\003\023\015\166\124\162\165\163\040
\122\157\157\164\040\103\101\060\036\027\015\061\070\060\067\063
\061\060\067\062\064\060\065\132\027\015\064\063\060\067\063\061
\060\067\062\064\060\065\132\060\103\061\013\060\011\006\003\125
\004\006\023\002\103\116\061\034\060\032\006\003\125\004\012\023
\023\151\124\162\165\163\103\150\151\156\141\040\103\157\056\054
\114\164\144\056\061\026\060\024\006\003\125\004\003\023\015\166
\124\162\165\163\040\122\157\157\164\040\103\101\060\202\002\042
\060\015\006\011\052\206\110\206\367\015\001\001\001\005\000\003
\202\002\017\000\060\202\002\012\002\202\002\001\000\275\125\174
\141\323\270\035\004\142\005\240\256\154\267\160\264\101\352\113
\003\136\020\077\220\132\034\213\073\260\146\213\154\110\246\034
\042\272\325\100\222\356\063\262\043\131\311\216\274\130\332\213
\236\320\031\362\057\131\306\214\143\132\272\237\243\013\260\263
\232\134\272\021\270\022\351\014\273\317\156\154\200\207\051\024
\003\054\215\044\232\310\144\203\265\152\254\023\054\063\361\237
\334\054\141\074\032\077\160\125\233\255\000\122\177\317\004\271
\376\066\372\234\300\026\256\142\376\226\114\103\176\125\024\276
\032\263\322\155\302\257\166\146\225\153\052\260\224\167\205\136
\004\017\142\035\143\165\367\153\347\313\133\232\160\354\076\147
\005\360\376\007\010\200\317\050\333\005\306\024\047\057\206\175
\360\047\336\377\346\176\063\110\347\013\036\130\321\047\053\123
\016\127\112\145\327\373\242\200\140\374\114\274\065\123\001\152
\227\162\202\257\361\035\160\350\234\365\357\136\302\154\307\107
\176\132\224\205\046\115\073\272\353\114\350\260\011\302\145\302
\235\235\011\233\116\265\227\005\254\365\006\240\367\066\005\176
```



\364\220\262\153\304\264\371\144\352\351\032\012\310\015\250\355  
\047\311\324\347\263\271\253\202\042\220\047\075\052\350\174\220  
\357\274\117\375\342\012\044\247\336\145\044\244\135\352\300\166  
\060\323\167\120\370\015\004\233\224\066\001\163\312\006\130\246  
\323\073\334\372\004\106\023\125\212\311\104\107\270\121\071\032  
\056\350\064\342\171\313\131\112\012\177\274\246\357\037\003\147  
\152\131\053\045\142\223\331\123\031\146\074\047\142\051\206\115  
\244\153\356\377\324\116\272\325\264\342\216\110\132\000\031\011  
\361\005\331\316\221\261\367\353\351\071\117\366\157\004\103\232  
\125\365\076\005\024\275\277\263\131\264\330\216\063\204\243\220  
\122\252\263\002\225\140\371\014\114\150\371\356\325\027\015\370  
\161\127\265\045\344\051\356\145\135\257\321\356\074\027\013\132  
\103\305\245\206\352\044\236\342\005\007\334\064\102\022\221\326  
\071\164\256\114\101\202\333\362\246\110\321\263\233\363\063\252  
\363\246\300\305\116\365\364\235\166\143\346\002\306\042\113\301  
\225\077\120\144\054\124\345\266\360\074\051\317\127\002\003\001  
\000\001\243\102\060\100\060\035\006\003\125\035\016\004\026\004  
\024\124\142\160\143\361\165\204\103\130\216\321\026\040\261\306  
\254\032\274\366\211\060\017\006\003\125\035\023\001\001\377\004  
\005\060\003\001\001\377\060\016\006\003\125\035\017\001\001\377  
\004\004\003\002\001\006\060\015\006\011\052\206\110\206\367\015  
\001\001\013\005\000\003\202\002\001\000\051\272\222\111\247\255  
\360\361\160\303\344\227\360\237\251\045\325\153\236\064\376\346  
\032\144\366\072\153\122\262\020\170\032\237\114\332\212\332\354  
\034\067\122\340\102\113\373\154\166\312\044\013\071\022\025\235  
\237\021\055\374\171\144\334\340\340\365\335\340\127\311\245\262  
\166\160\120\244\376\267\012\160\325\240\064\361\165\327\115\111  
\272\021\321\263\330\354\202\377\353\016\304\277\144\055\175\143  
\156\027\170\354\135\174\210\310\353\216\127\166\331\131\004\372  
\274\122\037\105\254\360\172\200\354\354\157\166\256\221\333\020  
\216\004\334\222\337\240\366\346\256\111\323\301\154\022\033\314  
\051\252\371\010\245\342\067\024\312\261\270\146\357\032\202\344  
\360\370\361\247\026\151\267\333\251\141\074\237\365\061\313\344  
\000\106\302\057\164\261\261\327\201\356\250\046\225\274\210\257  
\114\065\007\052\002\312\170\024\155\107\053\100\126\351\313\052  
\140\241\147\003\240\316\214\274\260\162\147\304\061\316\333\064  
\345\045\003\140\045\173\161\230\344\300\033\053\137\164\102\322  
\113\305\131\010\007\207\276\305\303\177\347\226\331\341\334\050  
\227\326\217\005\343\365\233\116\312\035\120\107\005\123\260\312  
\071\347\205\240\211\301\005\073\001\067\323\077\111\342\167\353  
\043\310\210\146\073\075\071\166\041\106\361\354\137\043\270\353  
\242\146\165\164\301\100\367\330\150\232\223\342\055\251\056\275  
\034\243\036\310\164\306\244\055\172\040\253\073\270\260\106\375  
\157\335\137\122\125\165\142\360\227\240\174\327\070\375\045\337  
\315\240\233\020\317\213\270\070\136\136\305\264\246\002\066\241  
\036\137\034\317\342\226\235\051\252\375\230\256\122\341\363\101  
\122\373\251\056\162\226\237\047\343\252\163\175\370\032\043\146  
\173\073\253\145\260\062\001\113\025\076\075\242\117\014\053\065

```
\242\306\331\147\022\065\060\315\166\056\026\263\231\236\115\117
\116\055\073\064\103\341\232\016\015\244\146\227\272\322\034\112
\114\054\052\213\213\201\117\161\032\251\335\134\173\173\010\305
\000\015\067\100\343\174\173\124\137\057\205\137\166\366\367\247
\260\034\127\126\301\162\350\255\242\257\215\063\111\272\037\212
\334\346\164\174\140\206\157\207\227\173
```

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "vTrus Root CA"

# Issuer: CN=vTrus Root CA,O="iTrusChina Co.,Ltd.",C=CN

# Serial Number:43:e3:71:13:d8:b3:59:14:5d:b7:ce:8c:fd:35:fd:6f:bc:05:8d:45

# Subject: CN=vTrus Root CA,O="iTrusChina Co.,Ltd.",C=CN

# Not Valid Before: Tue Jul 31 07:24:05 2018

# Not Valid After : Fri Jul 31 07:24:05 2043

# Fingerprint (SHA-256):

8A:71:DE:65:59:33:6F:42:6C:26:E5:38:80:D0:0D:88:A1:8D:A4:C6:A9:1F:0D:CB:61:94:E2:06:C5:C9:63:87

# Fingerprint (SHA1): 84:1A:69:FB:F5:CD:1A:25:34:13:3D:E3:F8:FC:B8:99:D0:C9:14:B7

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "vTrus Root CA"

CKA\_CERT\_SHA1\_HASH

MULTILINE\_OCTAL

```
\204\032\151\373\365\315\032\045\064\023\075\343\370\374\270\231
\320\311\024\267
```

END

CKA\_CERT\_MD5\_HASH MULTILINE\_OCTAL

```
\270\311\067\337\372\153\061\204\144\305\352\021\152\033\165\374
```

END

CKA\_ISSUER MULTILINE\_OCTAL

```
\060\103\061\013\060\011\006\003\125\004\006\023\002\103\116\061
\034\060\032\006\003\125\004\012\023\023\151\124\162\165\163\103
\150\151\156\141\040\103\157\056\054\114\164\144\056\061\026\060
\024\006\003\125\004\003\023\015\166\124\162\165\163\040\122\157
\157\164\040\103\101
```

END

CKA\_SERIAL\_NUMBER MULTILINE\_OCTAL

```
\002\024\103\343\161\023\330\263\131\024\135\267\316\214\375\065
\375\157\274\005\215\105
```

END

CKA\_TRUST\_SERVER\_AUTH CK\_TRUST CKT\_NSS\_TRUSTED\_DELEGATOR

CKA\_TRUST\_EMAIL\_PROTECTION CK\_TRUST CKT\_NSS\_MUST\_VERIFY\_TRUST

CKA\_TRUST\_CODE\_SIGNING CK\_TRUST CKT\_NSS\_MUST\_VERIFY\_TRUST

CKA\_TRUST\_STEP\_UP\_APPROVED CK\_BBOOL CK\_FALSE

#

# Certificate "ISRG Root X2"

#

# Issuer: CN=ISRG Root X2,O=Internet Security Research Group,C=US

# Serial Number:41:d2:9d:d1:72:ea:ee:a7:80:c1:2c:6c:e9:2f:87:52

#

Subject: CN=ISRG Root X2,O=Internet Security Research Group,C=US

# Not Valid Before: Fri Sep 04 00:00:00 2020

# Not Valid After : Mon Sep 17 16:00:00 2040

# Fingerprint (SHA-256):

69:72:9B:8E:15:A8:6E:FC:17:7A:57:AF:B7:17:1D:FC:64:AD:D2:8C:2F:CA:8C:F1:50:7E:34:45:3C:CB:14:70

# Fingerprint (SHA1): BD:B1:B9:3C:D5:97:8D:45:C6:26:14:55:F8:DB:95:C7:5A:D1:53:AF

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_CERTIFICATE

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "ISRG Root X2"

CKA\_CERTIFICATE\_TYPE CK\_CERTIFICATE\_TYPE CKC\_X\_509

CKA\_SUBJECT MULTILINE\_OCTAL

\060\117\061\013\060\011\006\003\125\004\006\023\002\125\123\061  
\051\060\047\006\003\125\004\012\023\040\111\156\164\145\162\156  
\145\164\040\123\145\143\165\162\151\164\171\040\122\145\163\145  
\141\162\143\150\040\107\162\157\165\160\061\025\060\023\006\003  
\125\004\003\023\014\111\123\122\107\040\122\157\157\164\040\130  
\062

END

CKA\_ID UTF8 "0"

CKA\_ISSUER

MULTILINE\_OCTAL

\060\117\061\013\060\011\006\003\125\004\006\023\002\125\123\061  
\051\060\047\006\003\125\004\012\023\040\111\156\164\145\162\156  
\145\164\040\123\145\143\165\162\151\164\171\040\122\145\163\145  
\141\162\143\150\040\107\162\157\165\160\061\025\060\023\006\003  
\125\004\003\023\014\111\123\122\107\040\122\157\157\164\040\130  
\062

END

CKA\_SERIAL\_NUMBER MULTILINE\_OCTAL

\002\020\101\322\235\321\162\352\356\247\200\301\054\154\351\057  
\207\122

END

CKA\_VALUE MULTILINE\_OCTAL

\060\202\002\033\060\202\001\241\240\003\002\001\002\002\020\101  
\322\235\321\162\352\356\247\200\301\054\154\351\057\207\122\060  
\012\006\010\052\206\110\316\075\004\003\003\060\117\061\013\060  
\011\006\003\125\004\006\023\002\125\123\061\051\060\047\006\003  
\125\004\012\023\040\111\156\164\145\162\156\145\164\040\123\145

\143\165\162\151\164\171\040\122\145\163\145\141\162\143\150\040  
\107\162\157\165\160\061\025\060\023\006\003\125\004\003\023\014  
\111\123\122\107\040\122\157\157\164\040\130\062\060\036\027\015  
\062\060\060\071\060\064\060\060\060\060\060\132\027\015\064  
\060\060\071\061\067\061\066\060\060\060\060\132\060\117\061\013  
\060\011\006\003\125\004\006\023\002\125\123\061\051\060\047\006  
\003\125\004\012\023\040\111\156\164\145\162\156\145\164\040\123  
\145\143\165\162\151\164\171\040\122\145\163\145\141\162\143\150  
\040\107\162\157\165\160\061\025\060\023\006\003\125\004\003\023  
\014\111\123\122\107\040\122\157\157\164\040\130\062\060\166\060  
\020\006\007\052\206\110\316\075\002\001\006\005\053\201\004\000  
\042\003\142\000\004\315\233\325\237\200\203\012\354\011\112\363  
\026\112\076\134\317\167\254\336\147\005\015\035\007\266\334\026  
\373\132\213\024\333\342\161\140\304\272\105\225\021\211\216\352  
\006\337\367\052\026\034\244\271\305\305\062\340\003\340\036\202  
\030\070\213\327\105\330\012\152\156\346\000\167\373\002\121\175  
\042\330\012\156\232\133\167\337\360\372\101\354\071\334\165\312  
\150\007\014\037\352\243\102\060\100\060\016\006\003\125\035\017  
\001\001\377\004\004\003\002\001\006\060\017\006\003\125\035\023  
\001\001\377\004\005\060\003\001\001\377\060\035\006\003\125\035  
\016\004\026\004\024\174\102\226\256\336\113\110\073\372\222\370  
\236\214\317\155\213\251\162\067\225\060\012\006\010\052\206\110  
\316\075\004\003\003\003\150\000\060\145\002\060\173\171\116\106  
\120\204\302\104\207\106\033\105\160\377\130\231\336\364\375\244  
\322\125\246\040\055\164\326\064\274\101\243\120\137\001\047\126  
\264\276\047\165\006\257\022\056\165\230\215\374\002\061\000\213  
\365\167\154\324\310\145\252\340\013\054\356\024\235\047\067\244  
\371\123\245\121\344\051\203\327\370\220\061\133\102\237\012\365  
\376\256\000\150\347\214\111\017\266\157\133\133\025\362\347

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRUST\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRUST\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "ISRG Root X2"

# Issuer: CN=ISRG Root X2,O=Internet Security Research Group,C=US

# Serial Number:41:d2:9d:d1:72:ea:ee:a7:80:c1:2c:6c:e9:2f:87:52

#

Subject: CN=ISRG Root X2,O=Internet Security Research Group,C=US

# Not Valid Before: Fri Sep 04 00:00:00 2020

# Not Valid After : Mon Sep 17 16:00:00 2040

# Fingerprint (SHA-256):

69:72:9B:8E:15:A8:6E:FC:17:7A:57:AF:B7:17:1D:FC:64:AD:D2:8C:2F:CA:8C:F1:50:7E:34:45:3C:CB:14:70

# Fingerprint (SHA1): BD:B1:B9:3C:D5:97:8D:45:C6:26:14:55:F8:DB:95:C7:5A:D1:53:AF

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

```

CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "ISRG Root X2"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\275\261\271\074\325\227\215\105\306\046\024\125\370\333\225\307
\132\321\123\257
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\323\236\304\036\043\074\246\337\317\243\176\155\340\024\346\345
END
CKA_ISSUER MULTILINE_OCTAL
\060\117\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\051\060\047\006\003\125\004\012\023\040\111\156\164\145\162\156
\145\164\040\123\145\143\165\162\151\164\171\040\122\145\163\145
\141\162\143\150\040\107\162\157\165\160\061\025\060\023\006\003
\125\004\003\023\014\111\123\122\107\040\122\157\157\164\040\130
\062
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\020\101\322\235\321\162\352\356\247\200\301\054\154\351\057
\207\122
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "HiPKI Root CA - G1"
#
# Issuer: CN=HiPKI Root CA - G1,O="Chunghwa Telecom Co., Ltd.",C=TW
# Serial Number:2d:dd:ac:ce:62:97:94:a1:43:e8:b0:cd:76:6a:5e:60
# Subject: CN=HiPKI Root CA - G1,O="Chunghwa Telecom Co., Ltd.",C=TW
# Not Valid Before: Fri Feb 22 09:46:04 2019
# Not Valid After : Thu Dec 31 15:59:59 2037
# Fingerprint (SHA-256):
F0:15:CE:3C:C2:39:BF:EF:06:4B:E9:F1:D2:C4:17:E1:A0:26:4A:0A:94:BE:1F:0C:8D:12:18:64:EB:69:49:CC
# Fingerprint (SHA1): 6A:92:E4:A8:EE:1B:EC:96:45:37:E3:29:57:49:CD:96:E3:E5:D2:60
CKA_CLASS CK_OBJECT_CLASS
CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "HiPKI Root CA - G1"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\117\061\013\060\011\006\003\125\004\006\023\002\124\127\061
\043\060\041\006\003\125\004\012\014\032\103\150\165\156\147\150

```

\167\141\040\124\145\154\145\143\157\155\040\103\157\056\054\040  
\114\164\144\056\061\033\060\031\006\003\125\004\003\014\022\110  
\151\120\113\111\040\122\157\157\164\040\103\101\040\055\040\107  
\061

END

CKA\_ID UTF8 "0"

CKA\_ISSUER MULTILINE\_OCTAL

\060\117\061\013\060\011\006\003\125\004\006\023\002\124\127\061  
\043\060\041\006\003\125\004\012\014\032\103\150\165\156\147\150  
\167\141\040\124\145\154\145\143\157\155\040\103\157\056\054\040  
\114\164\144\056\061\033\060\031\006\003\125\004\003\014\022\110  
\151\120\113\111\040\122\157\157\164\040\103\101\040\055\040\107  
\061

END

CKA\_SERIAL\_NUMBER MULTILINE\_OCTAL

\002\020\055\335\254\316\142\227\224\241\103\350\260\315\166\152  
\136\140

END

CKA\_VALUE

MULTILINE\_OCTAL

\060\202\005\152\060\202\003\122\240\003\002\001\002\002\020\055  
\335\254\316\142\227\224\241\103\350\260\315\166\152\136\140\060  
\015\006\011\052\206\110\206\367\015\001\001\013\005\000\060\117  
\061\013\060\011\006\003\125\004\006\023\002\124\127\061\043\060  
\041\006\003\125\004\012\014\032\103\150\165\156\147\150\167\141  
\040\124\145\154\145\143\157\155\040\103\157\056\054\040\114\164  
\144\056\061\033\060\031\006\003\125\004\003\014\022\110\151\120  
\113\111\040\122\157\157\164\040\103\101\040\055\040\107\061\060  
\036\027\015\061\071\060\062\062\062\060\071\064\066\060\064\132  
\027\015\063\067\061\062\063\061\061\065\065\071\065\071\132\060  
\117\061\013\060\011\006\003\125\004\006\023\002\124\127\061\043  
\060\041\006\003\125\004\012\014\032\103\150\165\156\147\150\167  
\141\040\124\145\154\145\143\157\155\040\103\157\056\054\040\114  
\164\144\056\061\033\060\031\006\003\125\004\003\014\022\110\151  
\120\113\111\040\122\157\157\164\040\103\101\040\055\040\107\061  
\060\202\002\042\060\015\006\011\052\206\110\206\367\015\001\001  
\001\005\000\003\202\002\017\000\060\202\002\012\002\202\002\001  
\000\364\036\177\122\163\062\014\163\344\275\023\164\243\324\060  
\250\320\256\113\330\266\337\165\107\146\364\174\347\071\004\036  
\152\160\040\322\132\107\162\147\125\364\245\350\235\325\036\041  
\241\360\147\272\314\041\150\276\104\123\277\215\371\342\334\057  
\125\310\067\077\037\244\300\234\263\344\167\134\240\106\376\167  
\372\032\240\070\352\355\232\162\336\053\275\224\127\072\272\354  
\171\347\137\175\102\144\071\172\046\066\367\044\360\325\057\272  
\225\230\021\146\255\227\065\326\165\001\200\340\257\364\204\141  
\214\015\036\137\174\207\226\136\101\257\353\207\352\370\135\361  
\056\210\005\076\114\042\273\332\037\052\335\122\106\144\071\363  
\102\316\331\236\014\263\260\167\227\144\234\300\364\243\056\037

\225\007\260\027\337\060\333\000\030\226\114\241\201\113\335\004  
\155\123\243\075\374\007\254\324\305\067\202\353\344\225\010\031  
\050\202\322\102\072\243\330\123\354\171\211\140\110\140\310\162  
\222\120\334\003\217\203\077\262\102\127\132\333\152\351\021\227  
\335\205\050\274\060\114\253\343\302\261\105\104\107\037\340\212  
\026\007\226\322\041\017\123\300\355\251\176\324\116\354\233\011  
\354\257\102\254\060\326\277\321\020\105\340\246\026\262\245\305  
\323\117\163\224\063\161\002\241\152\243\326\063\227\117\041\143  
\036\133\217\331\301\136\105\161\167\017\201\135\137\041\232\255  
\203\314\372\136\326\215\043\137\033\075\101\257\040\165\146\132  
\112\366\237\373\253\030\367\161\300\266\035\061\354\073\040\353  
\313\342\270\365\256\222\262\367\341\204\113\362\242\362\223\232  
\042\236\323\024\157\066\124\275\037\136\131\025\271\163\250\301  
\174\157\173\142\351\026\154\107\132\145\363\016\021\233\106\331  
\375\155\334\326\234\300\264\175\245\260\335\077\126\157\241\371  
\366\344\022\110\375\006\177\022\127\266\251\043\117\133\003\303  
\340\161\052\043\267\367\260\261\073\274\230\275\326\230\250\014  
\153\366\216\022\147\246\362\262\130\344\002\011\023\074\251\273  
\020\264\322\060\105\361\354\367\000\021\337\145\370\334\053\103  
\125\277\026\227\304\017\325\054\141\204\252\162\206\376\346\072  
\176\302\077\175\356\374\057\024\076\346\205\335\120\157\267\111  
\355\002\003\001\000\001\243\102\060\100\060\017\006\003\125\035  
\023\001\001\377\004\005\060\003\001\001\377\060\035\006\003\125  
\035\016\004\026\004\024\362\167\027\372\136\250\376\366\075\161  
\325\150\272\311\106\014\070\330\257\260\060\016\006\003\125\035  
\017\001\001\377\004\004\003\002\001\206\060\015\006\011\052\206  
\110\206\367\015\001\001\013\005\000\003\202\002\001\000\120\121  
\360\165\334\160\004\343\377\252\165\324\161\242\313\236\217\250  
\251\323\257\165\307\124\317\072\034\004\231\042\254\304\021\342  
\357\063\112\246\043\035\016\015\107\330\067\307\157\257\064\177  
\117\201\153\065\117\351\162\245\061\342\170\347\367\116\224\030  
\133\100\175\317\153\041\124\206\346\225\172\373\306\312\352\234  
\110\116\127\011\135\057\254\364\245\264\227\063\130\325\254\171  
\251\314\137\371\205\372\122\305\215\370\221\024\353\072\015\027  
\320\122\302\173\343\302\163\216\106\170\006\070\054\350\134\332  
\146\304\364\244\360\126\031\063\051\132\145\222\005\107\106\112  
\253\204\303\036\047\241\037\021\222\231\047\165\223\017\274\066  
\073\227\127\217\046\133\014\273\234\017\324\156\060\007\324\334  
\137\066\150\146\071\203\226\047\046\212\310\304\071\376\232\041  
\157\325\162\206\351\177\142\345\227\116\320\044\320\100\260\320  
\165\010\216\275\150\356\010\327\156\174\020\160\106\033\174\340  
\210\262\236\162\206\231\001\343\277\237\111\031\264\045\276\126  
\145\256\027\143\345\036\337\350\377\107\245\277\341\046\005\204  
\344\260\300\257\347\010\231\250\014\136\046\200\105\324\370\150  
\057\226\217\256\342\112\034\234\026\014\023\157\070\207\366\273  
\310\064\137\222\003\121\171\160\246\337\313\365\231\115\171\315  
\116\274\127\237\103\116\153\056\053\030\370\152\163\214\272\305  
\065\357\071\152\101\036\317\161\250\242\262\206\007\133\072\311

\341\357\077\145\004\200\107\062\104\160\225\116\061\147\152\164  
\133\020\105\165\352\260\237\320\346\065\376\116\237\213\314\053  
\222\105\133\156\045\140\205\106\315\321\252\260\166\146\223\167  
\226\276\203\276\070\266\044\116\046\013\314\355\172\126\032\340  
\351\132\306\144\255\114\172\000\110\104\057\271\100\273\023\076  
\276\025\170\235\205\201\112\052\127\336\325\031\103\332\333\312  
\133\107\206\203\013\077\266\015\166\170\163\171\042\136\261\200  
\037\317\276\321\077\126\020\230\053\225\207\241\037\235\144\024  
\140\071\054\263\000\125\056\344\365\263\016\127\304\221\101\000  
\234\077\350\245\337\352\366\377\310\360\255\155\122\250\027\253  
\233\141\374\022\121\065\344\045\375\257\252\152\206\071

END

CKA\_NSS\_Mozilla\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "HiPKI Root CA - G1"

# Issuer: CN=HiPKI Root CA - G1,O="Chunghwa Telecom Co., Ltd.",C=TW

# Serial Number:2d:dd:ac:ce:62:97:94:a1:43:e8:b0:cd:76:6a:5e:60

#

Subject: CN=HiPKI Root CA - G1,O="Chunghwa Telecom Co., Ltd.",C=TW

# Not Valid Before: Fri Feb 22 09:46:04 2019

# Not Valid After : Thu Dec 31 15:59:59 2037

# Fingerprint (SHA-256):

F0:15:CE:3C:C2:39:BF:EF:06:4B:E9:F1:D2:C4:17:E1:A0:26:4A:0A:94:BE:1F:0C:8D:12:18:64:EB:69:49:CC

# Fingerprint (SHA1): 6A:92:E4:A8:EE:1B:EC:96:45:37:E3:29:57:49:CD:96:E3:E5:D2:60

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "HiPKI Root CA - G1"

CKA\_CERT\_SHA1\_HASH MULTILINE\_OCTAL

\152\222\344\250\356\033\354\226\105\067\343\051\127\111\315\226  
\343\345\322\140

END

CKA\_CERT\_MD5\_HASH MULTILINE\_OCTAL

\151\105\337\026\145\113\350\150\232\217\166\137\377\200\236\323  
END

CKA\_ISSUER MULTILINE\_OCTAL

\060\117\061\013\060\011\006\003\125\004\006\023\002\124\127\061  
\043\060\041\006\003\125\004\012\014\032\103\150\165\156\147\150  
\167\141\040\124\145\154\145\143\157\155\040\103\157\056\054\040  
\114\164\144\056\061\033\060\031\006\003\125\004\003\014\022\110  
\151\120\113\111\040\122\157\157\164\040\103\101\040\055\040\107  
\061

END

CKA\_SERIAL\_NUMBER



```

MULTILINE_OCTAL
\002\020\055\335\254\316\142\227\224\241\103\350\260\315\166\152
\136\140
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "GlobalSign ECC Root CA - R4"
#
# Issuer: CN=GlobalSign,O=GlobalSign,OU=GlobalSign ECC Root CA - R4
# Serial Number:02:03:e5:7e:f5:3f:93:fd:a5:09:21:b2:a6
# Subject: CN=GlobalSign,O=GlobalSign,OU=GlobalSign ECC Root CA - R4
# Not Valid Before: Tue Nov 13 00:00:00 2012
# Not Valid After : Tue Jan 19 03:14:07 2038
# Fingerprint (SHA-256):
B0:85:D7:0B:96:4F:19:1A:73:E4:AF:0D:54:AE:7A:0E:07:AA:FD:AF:9B:71:DD:08:62:13:8A:B7:32:5A:24:A2
# Fingerprint (SHA1): 6B:A0:B0:98:E1:71:EF:5A:AD:FE:48:15:80:77:10:F4:BD:6F:0B:28
CKA_CLASS
CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "GlobalSign ECC Root CA - R4"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\120\061\044\060\042\006\003\125\004\013\023\033\107\154\157
\142\141\154\123\151\147\156\040\105\103\103\040\122\157\157\164
\040\103\101\040\055\040\122\064\061\023\060\021\006\003\125\004
\012\023\012\107\154\157\142\141\154\123\151\147\156\061\023\060
\021\006\003\125\004\003\023\012\107\154\157\142\141\154\123\151
\147\156
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\120\061\044\060\042\006\003\125\004\013\023\033\107\154\157
\142\141\154\123\151\147\156\040\105\103\103\040\122\157\157\164
\040\103\101\040\055\040\122\064\061\023\060\021\006\003\125\004
\012\023\012\107\154\157\142\141\154\123\151\147\156\061\023\060
\021\006\003\125\004\003\023\012\107\154\157\142\141\154\123\151
\147\156
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\015\002\003\345\176\365\077\223\375\245\011\041\262\246
END

```

CKA\_VALUE MULTILINE\_OCTAL

\060\202\001\334\060\202\001\203\240\003\002\001\002\002\015\002  
\003\345\176\365\077\223\375\245\011\041\262\246\060\012\006\010  
\052\206\110\316\075\004\003\002\060\120\061\044\060\042\006\003  
\125\004\013\023\033\107\154\157\142\141\154\123\151\147\156\040  
\105\103\103\040\122\157\157\164\040\103\101\040\055\040\122\064  
\061\023\060\021\006\003\125\004\012\023\012\107\154\157\142\141  
\154\123\151\147\156\061\023\060\021\006\003\125\004\003\023\012  
\107\154\157\142\141\154\123\151\147\156\060\036\027\015\061\062  
\061\061\061\063\060\060\060\060\060\060\132\027\015\063\070\060  
\061\061\071\060\063\061\064\060\067\132\060\120\061\044\060\042  
\006\003\125\004\013\023\033\107\154\157\142\141\154\123\151\147  
\156\040\105\103\103\040\122\157\157\164\040\103\101\040\055\040  
\122\064\061\023\060\021\006\003\125\004\012\023\012\107\154\157  
\142\141\154\123\151\147\156\061\023\060\021\006\003\125\004\003  
\023\012\107\154\157\142\141\154\123\151\147\156\060\131\060\023  
\006\007\052\206\110\316\075\002\001\006\010\052\206\110\316\075  
\003\001\007\003\102\000\004\270\306\171\323\217\154\045\016\237  
\056\071\031\034\003\244\256\232\345\071\007\011\026\312\143\261  
\271\206\370\212\127\301\127\316\102\372\163\241\367\145\102\377  
\036\301\000\262\156\163\016\377\307\041\345\030\244\252\331\161  
\077\250\324\271\316\214\035\243\102\060\100\060\016\006\003\125  
\035\017\001\001\377\004\004\003\002\001\206\060\017\006\003\125  
\035\023\001\001\377\004\005\060\003\001\001\377\060\035\006\003  
\125\035\016\004\026\004\024\124\260\173\255\105\270\342\100\177  
\373\012\156\373\276\063\311\074\243\204\325\060\012\006\010\052  
\206\110\316\075\004\003\002\003\107\000\060\104\002\040\042\117  
\164\162\271\140\257\361\346\234\240\026\005\120\137\303\136\073  
\156\141\164\357\276\001\304\276\030\110\131\141\202\062\002\040  
\046\235\124\143\100\336\067\140\120\317\310\330\355\235\202\256  
\067\230\274\243\217\114\114\251\064\053\154\357\373\225\233\046  
END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "GlobalSign ECC Root CA - R4"

# Issuer: CN=GlobalSign,O=GlobalSign,OU=GlobalSign ECC Root CA - R4

# Serial Number:02:03:e5:7e:f5:3f:93:fd:a5:09:21:b2:a6

# Subject: CN=GlobalSign,O=GlobalSign,OU=GlobalSign ECC Root CA - R4

# Not Valid Before: Tue Nov 13 00:00:00 2012

# Not Valid After : Tue Jan 19 03:14:07 2038

# Fingerprint (SHA-256):

B0:85:D7:0B:96:4F:19:1A:73:E4:AF:0D:54:AE:7A:0E:07:AA:FD:AF:9B:71:DD:08:62:13:8A:B7:32:5A:24:A2

# Fingerprint (SHA1): 6B:A0:B0:98:E1:71:EF:5A:AD:FE:48:15:80:77:10:F4:BD:6F:0B:28

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

```

CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "GlobalSign ECC Root CA - R4"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\153\240\260\230\341\161\357\132\255\376\110\025\200\167\020\364
\275\157\013\050
END
CKA_CERT_MD5_HASH
MULTILINE_OCTAL
\046\051\370\155\341\210\277\242\145\177\252\304\315\017\177\374
END
CKA_ISSUER MULTILINE_OCTAL
\060\120\061\044\060\042\006\003\125\004\013\023\033\107\154\157
\142\141\154\123\151\147\156\040\105\103\103\040\122\157\157\164
\040\103\101\040\055\040\122\064\061\023\060\021\006\003\125\004
\012\023\012\107\154\157\142\141\154\123\151\147\156\061\023\060
\021\006\003\125\004\003\023\012\107\154\157\142\141\154\123\151
\147\156
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\015\002\003\345\176\365\077\223\375\245\011\041\262\246
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "GTS Root R1"
#
# Issuer: CN=GTS Root R1,O=Google Trust Services LLC,C=US
# Serial Number:02:03:e5:93:6f:31:b0:13:49:88:6b:a2:17
# Subject: CN=GTS Root R1,O=Google Trust
Services LLC,C=US
# Not Valid Before: Wed Jun 22 00:00:00 2016
# Not Valid After : Sun Jun 22 00:00:00 2036
# Fingerprint (SHA-256):
D9:47:43:2A:BD:E7:B7:FA:90:FC:2E:6B:59:10:1B:12:80:E0:E1:C7:E4:E4:0F:A3:C6:88:7F:FF:57:A7:F4:CF
# Fingerprint (SHA1): E5:8C:1C:C4:91:3B:38:63:4B:E9:10:6E:E3:AD:8E:6B:9D:D9:81:4A
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "GTS Root R1"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\107\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\042\060\040\006\003\125\004\012\023\031\107\157\157\147\154\145

```

\040\124\162\165\163\164\040\123\145\162\166\151\143\145\163\040  
\114\114\103\061\024\060\022\006\003\125\004\003\023\013\107\124  
\123\040\122\157\157\164\040\122\061

END

CKA\_ID UTF8 "0"

CKA\_ISSUER MULTILINE\_OCTAL

\060\107\061\013\060\011\006\003\125\004\006\023\002\125\123\061  
\042\060\040\006\003\125\004\012\023\031\107\157\157\147\154\145  
\040\124\162\165\163\164\040\123\145\162\166\151\143\145\163\040  
\114\114\103\061\024\060\022\006\003\125\004\003\023\013\107\124  
\123\040\122\157\157\164\040\122\061

END

CKA\_SERIAL\_NUMBER

MULTILINE\_OCTAL

\002\015\002\003\345\223\157\061\260\023\111\210\153\242\027

END

CKA\_VALUE MULTILINE\_OCTAL

\060\202\005\127\060\202\003\077\240\003\002\001\002\002\015\002  
\003\345\223\157\061\260\023\111\210\153\242\027\060\015\006\011  
\052\206\110\206\367\015\001\001\014\005\000\060\107\061\013\060  
\011\006\003\125\004\006\023\002\125\123\061\042\060\040\006\003  
\125\004\012\023\031\107\157\157\147\154\145\040\124\162\165\163  
\164\040\123\145\162\166\151\143\145\163\040\114\114\103\061\024  
\060\022\006\003\125\004\003\023\013\107\124\123\040\122\157\157  
\164\040\122\061\060\036\027\015\061\066\060\066\062\062\060\060  
\060\060\060\060\132\027\015\063\066\060\066\062\062\060\060\060  
\060\060\060\132\060\107\061\013\060\011\006\003\125\004\006\023  
\002\125\123\061\042\060\040\006\003\125\004\012\023\031\107\157  
\157\147\154\145\040\124\162\165\163\164\040\123\145\162\166\151  
\143\145\163\040\114\114\103\061\024\060\022\006\003\125\004\003  
\023\013\107\124\123\040\122\157\157\164\040\122\061\060\202\002  
\042\060\015\006\011\052\206\110\206\367\015\001\001\001\005\000  
\003\202\002\017\000\060\202\002\012\002\202\002\001\000\266\021  
\002\213\036\343\241\167\233\073\334\277\224\076\267\225\247\100  
\074\241\375\202\371\175\062\006\202\161\366\366\214\177\373\350  
\333\274\152\056\227\227\243\214\113\371\053\366\261\371\316\204  
\035\261\371\305\227\336\357\271\362\243\351\274\022\211\136\247  
\252\122\253\370\043\047\313\244\261\234\143\333\327\231\176\360  
\012\136\353\150\246\364\306\132\107\015\115\020\063\343\116\261  
\023\243\310\030\154\113\354\374\011\220\337\235\144\051\045\043  
\007\241\264\322\075\056\140\340\317\322\011\207\273\315\110\360  
\115\302\302\172\210\212\273\272\317\131\031\326\257\217\260\007  
\260\236\061\361\202\301\300\337\056\246\155\154\031\016\265\330  
\176\046\032\105\003\075\260\171\244\224\050\255\017\177\046\345  
\250\010\376\226\350\074\150\224\123\356\203\072\210\053\025\226  
\011\262\340\172\214\056\165\326\234\353\247\126\144\217\226\117  
\150\256\075\227\302\204\217\300\274\100\300\013\134\275\366\207  
\263\065\154\254\030\120\177\204\340\114\315\222\323\040\351\063

\274\122\231\257\062\265\051\263\045\052\264\110\371\162\341\312  
\144\367\346\202\020\215\350\235\302\212\210\372\070\146\212\374  
\143\371\001\371\170\375\173\134\167\372\166\207\372\354\337\261  
\016\171\225\127\264\275\046\357\326\001\321\353\026\012\273\216  
\013\265\305\305\212\125\253\323\254\352\221\113\051\314\031\244  
\062\045\116\052\361\145\104\320\002\316\252\316\111\264\352\237  
\174\203\260\100\173\347\103\253\247\154\243\217\175\211\201\372  
\114\245\377\325\216\303\316\113\340\265\330\263\216\105\317\166  
\300\355\100\053\375\123\017\260\247\325\073\015\261\212\242\003  
\336\061\255\314\167\352\157\173\076\326\337\221\042\022\346\276  
\372\330\062\374\020\143\024\121\162\336\135\326\026\223\275\051  
\150\063\357\072\146\354\007\212\046\337\023\327\127\145\170\047  
\336\136\111\024\000\242\000\177\232\250\041\266\251\261\225\260  
\245\271\015\026\021\332\307\154\110\074\100\340\176\015\132\315  
\126\074\321\227\005\271\313\113\355\071\113\234\304\077\322\125  
\023\156\044\260\326\161\372\364\301\272\314\355\033\365\376\201  
\101\330\000\230\075\072\310\256\172\230\067\030\005\225\002\003  
\001\000\001\243\102\060\100\060\016\006\003\125\035\017\001\001  
\377\004\004\003\002\001\206\060\017\006\003\125\035\023\001\001  
\377\004\005\060\003\001\001\377\060\035\006\003\125\035\016\004  
\026\004\024\344\257\053\046\161\032\053\110\047\205\057\122\146  
\054\357\360\211\023\161\076\060\015\006\011\052\206\110\206\367  
\015\001\001\014\005\000\003\202\002\001\000\237\252\102\046\333  
\013\233\276\377\036\226\222\056\076\242\145\112\152\230\272\042  
\313\175\301\072\330\202\012\006\306\366\245\336\300\116\207\146  
\171\241\371\246\130\234\252\371\265\346\140\347\340\350\261\036  
\102\101\063\013\067\075\316\211\160\025\312\265\044\250\317\153  
\265\322\100\041\230\317\042\064\317\073\305\042\204\340\305\016  
\212\174\135\210\344\065\044\316\233\076\032\124\036\156\333\262  
\207\247\374\363\372\201\125\024\142\012\131\251\042\005\061\076  
\202\326\356\333\127\064\274\063\225\323\027\033\350\047\242\213  
\173\116\046\032\172\132\144\266\321\254\067\361\375\240\363\070  
\354\162\360\021\165\235\313\064\122\215\346\166\153\027\306\337  
\206\253\047\216\111\053\165\146\201\020\041\246\352\076\364\256  
\045\377\174\025\336\316\214\045\077\312\142\160\012\367\057\011  
\146\007\310\077\034\374\360\333\105\060\337\142\210\301\265\017  
\235\303\237\112\336\131\131\107\305\207\042\066\346\202\247\355  
\012\271\342\007\240\215\173\172\112\074\161\322\342\003\241\037  
\062\007\335\033\344\102\316\014\000\105\141\200\265\013\040\131  
\051\170\275\371\125\313\143\305\074\114\364\266\377\333\152\137  
\061\153\231\236\054\301\153\120\244\327\346\030\024\275\205\077  
\147\253\106\237\240\377\102\247\072\177\134\313\135\260\160\035  
\053\064\365\324\166\011\014\353\170\114\131\005\363\063\102\303  
\141\025\020\033\167\115\316\042\214\324\205\362\105\175\267\123  
\352\357\100\132\224\012\134\040\137\116\100\135\142\042\166\337  
\377\316\141\275\214\043\170\322\067\002\340\216\336\321\021\067  
\211\366\277\355\111\007\142\256\222\354\100\032\257\024\011\331  
\320\116\262\242\367\276\356\356\330\377\334\032\055\336\270\066

```
\161\342\374\171\267\224\045\321\110\163\133\241\065\347\263\231
\147\165\301\031\072\053\107\116\323\102\216\375\061\310\026\146
\332\322\014\074\333\263\216\311\241\015\200\017\173\026\167\024
\277\377\333\011\224\262\223\274\040\130\025\351\333\161\103\363
\336\020\303\000\334\250\052\225\266\302\326\077\220\153\166\333
\154\376\214\274\362\160\065\014\334\231\031\065\334\327\310\106
\143\325\066\161\256\127\373\267\202\155\334
```

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER

CK\_BBOOL CK\_FALSE

# Trust for "GTS Root R1"

# Issuer: CN=GTS Root R1,O=Google Trust Services LLC,C=US

# Serial Number:02:03:e5:93:6f:31:b0:13:49:88:6b:a2:17

# Subject: CN=GTS Root R1,O=Google Trust Services LLC,C=US

# Not Valid Before: Wed Jun 22 00:00:00 2016

# Not Valid After : Sun Jun 22 00:00:00 2036

# Fingerprint (SHA-256):

D9:47:43:2A:BD:E7:B7:FA:90:FC:2E:6B:59:10:1B:12:80:E0:E1:C7:E4:E4:0F:A3:C6:88:7F:FF:57:A7:F4:CF

# Fingerprint (SHA1): E5:8C:1C:C4:91:3B:38:63:4B:E9:10:6E:E3:AD:8E:6B:9D:D9:81:4A

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "GTS Root R1"

CKA\_CERT\_SHA1\_HASH MULTILINE\_OCTAL

```
\345\214\034\304\221\073\070\143\113\351\020\156\343\255\216\153
\235\331\201\112
```

END

CKA\_CERT\_MD5\_HASH MULTILINE\_OCTAL

```
\005\376\320\277\161\250\243\166\143\332\001\340\330\122\334\100
```

CKA\_ISSUER MULTILINE\_OCTAL

```
\060\107\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\042\060\040\006\003\125\004\012\023\031\107\157\157\147\154\145
\040\124\162\165\163\164\040\123\145\162\166\151\143\145\163\040
\114\114\103\061\024\060\022\006\003\125\004\003\023\013\107\124
\123\040\122\157\157\164\040\122\061
```

END

CKA\_SERIAL\_NUMBER

MULTILINE\_OCTAL

```
\002\015\002\003\345\223\157\061\260\023\111\210\153\242\027
```

END

CKA\_TRUST\_SERVER\_AUTH CK\_TRUST CKT\_NSS\_TRUSTED\_DELEGATOR

CKA\_TRUST\_EMAIL\_PROTECTION CK\_TRUST CKT\_NSS\_TRUSTED\_DELEGATOR

CKA\_TRUST\_CODE\_SIGNING CK\_TRUST CKT\_NSS\_MUST\_VERIFY\_TRUST  
CKA\_TRUST\_STEP\_UP\_APPROVED CK\_BBOOL CK\_FALSE

#

# Certificate "GTS Root R2"

#

# Issuer: CN=GTS Root R2,O=Google Trust Services LLC,C=US

# Serial Number:02:03:e5:ae:c5:8d:04:25:1a:ab:11:25:aa

# Subject: CN=GTS Root R2,O=Google Trust Services LLC,C=US

# Not Valid Before: Wed Jun 22 00:00:00 2016

# Not Valid After : Sun Jun 22 00:00:00 2036

# Fingerprint (SHA-256):

8D:25:CD:97:22:9D:BF:70:35:6B:DA:4E:B3:CC:73:40:31:E2:4C:F0:0F:AF:CF:D3:2D:C7:6E:B5:84:1C:7E:A8

# Fingerprint (SHA1): 9A:44:49:76:32:DB:DE:FA:D0:BC:FB:5A:7B:17:BD:9E:56:09:24:94

CKA\_CLASS

CK\_OBJECT\_CLASS CKO\_CERTIFICATE

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "GTS Root R2"

CKA\_CERTIFICATE\_TYPE CK\_CERTIFICATE\_TYPE CKC\_X\_509

CKA\_SUBJECT MULTILINE\_OCTAL

\060\107\061\013\060\011\006\003\125\004\006\023\002\125\123\061  
\042\060\040\006\003\125\004\012\023\031\107\157\157\147\154\145  
\040\124\162\165\163\164\040\123\145\162\166\151\143\145\163\040  
\114\114\103\061\024\060\022\006\003\125\004\003\023\013\107\124  
\123\040\122\157\157\164\040\122\062

END

CKA\_ID UTF8 "0"

CKA\_ISSUER MULTILINE\_OCTAL

\060\107\061\013\060\011\006\003\125\004\006\023\002\125\123\061  
\042\060\040\006\003\125\004\012\023\031\107\157\157\147\154\145  
\040\124\162\165\163\164\040\123\145\162\166\151\143\145\163\040  
\114\114\103\061\024\060\022\006\003\125\004\003\023\013\107\124  
\123\040\122\157\157\164\040\122\062

END

CKA\_SERIAL\_NUMBER MULTILINE\_OCTAL

\002\015\002\003\345\256\305\215\004\045\032\253\021\045\252

END

CKA\_VALUE

MULTILINE\_OCTAL

\060\202\005\127\060\202\003\077\240\003\002\001\002\002\015\002  
\003\345\256\305\215\004\045\032\253\021\045\252\060\015\006\011  
\052\206\110\206\367\015\001\001\014\005\000\060\107\061\013\060  
\011\006\003\125\004\006\023\002\125\123\061\042\060\040\006\003  
\125\004\012\023\031\107\157\157\147\154\145\040\124\162\165\163  
\164\040\123\145\162\166\151\143\145\163\040\114\114\103\061\024  
\060\022\006\003\125\004\003\023\013\107\124\123\040\122\157\157

\164\040\122\062\060\036\027\015\061\066\060\066\062\062\060\060  
\060\060\060\060\132\027\015\063\066\060\066\062\062\060\060\060  
\060\060\060\132\060\107\061\013\060\011\006\003\125\004\006\023  
\002\125\123\061\042\060\040\006\003\125\004\012\023\031\107\157  
\157\147\154\145\040\124\162\165\163\164\040\123\145\162\166\151  
\143\145\163\040\114\114\103\061\024\060\022\006\003\125\004\003  
\023\013\107\124\123\040\122\157\157\164\040\122\062\060\202\002  
\042\060\015\006\011\052\206\110\206\367\015\001\001\001\005\000  
\003\202\002\017\000\060\202\002\012\002\202\002\001\000\316\336  
\375\246\373\354\354\024\064\074\007\006\132\154\131\367\031\065  
\335\367\301\235\125\252\323\315\073\244\223\162\357\012\372\155  
\235\366\360\205\200\133\241\110\122\237\071\305\267\356\050\254  
\357\313\166\150\024\271\337\255\001\154\231\037\304\042\035\237  
\376\162\167\340\054\133\257\344\004\277\117\162\240\032\064\230  
\350\071\150\354\225\045\173\166\241\346\151\271\205\031\275\211  
\214\376\255\355\066\352\163\274\377\203\342\313\175\301\322\316  
\112\263\215\005\236\213\111\223\337\301\133\320\156\136\360\056  
\060\056\202\374\372\274\264\027\012\110\345\210\233\305\233\153  
\336\260\312\264\003\360\332\364\220\270\145\144\367\134\114\255  
\350\176\146\136\231\327\270\302\076\310\320\023\235\255\356\344  
\105\173\211\125\367\212\037\142\122\204\022\263\302\100\227\343  
\212\037\107\221\246\164\132\322\370\261\143\050\020\270\263\011  
\270\126\167\100\242\046\230\171\306\376\337\045\356\076\345\240  
\177\324\141\017\121\113\074\077\214\332\341\160\164\330\302\150  
\241\371\301\014\351\241\342\177\273\125\074\166\006\356\152\116  
\314\222\210\060\115\232\275\117\013\110\232\204\265\230\243\325  
\373\163\301\127\141\335\050\126\165\023\256\207\216\347\014\121  
\011\020\165\210\114\274\215\371\173\074\324\042\110\037\052\334  
\353\153\273\104\261\313\063\161\062\106\257\255\112\361\214\350  
\164\072\254\347\032\042\163\200\322\060\367\045\102\307\042\073  
\073\022\255\226\056\306\303\166\007\252\040\267\065\111\127\351  
\222\111\350\166\026\162\061\147\053\226\176\212\243\307\224\126  
\042\277\152\113\176\001\041\262\043\062\337\344\232\104\155\131  
\133\135\365\000\240\034\233\306\170\227\215\220\377\233\310\252  
\264\257\021\121\071\136\331\373\147\255\325\133\021\235\062\232  
\033\275\325\272\133\245\311\313\045\151\123\125\047\134\340\312  
\066\313\210\141\373\036\267\320\313\356\026\373\323\246\114\336  
\222\245\324\342\337\365\006\124\336\056\235\113\264\223\060\252  
\201\316\335\032\334\121\163\015\117\160\351\345\266\026\041\031  
\171\262\346\211\013\165\144\312\325\253\274\011\301\030\241\377  
\324\124\241\205\074\375\024\044\003\262\207\323\244\267\002\003  
\001\000\001\243\102\060\100\060\016\006\003\125\035\017\001\001  
\377\004\004\003\002\001\206\060\017\006\003\125\035\023\001\001  
\377\004\005\060\003\001\001\377\060\035\006\003\125\035\016\004  
\026\004\024\273\377\312\216\043\237\117\231\312\333\342\150\246  
\245\025\047\027\036\331\016\060\015\006\011\052\206\110\206\367  
\015\001\001\014\005\000\003\202\002\001\000\037\312\316\335\307  
\276\241\237\331\047\114\013\334\027\230\021\152\210\336\075\346



\161\126\162\262\236\032\116\234\325\053\230\044\135\233\153\173  
\260\063\202\011\275\337\045\106\352\230\236\266\033\376\203\074  
\322\142\141\301\004\355\316\340\305\311\310\023\023\125\347\250  
\143\255\214\173\001\376\167\060\341\316\150\233\005\370\022\356  
\171\061\240\101\105\065\050\012\161\244\044\117\214\334\074\202  
\007\137\146\334\175\020\376\014\141\263\005\225\356\341\256\201  
\017\250\370\307\217\115\250\043\002\046\153\035\203\122\125\316  
\265\057\000\312\200\100\340\341\164\254\140\365\207\200\235\256  
\066\144\221\135\260\150\030\352\212\141\311\167\250\227\304\311  
\307\245\374\125\113\363\360\177\271\145\075\047\150\320\314\153  
\372\123\235\341\221\032\311\135\032\226\155\062\207\355\003\040  
\310\002\316\132\276\331\352\375\262\115\304\057\033\337\137\172  
\365\370\213\306\356\061\072\045\121\125\147\215\144\062\173\351  
\236\303\202\272\052\055\351\036\264\340\110\006\242\374\147\257  
\037\042\002\163\373\040\012\257\235\124\113\241\315\377\140\107  
\260\077\135\357\033\126\275\227\041\226\055\012\321\136\235\070  
\002\107\154\271\364\366\043\045\270\240\152\232\053\167\010\372  
\304\261\050\220\046\130\010\074\342\176\252\327\075\157\272\061  
\210\012\005\353\047\265\241\111\356\240\105\124\173\346\047\145  
\231\040\041\250\243\274\373\030\226\273\122\157\014\355\203\121  
\114\351\131\342\040\140\305\302\145\222\202\214\363\020\037\016  
\212\227\276\167\202\155\077\217\035\135\274\111\047\275\314\117  
\017\341\316\166\206\004\043\305\300\214\022\133\375\333\204\240  
\044\361\110\377\144\174\320\276\134\026\321\357\231\255\300\037  
\373\313\256\274\070\042\006\046\144\332\332\227\016\077\050\025  
\104\250\117\000\312\360\232\314\317\164\152\264\076\074\353\225  
\354\265\323\132\330\201\231\351\103\030\067\353\263\273\321\130  
\142\101\363\146\322\217\252\170\225\124\040\303\132\056\164\053  
\325\321\276\030\151\300\254\325\244\317\071\272\121\204\003\145  
\351\142\300\142\376\330\115\125\226\342\320\021\372\110\064\021  
\354\236\355\005\035\344\310\326\035\206\313

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "GTS Root R2"

# Issuer: CN=GTS Root R2,O=Google Trust Services LLC,C=US

# Serial Number:02:03:e5:ae:c5:8d:04:25:1a:ab:11:25:aa

# Subject: CN=GTS Root R2,O=Google Trust Services LLC,C=US

# Not Valid Before: Wed

Jun 22 00:00:00 2016

# Not Valid After : Sun Jun 22 00:00:00 2036

# Fingerprint (SHA-256):

8D:25:CD:97:22:9D:BF:70:35:6B:DA:4E:B3:CC:73:40:31:E2:4C:F0:0F:AF:CF:D3:2D:C7:6E:B5:84:1C:7E:A8

# Fingerprint (SHA1): 9A:44:49:76:32:DB:DE:FA:D0:BC:FB:5A:7B:17:BD:9E:56:09:24:94

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

```

CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "GTS Root R2"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\232\104\111\166\062\333\336\372\320\274\373\132\173\027\275\236
\126\011\044\224
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\036\071\300\123\346\036\051\202\013\312\122\125\066\135\127\334
END
CKA_ISSUER MULTILINE_OCTAL
\060\107\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\042\060\040\006\003\125\004\012\023\031\107\157\157\147\154\145
\040\124\162\165\163\164\040\123\145\162\166\151\143\145\163\040
\114\114\103\061\024\060\022\006\003\125\004\003\023\013\107\124
\123\040\122\157\157\164\040\122\062
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\015\002\003\345\256\305\215\004\045\032\253\021\045\252
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "GTS Root R3"
#
# Issuer: CN=GTS Root R3,O=Google Trust Services LLC,C=US
# Serial Number:02:03:e5:b8:82:eb:20:f8:25:27:6d:3d:66
# Subject: CN=GTS Root R3,O=Google Trust Services LLC,C=US
# Not Valid Before: Wed Jun 22 00:00:00 2016
# Not Valid After : Sun Jun 22 00:00:00 2036
# Fingerprint (SHA-256):
34:D8:A7:3E:E2:08:D9:BC:DB:0D:95:65:20:93:4B:4E:40:E6:94:82:59:6E:8B:6F:73:C8:42:6B:01:0A:6F:48
# Fingerprint (SHA1): ED:E5:71:80:2B:C8:92:B9:5B:83:3C:D2:32:68:3F:09:CD:A0:1E:46
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "GTS Root R3"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE
CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\107\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\042\060\040\006\003\125\004\012\023\031\107\157\157\147\154\145

```

\040\124\162\165\163\164\040\123\145\162\166\151\143\145\163\040  
\114\114\103\061\024\060\022\006\003\125\004\003\023\013\107\124  
\123\040\122\157\157\164\040\122\063

END

CKA\_ID UTF8 "0"

CKA\_ISSUER MULTILINE\_OCTAL

\060\107\061\013\060\011\006\003\125\004\006\023\002\125\123\061  
\042\060\040\006\003\125\004\012\023\031\107\157\157\147\154\145  
\040\124\162\165\163\164\040\123\145\162\166\151\143\145\163\040  
\114\114\103\061\024\060\022\006\003\125\004\003\023\013\107\124  
\123\040\122\157\157\164\040\122\063

END

CKA\_SERIAL\_NUMBER MULTILINE\_OCTAL

\002\015\002\003\345\270\202\353\040\370\045\047\155\075\146

END

CKA\_VALUE MULTILINE\_OCTAL

\060\202\002\011\060\202\001\216\240\003\002\001\002\002\015\002  
\003\345\270\202\353\040\370\045\047\155\075\146\060\012\006\010  
\052\206\110\316\075\004\003\003\060\107\061\013\060\011\006\003  
\125\004\006\023\002\125\123\061\042\060\040\006\003\125\004\012  
\023\031\107\157\157\147\154\145\040\124\162\165\163\164\040\123  
\145\162\166\151\143\145\163\040\114\114\103\061\024\060\022\006  
\003\125\004\003\023\013\107\124\123\040\122\157\157\164\040\122  
\063\060\036\027\015\061\066\060\066\062\062\060\060\060\060\060  
\060\132\027\015\063\066\060\066\062\062\060\060\060\060\060\060  
\132\060\107\061\013\060\011\006\003\125\004\006\023\002\125\123  
\061\042\060\040\006\003\125\004\012\023\031\107\157\157\147\154  
\145\040\124\162\165\163\164\040\123\145\162\166\151\143\145\163  
\040\114\114\103\061\024\060\022\006\003\125\004\003\023\013\107  
\124\123\040\122\157\157\164\040\122\063\060\166\060\020\006\007  
\052\206\110\316\075\002\001\006\005\053\201\004\000\042\003\142  
\000\004\037\117\063\207\063\051\212\241\204\336\313\307\041\130  
\101\211\352\126\235\053\113\205\306\035\114\047\274\177\046\121  
\162\157\342\237\326\243\312\314\105\024\106\213\255\357\176\206  
\214\354\261\176\057\377\251\161\235\030\204\105\004\101\125\156  
\053\352\046\177\273\220\001\343\113\031\272\344\124\226\105\011  
\261\325\154\221\104\255\204\023\216\232\214\015\200\014\062\366  
\340\047\243\102\060\100\060\016\006\003\125\035\017\001\001\377  
\004\004\003\002\001\206\060\017\006\003\125\035\023\001\001\377  
\004\005\060\003\001\001\377\060\035\006\003\125\035\016\004\026  
\004\024\301\361\046\272\240\055\256\205\201\317\323\361\052\022  
\275\270\012\147\375\274\060\012\006\010\052\206\110\316\075\004  
\003\003\003\151\000\060\146\002\061\000\366\341\040\225\024\173  
\124\243\220\026\021\277\204\310\352\157\153\027\236\036\106\230  
\040\233\237\323\015\331\254\323\057\315\174\370\133\056\125\273  
\277\335\222\367\244\014\334\061\341\242\002\061\000\374\227\146  
\146\345\103\026\023\203\335\307\337\057\276\024\070\355\001\316  
\261\027\032\021\165\351\275\003\217\046\176\204\345\311\140\246

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\225\327\124\131\267\347\021\054\211\324\271\356\027
END
CKA_NSS_MOZILLA_CA_POLICY
CK_BBOOL CK_TRUE
CKA_NSS_SERVER_DISTRICT_AFTER
CK_BBOOL CK_FALSE
CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

# Trust for "GTS Root R3"
# Issuer: CN=GTS Root R3,O=Google Trust Services LLC,C=US
# Serial Number:02:03:e5:b8:82:eb:20:f8:25:27:6d:3d:66
# Subject: CN=GTS Root R3,O=Google Trust Services LLC,C=US
# Not Valid Before: Wed Jun 22 00:00:00 2016
# Not Valid After : Sun Jun 22 00:00:00 2036
# Fingerprint (SHA-256):
34:D8:A7:3E:E2:08:D9:BC:DB:0D:95:65:20:93:4B:4E:40:E6:94:82:59:6E:8B:6F:73:C8:42:6B:01:0A:6F:48
# Fingerprint (SHA1): ED:E5:71:80:2B:C8:92:B9:5B:83:3C:D2:32:68:3F:09:CD:A0:1E:46
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "GTS Root R3"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\355\345\161\200\053\310\222\271\133\203\074\322\062\150\077\011
\315\240\036\106
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\076\347\235\130\002\224\106\121\224\345\340\042\112\213\347\163
END
CKA_ISSUER MULTILINE_OCTAL
\060\107\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\042\060\040\006\003\125\004\012\023\031\107\157\157\147\154\145
\040\124\162\165\163\164\040\123\145\162\166\151\143\145\163\040
\114\114\103\061\024\060\022\006\003\125\004\003\023\013\107\124
\123\040\122\157\157\164\040\122\063
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\015\002\003\345\270\202\353\040\370\045\047\155\075\146
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "GTS Root R4"
#

```

```
# Issuer: CN=GTS Root R4,O=Google Trust Services LLC,C=US
# Serial Number:02:03:e5:c0:68:ef:63:1a:9c:72:90:50:52
# Subject: CN=GTS Root R4,O=Google Trust Services LLC,C=US
# Not Valid Before: Wed Jun 22 00:00:00 2016
# Not Valid After : Sun Jun 22 00:00:00 2036
# Fingerprint (SHA-256):
34:9D:FA:40:58:C5:E2:63:12:3B:39:8A:E7:95:57:3C:4E:13:13:C8:3F:E6:8F:93:55:6C:D5:E8:03:1B:3C:7D
#
Fingerprint (SHA1): 77:D3:03:67:B5:E0:0C:15:F6:0C:38:61:DF:7C:E1:3B:92:46:4D:47
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "GTS Root R4"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\107\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\042\060\040\006\003\125\004\012\023\031\107\157\157\147\154\145
\040\124\162\165\163\164\040\123\145\162\166\151\143\145\163\040
\114\114\103\061\024\060\022\006\003\125\004\003\023\013\107\124
\123\040\122\157\157\164\040\122\064
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\107\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\042\060\040\006\003\125\004\012\023\031\107\157\157\147\154\145
\040\124\162\165\163\164\040\123\145\162\166\151\143\145\163\040
\114\114\103\061\024\060\022\006\003\125\004\003\023\013\107\124
\123\040\122\157\157\164\040\122\064
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\015\002\003\345\300\150\357\143\032\234\162\220\120\122
END
CKA_VALUE MULTILINE_OCTAL
\060\202\002\011\060\202\001\216\240\003\002\001\002\002\015\002
\003\345\300\150\357\143\032\234\162\220\120\122\060\012\006\010
\052\206\110\316\075\004\003\003\060\107\061\013\060\011\006\003
\125\004\006\023\002\125\123\061\042\060\040\006\003\125\004\012
\023\031\107\157\157\147\154\145\040\124\162\165\163\164\040\123
\145\162\166\151\143\145\163\040\114\114\103\061\024\060\022\006
\003\125\004\003\023\013\107\124\123\040\122\157\157\164\040\122
\064\060\036\027\015\061\066\060\066\062\062\060\060\060\060\060
\060\132\027\015\063\066\060\066\062\062\060\060\060\060\060\060
\132\060\107\061\013\060\011\006\003\125\004\006\023\002\125\123
\061\042\060\040\006\003\125\004\012\023\031\107\157\157\147\154
\145\040\124\162\165\163\164\040\123\145\162\166\151\143\145\163
\040\114\114\103\061\024\060\022\006\003\125\004\003\023\013\107
```

```
\124\123\040\122\157\157\164\040\122\064\060\166\060\020\006\007
\052\206\110\316\075\002\001\006\005\053\201\004\000\042\003\142
\000\004\363\164\163\247\150\213\140\256\103\270\065\305\201\060
\173\113\111\235\373\301\141\316\346\336\106\275\153\325\141\030
\065\256\100\335\163\367\211\221\060\132\353\074\356\205\174\242
\100\166\073\251\306\270\107\330\052\347\222\221\152\163\351\261
\162\071\237\051\237\242\230\323\137\136\130\206\145\017\241\204
\145\006\321\334\213\311\307\163\310\214\152\057\345\304\253\321
\035\212\243\102\060\100\060\016\006\003\125\035\017\001\001\377
\004\004\003\002\001\206\060\017\006\003\125\035\023\001\001\377
\004\005\060\003\001\001\377\060\035\006\003\125\035\016\004\026
\004\024\200\114\326\353\164\377\111\066\243\325\330\374\265\076
\305\152\360\224\035\214\060\012\006\010\052\206\110\316\075\004
\003\003\003\151\000\060\146\002\061\000\350\100\377\203\336\003
\364\237\256\035\172\247\056\271\257\117\366\203\035\016\055\205
\001\035\321\331\152\354\017\302\257\307\136\126\136\134\325\034
\130\042\050\013\367\060\266\057\261\174\002\061\000\360\141\074
\247\364\240\202\343\041\325\204\035\163\206\234\055\257\312\064
\233\361\237\271\043\066\342\274\140\003\235\200\263\232\126\310
\341\342\273\024\171\312\315\041\324\224\265\111\103
```

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "GTS Root R4"

# Issuer: CN=GTS Root R4,O=Google Trust Services LLC,C=US

# Serial Number:02:03:e5:c0:68:ef:63:1a:9c:72:90:50:52

# Subject: CN=GTS Root R4,O=Google Trust Services LLC,C=US

# Not Valid Before: Wed Jun 22 00:00:00 2016

# Not Valid After : Sun Jun 22 00:00:00 2036

# Fingerprint (SHA-256):

34:9D:FA:40:58:C5:E2:63:12:3B:39:8A:E7:95:57:3C:4E:13:13:C8:3F:E6:8F:93:55:6C:D5:E8:03:1B:3C:7D

# Fingerprint (SHA1): 77:D3:03:67:B5:E0:0C:15:F6:0C:38:61:DF:7C:E1:3B:92:46:4D:47

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL

CK\_FALSE

CKA\_LABEL UTF8 "GTS Root R4"

CKA\_CERT\_SHA1\_HASH MULTILINE\_OCTAL

```
\167\323\003\147\265\340\014\025\366\014\070\141\337\174\341\073
\222\106\115\107
```

END

CKA\_CERT\_MD5\_HASH MULTILINE\_OCTAL

```
\103\226\203\167\031\115\166\263\235\145\122\344\035\042\245\350
```

END

```

CKA_ISSUER MULTILINE_OCTAL
\060\107\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\042\060\040\006\003\125\004\012\023\031\107\157\157\147\154\145
\040\124\162\165\163\164\040\123\145\162\166\151\143\145\163\040
\114\114\103\061\024\060\022\006\003\125\004\003\023\013\107\124
\123\040\122\157\157\164\040\122\064
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\015\002\003\345\300\150\357\143\032\234\162\220\120\122
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "Telia Root CA v2"
#
# Issuer: CN=Telia Root CA v2,O=Telia Finland
Oyj,C=FI
# Serial Number:01:67:5f:27:d6:fe:7a:e3:e4:ac:be:09:5b:05:9e
# Subject: CN=Telia Root CA v2,O=Telia Finland Oyj,C=FI
# Not Valid Before: Thu Nov 29 11:55:54 2018
# Not Valid After : Sun Nov 29 11:55:54 2043
# Fingerprint (SHA-256):
24:2B:69:74:2F:CB:1E:5B:2A:BF:98:89:8B:94:57:21:87:54:4E:5B:4D:99:11:78:65:73:62:1F:6A:74:B8:2C
# Fingerprint (SHA1): B9:99:CD:D1:73:50:8A:C4:47:05:08:9C:8C:88:FB:BE:A0:2B:40:CD
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Telia Root CA v2"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\104\061\013\060\011\006\003\125\004\006\023\002\106\111\061
\032\060\030\006\003\125\004\012\014\021\124\145\154\151\141\040
\106\151\156\154\141\156\144\040\117\171\152\061\031\060\027\006
\003\125\004\003\014\020\124\145\154\151\141\040\122\157\157\164
\040\103\101\040\166\062
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\104\061\013\060\011\006\003\125\004\006\023\002\106\111\061
\032\060\030\006\003\125\004\012\014\021\124\145\154\151\141\040
\106\151\156\154\141\156\144\040\117\171\152\061\031\060\027\006
\003\125\004\003\014\020\124\145\154\151\141\040\122\157\157\164
\040\103\101\040\166\062
END

```

CKA\_SERIAL\_NUMBER

MULTILINE\_OCTAL

\002\017\001\147\137\047\326\376\172\343\344\254\276\011\133\005  
\236

END

CKA\_VALUE MULTILINE\_OCTAL

\060\202\005\164\060\202\003\134\240\003\002\001\002\002\017\001  
\147\137\047\326\376\172\343\344\254\276\011\133\005\236\060\015  
\006\011\052\206\110\206\367\015\001\001\013\005\000\060\104\061  
\013\060\011\006\003\125\004\006\023\002\106\111\061\032\060\030  
\006\003\125\004\012\014\021\124\145\154\151\141\040\106\151\156  
\154\141\156\144\040\117\171\152\061\031\060\027\006\003\125\004  
\003\014\020\124\145\154\151\141\040\122\157\157\164\040\103\101  
\040\166\062\060\036\027\015\061\070\061\061\062\071\061\061\065\065  
\065\065\064\132\027\015\064\063\061\061\062\071\061\061\065\065  
\065\064\132\060\104\061\013\060\011\006\003\125\004\006\023\002  
\106\111\061\032\060\030\006\003\125\004\012\014\021\124\145\154  
\151\141\040\106\151\156\154\141\156\144\040\117\171\152\061\031  
\060\027\006\003\125\004\003\014\020\124\145\154\151\141\040\122  
\157\157\164\040\103\101\040\166\062\060\202\002\042\060\015\006  
\011\052\206\110\206\367\015\001\001\001\005\000\003\202\002\017  
\000\060\202\002\012\002\202\002\001\000\262\320\077\007\274\342  
\173\320\153\231\370\342\167\151\347\316\235\244\003\274\202\155  
\241\376\201\145\037\114\047\254\216\000\272\026\173\353\060\152  
\000\300\263\164\150\176\262\257\307\325\142\263\172\077\120\312  
\214\066\104\044\143\322\066\351\014\205\366\103\166\325\114\241  
\140\162\147\342\050\063\245\313\061\270\072\042\043\064\270\175  
\275\126\042\100\235\352\364\173\003\255\150\374\262\201\117\230  
\320\164\352\215\345\175\315\143\303\243\366\336\222\302\130\031  
\340\226\273\305\304\251\075\245\164\226\376\257\371\211\252\275  
\225\027\124\330\170\104\361\014\167\025\222\340\230\102\247\244  
\326\252\040\222\315\301\240\263\226\262\072\204\102\215\175\325  
\225\344\326\333\351\142\304\130\263\171\305\214\323\065\063\203  
\237\165\241\122\047\141\070\361\131\075\216\120\340\275\171\074  
\347\154\226\376\136\331\002\145\264\216\134\320\021\064\337\135  
\277\122\247\201\000\303\177\231\105\231\025\325\027\310\012\123  
\354\143\363\231\175\314\151\022\206\302\027\360\001\236\277\204  
\274\321\122\313\033\222\146\316\244\123\345\241\277\304\333\011  
\326\346\211\126\053\310\343\174\336\343\377\211\345\065\156\050  
\350\154\013\043\121\251\045\005\353\110\370\335\261\312\372\154  
\010\121\357\267\030\154\104\312\046\341\163\306\211\006\201\345  
\212\254\260\342\051\306\271\044\263\153\104\021\364\245\103\302  
\114\103\345\160\066\214\266\063\127\172\225\056\202\240\364\134  
\020\263\141\203\366\002\005\206\056\174\055\154\334\003\106\156  
\065\223\325\172\225\057\336\040\330\133\176\224\220\004\152\272  
\131\075\004\005\165\235\067\242\016\056\075\353\301\244\122\203  
\376\320\153\324\146\216\334\306\351\022\116\035\052\127\252\020  
\274\174\136\202\175\246\246\311\362\055\271\365\027\047\255\321



\016\211\124\053\225\372\300\255\035\230\024\170\063\102\206\012  
\251\163\265\373\164\015\267\033\060\031\304\132\016\034\047\267  
\332\030\320\377\212\310\005\272\361\252\034\242\067\267\346\110  
\244\106\054\224\352\250\166\142\107\213\020\123\007\110\127\154  
\342\222\115\266\256\005\313\334\301\112\136\217\254\075\031\116  
\302\355\140\165\053\333\301\312\102\325\002\003\001\000\001\243  
\143\060\141\060\037\006\003\125\035\043\004\030\060\026\200\024  
\162\254\344\063\171\252\105\207\366\375\254\035\236\326\307\057  
\206\330\044\071\060\035\006\003\125\035\016\004\026\004\024\162  
\254\344\063\171\252\105\207\366\375\254\035\236\326\307\057\206  
\330\044\071\060\016\006\003\125\035\017\001\001\377\004\004\003  
\002\001\006\060\017\006\003\125\035\023\001\001\377\004\005\060  
\003\001\001\377\060\015\006\011\052\206\110\206\367\015\001\001  
\013\005\000\003\202\002\001\000\240\073\131\247\011\224\076\066  
\204\322\176\057\071\245\226\227\372\021\255\374\147\363\161\011  
\362\262\211\204\147\104\257\271\357\355\226\354\234\144\333\062  
\060\157\147\232\254\176\137\262\253\001\066\176\201\372\344\204  
\136\322\254\066\340\153\142\305\175\113\016\202\155\322\166\142  
\321\376\227\370\237\060\174\030\371\264\122\167\202\035\166\333  
\323\035\251\360\301\232\000\275\155\165\330\175\347\372\307\070  
\243\234\160\350\106\171\003\257\056\164\333\165\370\156\123\014  
\003\310\231\032\211\065\031\074\323\311\124\174\250\360\054\346  
\156\007\171\157\152\341\346\352\221\202\151\012\035\303\176\131  
\242\236\153\106\025\230\133\323\257\106\035\142\310\316\200\122  
\111\021\077\311\004\022\303\023\174\077\073\212\226\333\074\240  
\036\012\264\213\124\262\044\147\015\357\202\313\276\074\175\321  
\342\177\256\026\326\126\130\271\332\040\261\203\025\241\357\212  
\115\062\157\101\057\023\122\202\224\327\032\301\170\242\121\335  
\053\160\155\267\032\371\367\260\340\147\227\126\333\174\141\123  
\011\003\050\002\100\307\263\330\375\234\160\152\306\050\303\205  
\351\342\355\032\223\240\336\113\230\242\204\076\005\167\001\226  
\075\373\264\040\017\234\162\002\172\022\057\325\243\272\121\170  
\257\052\053\104\145\116\265\375\012\350\301\315\171\207\141\053  
\336\200\127\105\277\147\361\233\221\136\245\244\354\131\110\020  
\015\070\307\260\372\303\104\155\004\365\170\120\034\222\226\133  
\332\365\270\056\272\133\317\345\360\152\235\113\057\130\163\055  
\117\055\304\034\076\364\263\077\253\025\016\073\031\101\212\244  
\301\127\022\146\161\114\372\123\343\127\353\142\225\011\236\124  
\335\321\302\074\127\074\275\070\255\230\144\267\270\003\232\123  
\126\140\135\263\330\102\033\134\113\022\212\034\353\353\175\306  
\172\151\307\047\177\244\370\213\362\344\224\146\207\113\351\224  
\007\011\022\171\212\262\353\164\004\334\316\364\104\131\340\026  
\312\305\054\130\327\074\173\317\142\206\152\120\175\065\066\146  
\247\373\067\347\050\307\330\320\255\245\151\224\217\350\301\337  
\044\370\033\007\061\207\201\330\135\366\350\050\330\112\122\200  
\254\023\356\120\024\036\230\307

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

```

CK_BBOOL CK_TRUE
CKA_NSS_SERVER_DISTRUST_AFTER CK_BBOOL CK_FALSE
CKA_NSS_EMAIL_DISTRUST_AFTER CK_BBOOL CK_FALSE

# Trust for "Telia Root CA v2"
# Issuer: CN=Telia Root CA v2,O=Telia Finland Oyj,C=FI
# Serial Number:01:67:5f:27:d6:fe:7a:e3:e4:ac:be:09:5b:05:9e
# Subject: CN=Telia Root CA v2,O=Telia Finland Oyj,C=FI
# Not Valid Before: Thu Nov 29 11:55:54 2018
# Not Valid After : Sun Nov 29 11:55:54 2043
# Fingerprint (SHA-256):
24:2B:69:74:2F:CB:1E:5B:2A:BF:98:89:8B:94:57:21:87:54:4E:5B:4D:99:11:78:65:73:62:1F:6A:74:B8:2C
# Fingerprint (SHA1): B9:99:CD:D1:73:50:8A:C4:47:05:08:9C:8C:88:FB:BE:A0:2B:40:CD
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Telia Root CA v2"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\271\231\315\321\163\120\212\304\107\005\010\234\214\210\373\276
\240\053\100\315
END
CKA_CERT_MD5_HASH
MULTILINE_OCTAL
\016\217\254\252\202\337\205\261\364\334\020\034\374\231\331\110
END
CKA_ISSUER MULTILINE_OCTAL
\060\104\061\013\060\011\006\003\125\004\006\023\002\106\111\061
\032\060\030\006\003\125\004\012\014\021\124\145\154\151\141\040
\106\151\156\154\141\156\144\040\117\171\152\061\031\060\027\006
\003\125\004\003\014\020\124\145\154\151\141\040\122\157\157\164
\040\103\101\040\166\062
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\017\001\147\137\047\326\376\172\343\344\254\276\011\133\005
\236
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "D-TRUST BR Root CA 1 2020"
#
# Issuer: CN=D-TRUST BR Root CA 1 2020,O=D-Trust GmbH,C=DE
# Serial Number:7c:c9:8f:2b:84:d7:df:ea:0f:c9:65:9a:d3:4b:4d:96
# Subject: CN=D-TRUST BR Root CA 1 2020,O=D-Trust

```

GmbH,C=DE

# Not Valid Before: Tue Feb 11 09:45:00 2020

# Not Valid After : Sun Feb 11 09:44:59 2035

# Fingerprint (SHA-256):

E5:9A:AA:81:60:09:C2:2B:FF:5B:25:BA:D3:7D:F3:06:F0:49:79:7C:1F:81:D8:5A:B0:89:E6:57:BD:8F:00:44

# Fingerprint (SHA1): 1F:5B:98:F0:E3:B5:F7:74:3C:ED:E6:B0:36:7D:32:CD:F4:09:41:67

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_CERTIFICATE

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "D-TRUST BR Root CA 1 2020"

CKA\_CERTIFICATE\_TYPE CK\_CERTIFICATE\_TYPE CKC\_X\_509

CKA\_SUBJECT MULTILINE\_OCTAL

\060\110\061\013\060\011\006\003\125\004\006\023\002\104\105\061  
\025\060\023\006\003\125\004\012\023\014\104\055\124\162\165\163  
\164\040\107\155\142\110\061\042\060\040\006\003\125\004\003\023  
\031\104\055\124\122\125\123\124\040\102\122\040\122\157\157\164  
\040\103\101\040\061\040\062\060\062\060

END

CKA\_ID UTF8 "0"

CKA\_ISSUER MULTILINE\_OCTAL

\060\110\061\013\060\011\006\003\125\004\006\023\002\104\105\061  
\025\060\023\006\003\125\004\012\023\014\104\055\124\162\165\163  
\164\040\107\155\142\110\061\042\060\040\006\003\125\004\003\023  
\031\104\055\124\122\125\123\124\040\102\122\040\122\157\157\164  
\040\103\101\040\061\040\062\060\062\060

END

CKA\_SERIAL\_NUMBER

MULTILINE\_OCTAL

\002\020\174\311\217\053\204\327\337\352\017\311\145\232\323\113  
\115\226

END

CKA\_VALUE MULTILINE\_OCTAL

\060\202\002\333\060\202\002\140\240\003\002\001\002\002\020\174  
\311\217\053\204\327\337\352\017\311\145\232\323\113\115\226\060  
\012\006\010\052\206\110\316\075\004\003\003\060\110\061\013\060  
\011\006\003\125\004\006\023\002\104\105\061\025\060\023\006\003  
\125\004\012\023\014\104\055\124\162\165\163\164\040\107\155\142  
\110\061\042\060\040\006\003\125\004\003\023\031\104\055\124\122  
\125\123\124\040\102\122\040\122\157\157\164\040\103\101\040\061  
\040\062\060\062\060\060\036\027\015\062\060\060\062\061\061\060  
\071\064\065\060\060\132\027\015\063\065\060\062\061\061\060\071  
\064\064\065\071\132\060\110\061\013\060\011\006\003\125\004\006  
\023\002\104\105\061\025\060\023\006\003\125\004\012\023\014\104  
\055\124\162\165\163\164\040\107\155\142\110\061\042\060\040\006  
\003\125\004\003\023\031\104\055\124\122\125\123\124\040\102\122  
\040\122\157\157\164\040\103\101\040\061\040\062\060\062\060\060  
\166\060\020\006\007\052\206\110\316\075\002\001\006\005\053\201

\004\000\042\003\142\000\004\306\313\307\050\321\373\204\365\232  
\357\102\024\040\341\103\153\156\165\255\374\053\003\204\324\166  
\223\045\327\131\073\101\145\153\036\346\064\052\273\164\366\022  
\316\350\155\347\253\344\074\116\077\104\010\213\315\026\161\313  
\277\222\231\364\244\327\074\120\124\122\220\205\203\170\224\147  
\147\243\034\011\031\075\165\064\205\336\355\140\175\307\014\264  
\101\122\271\156\345\356\102\243\202\001\015\060\202\001\011\060  
\017\006\003\125\035\023\001\001\377\004\005\060\003\001\001\377  
\060\035\006\003\125\035\016\004\026\004\024\163\221\020\253\377  
\125\263\132\174\011\045\325\262\272\010\240\153\253\037\155\060  
\016\006\003\125\035\017\001\001\377\004\004\003\002\001\006\060  
\201\306\006\003\125\035\037\004\201\276\060\201\273\060\076\240  
\074\240\072\206\070\150\164\164\160\072\057\057\143\162\154\056  
\144\055\164\162\165\163\164\056\156\145\164\057\143\162\154\057  
\144\055\164\162\165\163\164\137\142\162\137\162\157\157\164\137  
\143\141\137\061\137\062\060\062\060\056\143\162\154\060\171\240  
\167\240\165\206\163\154\144\141\160\072\057\057\144\151\162\145  
\143\164\157\162\171\056\144\055\164\162\165\163\164\056\156\145  
\164\057\103\116\075\104\055\124\122\125\123\124\045\062\060\102  
\122\045\062\060\122\157\157\164\045\062\060\103\101\045\062\060  
\061\045\062\060\062\060\062\060\054\117\075\104\055\124\162\165  
\163\164\045\062\060\107\155\142\110\054\103\075\104\105\077\143  
\145\162\164\151\146\151\143\141\164\145\162\145\166\157\143\141  
\164\151\157\156\154\151\163\164\060\012\006\010\052\206\110\316  
\075\004\003\003\003\151\000\060\146\002\061\000\224\220\055\023  
\372\341\143\370\141\143\350\255\205\170\124\221\234\270\223\070  
\076\032\101\332\100\026\123\102\010\312\057\216\361\076\201\126  
\300\252\330\355\030\304\260\256\364\076\372\046\002\061\000\363  
\050\342\306\333\053\231\373\267\121\270\044\243\244\224\172\032  
\077\346\066\342\003\127\063\212\060\313\202\307\326\024\021\325  
\165\143\133\024\225\234\037\001\317\330\325\162\247\017\073

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "D-TRUST BR Root CA 1 2020"

# Issuer: CN=D-TRUST BR Root CA 1 2020,O=D-Trust GmbH,C=DE

# Serial Number:7c:c9:8f:2b:84:d7:df:ea:0f:c9:65:9a:d3:4b:4d:96

# Subject: CN=D-TRUST BR Root CA 1 2020,O=D-Trust GmbH,C=DE

# Not Valid Before: Tue Feb 11 09:45:00 2020

# Not Valid After : Sun Feb 11 09:44:59 2035

# Fingerprint (SHA-256):

E5:9A:AA:81:60:09:C2:2B:FF:5B:25:BA:D3:7D:F3:06:F0:49:79:7C:1F:81:D8:5A:B0:89:E6:57:BD:8F:00:44

# Fingerprint (SHA1): 1F:5B:98:F0:E3:B5:F7:74:3C:ED:E6:B0:36:7D:32:CD:F4:09:41:67

CKA\_CLASS

```

CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "D-TRUST BR Root CA 1 2020"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\037\133\230\360\343\265\367\164\074\355\346\260\066\175\062\315
\364\011\101\147
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\265\252\113\325\355\367\343\125\056\217\162\012\363\165\270\355
END
CKA_ISSUER MULTILINE_OCTAL
\060\110\061\013\060\011\006\003\125\004\006\023\002\104\105\061
\025\060\023\006\003\125\004\012\023\014\104\055\124\162\165\163
\164\040\107\155\142\110\061\042\060\040\006\003\125\004\003\023
\031\104\055\124\122\125\123\124\040\102\122\040\122\157\157\164
\040\103\101\040\061\040\062\060\062\060
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\020\174\311\217\053\204\327\337\352\017\311\145\232\323\113
\115\226
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED
CK_BBOOL CK_FALSE

#
# Certificate "D-TRUST EV Root CA 1 2020"
#
# Issuer: CN=D-TRUST EV Root CA 1 2020,O=D-Trust GmbH,C=DE
# Serial Number:5f:02:41:d7:7a:87:7c:4c:03:a3:ac:96:8d:fb:ff:d0
# Subject: CN=D-TRUST EV Root CA 1 2020,O=D-Trust GmbH,C=DE
# Not Valid Before: Tue Feb 11 10:00:00 2020
# Not Valid After : Sun Feb 11 09:59:59 2035
# Fingerprint (SHA-256):
08:17:0D:1A:A3:64:53:90:1A:2F:95:92:45:E3:47:DB:0C:8D:37:AB:AA:BC:56:B8:1A:A1:00:DC:95:89:70:DB
# Fingerprint (SHA1): 61:DB:8C:21:59:69:03:90:D8:7C:9C:12:86:54:CF:9D:3D:F4:DD:07
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "D-TRUST EV Root CA 1 2020"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\110\061\013\060\011\006\003\125\004\006\023\002\104\105\061

```

\025\060\023\006\003\125\004\012\023\014\104\055\124\162\165\163  
\164\040\107\155\142\110\061\042\060\040\006\003\125\004\003\023  
\031\104\055\124\122\125\123\124\040\105\126\040\122\157\157\164  
\040\103\101\040\061\040\062\060\062\060

END

CKA\_ID

UTF8 "0"

CKA\_ISSUER MULTILINE\_OCTAL

\060\110\061\013\060\011\006\003\125\004\006\023\002\104\105\061  
\025\060\023\006\003\125\004\012\023\014\104\055\124\162\165\163  
\164\040\107\155\142\110\061\042\060\040\006\003\125\004\003\023  
\031\104\055\124\122\125\123\124\040\105\126\040\122\157\157\164  
\040\103\101\040\061\040\062\060\062\060

END

CKA\_SERIAL\_NUMBER MULTILINE\_OCTAL

\002\020\137\002\101\327\172\207\174\114\003\243\254\226\215\373  
\377\320

END

CKA\_VALUE MULTILINE\_OCTAL

\060\202\002\333\060\202\002\140\240\003\002\001\002\002\020\137  
\002\101\327\172\207\174\114\003\243\254\226\215\373\377\320\060  
\012\006\010\052\206\110\316\075\004\003\003\060\110\061\013\060  
\011\006\003\125\004\006\023\002\104\105\061\025\060\023\006\003  
\125\004\012\023\014\104\055\124\162\165\163\164\040\107\155\142  
\110\061\042\060\040\006\003\125\004\003\023\031\104\055\124\122  
\125\123\124\040\105\126\040\122\157\157\164\040\103\101\040\061  
\040\062\060\062\060\060\036\027\015\062\060\060\062\061\061\061  
\060\060\060\060\060\132\027\015\063\065\060\062\061\061\060\071  
\065\071\065\071\132\060\110\061\013\060\011\006\003\125\004\006  
\023\002\104\105\061\025\060\023\006\003\125\004\012\023\014\104  
\055\124\162\165\163\164\040\107\155\142\110\061\042\060\040\006  
\003\125\004\003\023\031\104\055\124\122\125\123\124\040\105\126  
\040\122\157\157\164\040\103\101\040\061\040\062\060\062\060\060  
\166\060\020\006\007\052\206\110\316\075\002\001\006\005\053\201  
\004\000\042\003\142\000\004\361\013\335\206\103\040\031\337\227  
\205\350\042\112\233\317\235\230\277\264\005\046\311\313\343\246  
\322\217\305\236\170\173\061\211\251\211\255\047\074\145\020\202  
\374\337\303\235\116\360\063\043\304\322\062\365\034\260\337\063  
\027\135\305\360\261\212\371\357\271\267\024\312\051\112\302\017  
\251\177\165\145\111\052\060\147\364\144\367\326\032\167\332\303  
\302\227\141\102\173\111\255\243\202\001\015\060\202\001\011\060  
\017\006\003\125\035\023\001\001\377\004\005\060\003\001\001\377  
\060\035\006\003\125\035\016\004\026\004\024\177\020\001\026\067  
\072\244\050\344\120\370\244\367\354\153\062\266\376\351\213\060  
\016\006\003\125\035\017\001\001\377\004\004\003\002\001\006\060  
\201\306\006\003\125\035\037\004\201\276\060\201\273\060\076\240  
\074\240\072\206\070\150\164\164\160\072\057\057\143\162\154\056  
\144\055\164\162\165\163\164\056\156\145\164\057\143\162\154\057

\144\055\164\162\165\163\164\137\145\166\137\162\157\157\164\137  
\143\141\137\061\137\062\060\062\060\056\143\162\154\060\171\240  
\167\240\165\206\163\154\144\141\160\072\057\057\144\151\162\145  
\143\164\157\162\171\056\144\055\164\162\165\163\164\056\156\145  
\164\057\103\116\075\104\055\124\122\125\123\124\045\062\060\105  
\126\045\062\060\122\157\157\164\045\062\060\103\101\045\062\060  
\061\045\062\060\062\060\062\060\054\117\075\104\055\124\162\165  
\163\164\045\062\060\107\155\142\110\054\103\075\104\105\077\143  
\145\162\164\151\146\151\143\141\164\145\162\145\166\157\143\141  
\164\151\157\156\154\151\163\164\060\012\006\010\052\206\110\316  
\075\004\003\003\003\151\000\060\146\002\061\000\312\074\306\052  
\165\302\136\165\142\071\066\000\140\132\213\301\223\231\314\331  
\333\101\073\073\207\231\027\073\325\314\117\312\042\367\240\200  
\313\371\264\261\033\126\365\162\322\374\031\321\002\061\000\221  
\367\060\223\077\020\106\053\161\244\320\073\104\233\300\051\002  
\005\262\101\167\121\363\171\132\236\216\024\240\116\102\322\133  
\201\363\064\152\003\347\042\070\120\133\355\031\117\103\026

END

CKA\_NSS\_Mozilla\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRUST\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRUST\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "D-TRUST EV Root CA 1 2020"

# Issuer: CN=D-TRUST EV Root CA 1 2020,O=D-Trust GmbH,C=DE

# Serial Number:5f:02:41:d7:7a:87:7c:4c:03:a3:ac:96:8d:fb:ff:d0

# Subject: CN=D-TRUST EV Root CA 1 2020,O=D-Trust GmbH,C=DE

# Not Valid Before: Tue

Feb 11 10:00:00 2020

# Not Valid After : Sun Feb 11 09:59:59 2035

# Fingerprint (SHA-256):

08:17:0D:1A:A3:64:53:90:1A:2F:95:92:45:E3:47:DB:0C:8D:37:AB:AA:BC:56:B8:1A:A1:00:DC:95:89:70:DB

# Fingerprint (SHA1): 61:DB:8C:21:59:69:03:90:D8:7C:9C:12:86:54:CF:9D:3D:F4:DD:07

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "D-TRUST EV Root CA 1 2020"

CKA\_CERT\_SHA1\_HASH MULTILINE\_OCTAL

\141\333\214\041\131\151\003\220\330\174\234\022\206\124\317\235  
\075\364\335\007

END

CKA\_CERT\_MD5\_HASH MULTILINE\_OCTAL

\214\055\235\160\237\110\231\021\006\021\373\351\313\060\300\156

END

CKA\_ISSUER MULTILINE\_OCTAL

\060\110\061\013\060\011\006\003\125\004\006\023\002\104\105\061  
\025\060\023\006\003\125\004\012\023\014\104\055\124\162\165\163

```

\164\040\107\155\142\110\061\042\060\040\006\003\125\004\003\023
\031\104\055\124\122\125\123\124\040\105\126\040\122\157\157\164
\040\103\101\040\061\040\062\060\062\060
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\020\137\002\101\327\172\207\174\114\003\243\254\226\215\373
\377\320
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "DigiCert TLS ECC P384 Root G5"
#
# Issuer: CN=DigiCert TLS ECC P384 Root G5,O="DigiCert, Inc.",C=US
# Serial Number:09:e0:93:65:ac:f7:d9:c8:b9:3e:1c:0b:04:2a:2e:f3
# Subject: CN=DigiCert TLS ECC P384 Root G5,O="DigiCert, Inc.",C=US
# Not Valid Before: Fri Jan 15 00:00:00 2021
# Not Valid After : Sun Jan 14 23:59:59 2046
# Fingerprint (SHA-256):
01:8E:13:F0:77:25:32:CF:80:9B:D1:B1:72:81:86:72:83:FC:48:C6:E1:3B:E9:C6:98:12:85:4A:49:0C:1B:05
# Fingerprint (SHA1): 17:F3:DE:5E:9F:0F:19:E9:8E:F6:1F:32:26:6E:20:C4:07:AE:30:EE
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL
CK_FALSE
CKA_LABEL UTF8 "DigiCert TLS ECC P384 Root G5"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\116\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\027\060\025\006\003\125\004\012\023\016\104\151\147\151\103\145
\162\164\054\040\111\156\143\056\061\046\060\044\006\003\125\004
\003\023\035\104\151\147\151\103\145\162\164\040\124\114\123\040
\105\103\103\040\120\063\070\064\040\122\157\157\164\040\107\065
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\116\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\027\060\025\006\003\125\004\012\023\016\104\151\147\151\103\145
\162\164\054\040\111\156\143\056\061\046\060\044\006\003\125\004
\003\023\035\104\151\147\151\103\145\162\164\040\124\114\123\040
\105\103\103\040\120\063\070\064\040\122\157\157\164\040\107\065
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL

```



\002\020\011\340\223\145\254\367\331\310\271\076\034\013\004\052  
\056\363

END

CKA\_VALUE MULTILINE\_OCTAL

\060\202\002\031\060\202\001\237\240\003\002\001\002\002\020\011  
\340\223\145\254\367\331\310\271\076\034\013\004\052\056\363\060  
\012\006\010\052\206\110\316\075\004\003\003\060\116\061\013\060  
\011\006\003\125\004\006\023\002\125\123\061\027\060\025\006\003  
\125\004\012\023\016\104\151\147\151\103\145\162\164\054\040\111  
\156\143\056\061\046\060\044\006\003\125\004\003\023\035\104\151  
\147\151\103\145\162\164\040\124\114\123\040\105\103\103\040\120  
\063\070\064\040\122\157\157\164\040\107\065\060\036\027\015\062  
\061\060\061\061\065\060\060\060\060\060\060\132\027\015\064\066  
\060\061\061\064\062\063\065\071\065\071\132\060\116\061\013\060  
\011\006\003\125\004\006\023\002\125\123\061\027\060\025\006\003  
\125\004\012\023\016\104\151\147\151\103\145\162\164\054\040\111  
\156\143\056\061\046\060\044\006\003\125\004\003\023\035\104\151  
\147\151\103\145\162\164\040\124\114\123\040\105\103\103\040\120  
\063\070\064\040\122\157\157\164\040\107\065\060\166\060\020\006  
\007\052\206\110\316\075\002\001\006\005\053\201\004\000\042\003  
\142\000\004\301\104\241\317\021\227\120\232\336\043\202\065\007  
\315\320\313\030\235\322\361\177\167\065\117\073\335\224\162\122  
\355\302\073\370\354\372\173\153\130\040\354\231\256\311\374\150  
\263\165\271\333\011\354\310\023\365\116\306\012\035\146\060\114  
\273\037\107\012\074\141\020\102\051\174\245\010\016\340\042\351  
\323\065\150\316\233\143\237\204\265\231\115\130\240\216\365\124  
\347\225\311\243\102\060\100\060\035\006\003\125\035\016\004\026  
\004\024\301\121\105\120\131\253\076\347\054\132\372\040\042\022  
\007\200\210\174\021\152\060\016\006\003\125\035\017\001\001\377  
\004\004\003\002\001\206\060\017\006\003\125\035\023\001\001\377  
\004\005\060\003\001\001\377\060\012\006\010\052\206\110\316\075  
\004\003\003\003\150\000\060\145\002\061\000\211\152\215\107\347  
\354\374\156\125\003\331\147\154\046\116\203\306\375\311\373\053  
\023\274\267\172\214\264\145\322\151\151\143\023\143\073\046\120  
\056\001\241\171\006\221\235\110\277\302\276\002\060\107\303\025  
\173\261\240\221\231\111\223\250\074\174\350\106\006\213\054\362  
\061\000\224\235\142\310\211\275\031\204\024\351\245\373\001\270  
\015\166\103\214\056\123\313\174\337\014\027\226\120

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "DigiCert TLS ECC P384 Root G5"

# Issuer: CN=DigiCert TLS ECC P384 Root G5,O="DigiCert, Inc.",C=US

# Serial Number:09:e0:93:65:ac:f7:d9:c8:b9:3e:1c:0b:04:2a:2e:f3

# Subject: CN=DigiCert TLS ECC P384 Root G5,O="DigiCert, Inc.",C=US

```
# Not Valid Before: Fri Jan 15 00:00:00 2021
# Not Valid After : Sun Jan 14 23:59:59 2046
# Fingerprint (SHA-256):
01:8E:13:F0:77:25:32:CF:80:9B:D1:B1:72:81:86:72:83:FC:48:C6:E1:3B:E9:C6:98:12:85:4A:49:0C:1B:05
# Fingerprint (SHA1): 17:F3:DE:5E:9F:0F:19:E9:8E:F6:1F:32:26:6E:20:C4:07:AE:30:EE
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "DigiCert
  TLS ECC P384 Root G5"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\027\363\336\136\237\017\031\351\216\366\037\062\046\156\040\304
\007\256\060\356
```

```
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\323\161\004\152\103\034\333\246\131\341\250\243\252\305\161\355
END
```

```
CKA_ISSUER MULTILINE_OCTAL
\060\116\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\027\060\025\006\003\125\004\012\023\016\104\151\147\151\103\145
\162\164\054\040\111\156\143\056\061\046\060\044\006\003\125\004
\003\023\035\104\151\147\151\103\145\162\164\040\124\114\123\040
\105\103\103\040\120\063\070\064\040\122\157\157\164\040\107\065
END
```

```
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\020\011\340\223\145\254\367\331\310\271\076\034\013\004\052
\056\363
END
```

```
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE
```

```
#
# Certificate "DigiCert TLS RSA4096 Root G5"
#
# Issuer:
  CN=DigiCert TLS RSA4096 Root G5,O="DigiCert, Inc.",C=US
# Serial Number:08:f9:b4:78:a8:fa:7e:da:6a:33:37:89:de:7c:cf:8a
# Subject: CN=DigiCert TLS RSA4096 Root G5,O="DigiCert, Inc.",C=US
# Not Valid Before: Fri Jan 15 00:00:00 2021
# Not Valid After : Sun Jan 14 23:59:59 2046
# Fingerprint (SHA-256):
37:1A:00:DC:05:33:B3:72:1A:7E:EB:40:E8:41:9E:70:79:9D:2B:0A:0F:2C:1D:80:69:31:65:F7:CE:C4:AD:75
# Fingerprint (SHA1): A7:88:49:DC:5D:7C:75:8C:8C:DE:39:98:56:B3:AA:D0:B2:A5:71:35
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
```

```
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "DigiCert TLS RSA4096 Root G5"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\115\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\027\060\025\006\003\125\004\012\023\016\104\151\147\151\103\145
\162\164\054\040\111\156\143\056\061\045\060\043\006\003\125\004
\003\023\034\104\151\147\151\103\145\162\164\040\124\114\123\040
\122\123\101\064\060\071\066\040\122\157\157\164\040\107\065
END
CKA_ID
UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\115\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\027\060\025\006\003\125\004\012\023\016\104\151\147\151\103\145
\162\164\054\040\111\156\143\056\061\045\060\043\006\003\125\004
\003\023\034\104\151\147\151\103\145\162\164\040\124\114\123\040
\122\123\101\064\060\071\066\040\122\157\157\164\040\107\065
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\020\010\371\264\170\250\372\176\332\152\063\067\211\336\174
\317\212
END
CKA_VALUE MULTILINE_OCTAL
\060\202\005\146\060\202\003\116\240\003\002\001\002\002\020\010
\371\264\170\250\372\176\332\152\063\067\211\336\174\317\212\060
\015\006\011\052\206\110\206\367\015\001\001\014\005\000\060\115
\061\013\060\011\006\003\125\004\006\023\002\125\123\061\027\060
\025\006\003\125\004\012\023\016\104\151\147\151\103\145\162\164
\054\040\111\156\143\056\061\045\060\043\006\003\125\004\003\023
\034\104\151\147\151\103\145\162\164\040\124\114\123\040\122\123
\101\064\060\071\066\040\122\157\157\164\040\107\065\060\036\027
\015\062\061\060\061\061\065\060\060\060\060\060\060\132\027\015
\064\066\060\061\061\064\062\063\065\071\065\071\132\060\115\061
\013\060\011\006\003\125\004\006\023\002\125\123\061\027\060\025
\006\003\125\004\012\023\016\104\151\147\151\103\145\162\164\054
\040\111\156\143\056\061\045\060\043\006\003\125\004\003\023\034
\104\151\147\151\103\145\162\164\040\124\114\123\040\122\123\101
\064\060\071\066\040\122\157\157\164\040\107\065\060\202\002\042
\060\015\006\011\052\206\110\206\367\015\001\001\001\005\000\003
\202\002\017\000\060\202\002\012\002\202\002\001\000\263\320\364
\311\171\021\235\375\374\146\201\347\314\325\344\274\354\201\076
\152\065\216\056\267\347\336\257\371\007\115\317\060\235\352\011
\013\231\275\154\127\332\030\112\270\170\254\072\071\250\246\110
\254\056\162\345\275\353\361\032\315\347\244\003\251\077\021\264
\330\057\211\026\373\224\001\075\273\057\370\023\005\241\170\034
\216\050\340\105\340\203\364\131\033\225\263\256\176\003\105\345
```

\276\302\102\376\356\362\074\266\205\023\230\062\235\026\250\051  
\302\013\034\070\334\237\061\167\134\277\047\243\374\047\254\267  
\053\275\164\233\027\055\362\201\332\135\260\341\043\027\076\210  
\112\022\043\320\352\317\235\336\003\027\261\102\112\240\026\114  
\244\155\223\351\077\072\356\072\174\235\130\235\364\116\217\374  
\073\043\310\155\270\342\005\332\314\353\354\303\061\364\327\247  
\051\124\200\317\104\133\114\157\060\236\363\314\335\037\224\103  
\235\115\177\160\160\015\324\072\321\067\360\154\235\233\300\024  
\223\130\357\315\101\070\165\274\023\003\225\174\177\343\134\351  
\325\015\325\342\174\020\142\252\153\360\075\166\363\077\243\350  
\260\301\375\357\252\127\115\254\206\247\030\264\051\301\054\016  
\277\144\276\051\214\330\002\055\315\134\057\362\177\357\025\364  
\014\025\254\012\260\361\323\015\117\152\115\167\227\001\240\361  
\146\267\267\316\357\316\354\354\245\165\312\254\343\341\143\367  
\270\241\004\310\274\173\077\135\055\026\042\126\355\110\111\376  
\247\057\171\060\045\233\272\153\055\077\235\073\304\027\347\035  
\056\373\362\317\246\374\343\024\054\226\230\041\214\264\221\351  
\031\140\203\362\060\053\006\163\120\325\230\073\006\351\307\212  
\014\140\214\050\370\122\233\156\341\366\115\273\006\044\233\327  
\053\046\077\375\052\057\161\365\326\044\276\177\061\236\017\155  
\350\217\117\115\243\077\377\065\352\337\111\136\101\217\206\371  
\361\167\171\113\033\264\243\136\057\373\106\002\320\146\023\136  
\136\205\117\316\330\160\210\173\316\001\265\226\227\327\315\175  
\375\202\370\302\044\301\312\001\071\117\215\242\301\024\100\037  
\234\146\325\014\011\106\326\362\320\321\110\166\126\072\103\313  
\266\012\021\071\272\214\023\154\006\265\236\317\353\002\003\001  
\000\001\243\102\060\100\060\035\006\003\125\035\016\004\026\004  
\024\121\063\034\355\066\100\257\027\323\045\315\151\150\362\257  
\116\043\076\263\101\060\016\006\003\125\035\017\001\001\377\004  
\004\003\002\001\206\060\017\006\003\125\035\023\001\001\377\004  
\005\060\003\001\001\377\060\015\006\011\052\206\110\206\367\015  
\001\001\014\005\000\003\202\002\001\000\140\246\257\133\137\127  
\332\211\333\113\120\251\304\043\065\041\377\320\141\060\204\221  
\267\077\020\317\045\216\311\277\106\064\331\301\041\046\034\160  
\031\162\036\243\311\207\376\251\103\144\226\072\310\123\004\012  
\266\101\273\304\107\000\331\237\030\030\073\262\016\363\064\352  
\044\367\335\257\040\140\256\222\050\137\066\347\135\344\336\307  
\074\333\120\071\255\273\075\050\115\226\174\166\306\133\364\301  
\333\024\245\253\031\142\007\030\100\137\227\221\334\234\307\253  
\265\121\015\346\151\123\125\314\071\175\332\305\021\125\162\305  
\073\213\211\370\064\055\244\027\345\027\346\231\175\060\210\041  
\067\315\060\027\075\270\362\274\250\165\240\103\334\076\211\113  
\220\256\155\003\340\034\243\240\226\011\273\175\243\267\052\020  
\104\113\106\007\064\143\355\061\271\004\356\243\233\232\256\346  
\061\170\364\352\044\141\073\253\130\144\377\273\207\047\142\045  
\201\337\334\241\057\366\355\247\377\172\217\121\056\060\370\244  
\001\322\205\071\137\001\231\226\157\132\133\160\031\106\376\206  
\140\076\255\200\020\011\335\071\045\057\130\177\273\322\164\360

```
\367\106\037\106\071\112\330\123\320\363\056\073\161\245\324\157
\374\363\147\344\007\217\335\046\031\341\215\133\372\243\223\021
\233\351\310\072\303\125\150\232\222\341\122\166\070\350\341\272
\275\373\117\325\357\263\347\110\203\061\360\202\041\343\266\276
\247\253\157\357\237\337\114\317\001\270\142\152\043\075\347\011
\115\200\033\173\060\244\303\335\007\177\064\276\244\046\262\366
\101\350\011\035\343\040\230\252\067\117\377\367\361\342\051\160
\061\107\077\164\320\024\026\372\041\212\002\325\212\011\224\167
\056\362\131\050\213\174\120\222\012\146\170\070\203\165\304\265
\132\250\021\306\345\301\235\146\125\317\123\304\257\327\165\205
\251\102\023\126\354\041\167\201\223\132\014\352\226\331\111\312
\241\010\362\227\073\155\233\004\030\044\104\216\174\001\362\334
\045\330\136\206\232\261\071\333\365\221\062\152\321\246\160\212
\242\367\336\244\105\205\046\250\036\214\135\051\133\310\113\330
\232\152\003\136\160\362\205\117\154\113\150\057\312\124\366\214
\332\062\376\303\153\203\077\070\306\176
```

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "DigiCert TLS RSA4096 Root G5"

# Issuer: CN=DigiCert TLS RSA4096 Root G5,O="DigiCert, Inc.",C=US

# Serial Number:08:f9:b4:78:a8:fa:7e:da:6a:33:37:89:de:7c:cf:8a

# Subject: CN=DigiCert TLS RSA4096 Root G5,O="DigiCert, Inc.",C=US

# Not Valid Before: Fri Jan 15 00:00:00 2021

# Not Valid After : Sun Jan 14 23:59:59 2046

# Fingerprint (SHA-256):

37:1A:00:DC:05:33:B3:72:1A:7E:EB:40:E8:41:9E:70:79:9D:2B:0A:0F:2C:1D:80:69:31:65:F7:CE:C4:AD:75

# Fingerprint (SHA1): A7:88:49:DC:5D:7C:75:8C:8C:DE:39:98:56:B3:AA:D0:B2:A5:71:35

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL

UTF8 "DigiCert TLS RSA4096 Root G5"

CKA\_CERT\_SHA1\_HASH MULTILINE\_OCTAL

```
\247\210\111\334\135\174\165\214\214\336\071\230\126\263\252\320
\262\245\161\065
```

END

CKA\_CERT\_MD5\_HASH MULTILINE\_OCTAL

```
\254\376\367\064\226\251\362\263\264\022\113\344\047\101\157\341
```

END

CKA\_ISSUER MULTILINE\_OCTAL

```
\060\115\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\027\060\025\006\003\125\004\012\023\016\104\151\147\151\103\145
\162\164\054\040\111\156\143\056\061\045\060\043\006\003\125\004
```

\003\023\034\104\151\147\151\103\145\162\164\040\124\114\123\040

\122\123\101\064\060\071\066\040\122\157\157\164\040\107\065

END

CKA\_SERIAL\_NUMBER MULTILINE\_OCTAL

\002\020\010\371\264\170\250\372\176\332\152\063\067\211\336\174

\317\212

END

CKA\_TRUST\_SERVER\_AUTH CK\_TRUST CKT\_NSS\_TRUSTED\_DELEGATOR

CKA\_TRUST\_EMAIL\_PROTECTION CK\_TRUST CKT\_NSS\_MUST\_VERIFY\_TRUST

CKA\_TRUST\_CODE\_SIGNING CK\_TRUST CKT\_NSS\_MUST\_VERIFY\_TRUST

CKA\_TRUST\_STEP\_UP\_APPROVED CK\_BBOOL CK\_FALSE

#

# Certificate "DigiCert SMIME ECC

P384 Root G5"

#

# Issuer: CN=DigiCert SMIME ECC P384 Root G5,O="DigiCert, Inc.",C=US

# Serial Number:05:3f:6e:a0:06:01:72:7d:ed:3f:c3:a3:b6:a3:d6:ef

# Subject: CN=DigiCert SMIME ECC P384 Root G5,O="DigiCert, Inc.",C=US

# Not Valid Before: Fri Jan 15 00:00:00 2021

# Not Valid After : Sun Jan 14 23:59:59 2046

# Fingerprint (SHA-256):

E8:E8:17:65:36:A6:0C:C2:C4:E1:01:87:C3:BE:FC:A2:0E:F2:63:49:70:18:F5:66:D5:BE:A0:F9:4D:0C:11:1B

# Fingerprint (SHA1): 1C:B8:A7:08:C9:0D:20:79:01:A0:B2:36:7F:F0:95:65:E4:53:24:FE

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_CERTIFICATE

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "DigiCert SMIME ECC P384 Root G5"

CKA\_CERTIFICATE\_TYPE CK\_CERTIFICATE\_TYPE CKC\_X\_509

CKA\_SUBJECT MULTILINE\_OCTAL

\060\120\061\013\060\011\006\003\125\004\006\023\002\125\123\061

\027\060\025\006\003\125\004\012\023\016\104\151\147\151\103\145

\162\164\054\040\111\156\143\056\061\050\060\046\006\003\125\004

\003\023\037\104\151\147\151\103\145\162\164\040\123\115\111\115

\105\040\105\103\103\040\120\063\070\064\040\122\157\157\164\040

\107\065

END

CKA\_ID

UTF8 "0"

CKA\_ISSUER MULTILINE\_OCTAL

\060\120\061\013\060\011\006\003\125\004\006\023\002\125\123\061

\027\060\025\006\003\125\004\012\023\016\104\151\147\151\103\145

\162\164\054\040\111\156\143\056\061\050\060\046\006\003\125\004

\003\023\037\104\151\147\151\103\145\162\164\040\123\115\111\115

\105\040\105\103\103\040\120\063\070\064\040\122\157\157\164\040

\107\065

END

CKA\_SERIAL\_NUMBER MULTILINE\_OCTAL  
\002\020\005\077\156\240\006\001\162\175\355\077\303\243\266\243  
\326\357

END

CKA\_VALUE MULTILINE\_OCTAL  
\060\202\002\034\060\202\001\243\240\003\002\001\002\002\020\005  
\077\156\240\006\001\162\175\355\077\303\243\266\243\326\357\060  
\012\006\010\052\206\110\316\075\004\003\003\060\120\061\013\060  
\011\006\003\125\004\006\023\002\125\123\061\027\060\025\006\003  
\125\004\012\023\016\104\151\147\151\103\145\162\164\054\040\111  
\156\143\056\061\050\060\046\006\003\125\004\003\023\037\104\151  
\147\151\103\145\162\164\040\123\115\111\115\105\040\105\103\103  
\040\120\063\070\064\040\122\157\157\164\040\107\065\060\036\027  
\015\062\061\060\061\061\065\060\060\060\060\060\132\027\015  
\064\066\060\061\061\064\062\063\065\071\065\071\132\060\120\061  
\013\060\011\006\003\125\004\006\023\002\125\123\061\027\060\025  
\006\003\125\004\012\023\016\104\151\147\151\103\145\162\164\054  
\040\111\156\143\056\061\050\060\046\006\003\125\004\003\023\037  
\104\151\147\151\103\145\162\164\040\123\115\111\115\105\040\105  
\103\103\040\120\063\070\064\040\122\157\157\164\040\107\065\060  
\166\060\020\006\007\052\206\110\316\075\002\001\006\005\053\201  
\004\000\042\003\142\000\004\026\235\125\345\266\324\373\373\147  
\153\032\324\241\252\322\167\225\076\210\345\007\237\266\160\146  
\040\050\244\210\354\160\065\257\263\062\377\067\023\112\236\274  
\001\003\336\204\301\270\306\346\145\107\211\362\023\125\277\315  
\245\036\010\140\177\255\177\350\141\222\051\317\011\107\136\013  
\034\300\037\244\277\362\133\274\230\357\231\114\314\160\153\266  
\272\320\050\035\277\276\004\243\102\060\100\060\035\006\003\125  
\035\016\004\026\004\024\163\172\153\226\333\102\007\213\122\146  
\302\144\062\027\376\340\147\220\056\255\060\016\006\003\125\035  
\017\001\001\377\004\004\003\002\001\206\060\017\006\003\125\035  
\023\001\001\377\004\005\060\003\001\001\377\060\012\006\010\052  
\206\110\316\075\004\003\003\003\147\000\060\144\002\060\067\104  
\365\062\200\343\161\353\364\155\317\174\314\221\232\303\156\161  
\330\322\043\135\222\115\202\102\155\134\141\225\366\221\365\247  
\010\366\152\227\351\234\224\055\230\160\375\063\266\011\002\060  
\007\074\057\271\130\202\136\017\243\142\250\223\147\360\040\303  
\151\277\003\054\073\120\247\073\257\101\070\311\122\110\221\326  
\016\373\274\140\060\174\144\077\022\036\105\177\121\076\364\246

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "DigiCert

SMIME ECC P384 Root G5"

# Issuer: CN=DigiCert SMIME ECC P384 Root G5,O="DigiCert, Inc.",C=US

```
# Serial Number:05:3f:6e:a0:06:01:72:7d:ed:3f:c3:a3:b6:a3:d6:ef
# Subject: CN=DigiCert SMIME ECC P384 Root G5,O="DigiCert, Inc.",C=US
# Not Valid Before: Fri Jan 15 00:00:00 2021
# Not Valid After : Sun Jan 14 23:59:59 2046
# Fingerprint (SHA-256):
E8:E8:17:65:36:A6:0C:C2:C4:E1:01:87:C3:BE:FC:A2:0E:F2:63:49:70:18:F5:66:D5:BE:A0:F9:4D:0C:11:1B
# Fingerprint (SHA1): 1C:B8:A7:08:C9:0D:20:79:01:A0:B2:36:7F:F0:95:65:E4:53:24:FE
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "DigiCert SMIME ECC P384 Root G5"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\034\270\247\010\311\015\040\171\001\240\262\066\177\360\225\145
\344\123\044\376
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\246\376\364\122\066\104\330\356\015\267\003\013\357\164\263\003
END
CKA_ISSUER MULTILINE_OCTAL
\060\120\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\027\060\025\006\003\125\004\012\023\016\104\151\147\151\103\145
\162\164\054\040\111\156\143\056\061\050\060\046\006\003\125\004
\003\023\037\104\151\147\151\103\145\162\164\040\123\115\111\115
\105\040\105\103\103\040\120\063\070\064\040\122\157\157\164\040
\107\065
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\020\005\077\156\240\006\001\162\175\355\077\303\243\266\243
\326\357
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "DigiCert SMIME RSA4096 Root G5"
#
# Issuer: CN=DigiCert SMIME RSA4096 Root G5,O="DigiCert, Inc.",C=US
# Serial Number:05:f6:ba:04:23:83:46:cb:7d:5c:e6:b9:5b:ba:1c:55
# Subject: CN=DigiCert SMIME RSA4096 Root G5,O="DigiCert, Inc.",C=US
# Not Valid Before: Fri Jan 15 00:00:00 2021
# Not Valid After : Sun Jan 14 23:59:59 2046
# Fingerprint (SHA-256):
90:37:0D:3E:FA:88:BF:58:C3:01:05:BA:25:10:4A:35:84:60:A7:FA:52:DF:C2:01:1D:F2:33:A0:F4:17:91:2A
#
```



Fingerprint (SHA1): 5B:C5:AD:E2:9A:A7:54:DA:84:89:53:A5:FE:D7:5B:46:86:D0:57:08

```
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "DigiCert SMIME RSA4096 Root G5"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\117\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\027\060\025\006\003\125\004\012\023\016\104\151\147\151\103\145
\162\164\054\040\111\156\143\056\061\047\060\045\006\003\125\004
\003\023\036\104\151\147\151\103\145\162\164\040\123\115\111\115
\105\040\122\123\101\064\060\071\066\040\122\157\157\164\040\107
\065
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\117\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\027\060\025\006\003\125\004\012\023\016\104\151\147\151\103\145
\162\164\054\040\111\156\143\056\061\047\060\045\006\003\125\004
\003\023\036\104\151\147\151\103\145\162\164\040\123\115\111\115
\105\040\122\123\101\064\060\071\066\040\122\157\157\164\040\107
\065
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\020\005\366\272\004\043\203\106\313\175\134\346\271\133\272
\034\125
END
CKA_VALUE MULTILINE_OCTAL
\060\202\005\152\060\202\003\122\240\003\002\001\002\002\020\005
\366\272\004\043\203\106\313\175\134\346\271\133\272\034\125\060
\015\006\011\052\206\110\206\367\015\001\001\014\005\000\060\117
\061\013\060\011\006\003\125\004\006\023\002\125\123\061\027\060
\025\006\003\125\004\012\023\016\104\151\147\151\103\145\162\164
\054\040\111\156\143\056\061\047\060\045\006\003\125\004\003\023
\036\104\151\147\151\103\145\162\164\040\123\115\111\115\105\040
\122\123\101\064\060\071\066\040\122\157\157\164\040\107\065\060
\036\027\015\062\061\060\061\061\065\060\060\060\060\060\060\132
\027\015\064\066\060\061\061\064\062\063\065\071\065\071\132\060
\117\061\013\060\011\006\003\125\004\006\023\002\125\123\061\027
\060\025\006\003\125\004\012\023\016\104\151\147\151\103\145\162
\164\054\040\111\156\143\056\061\047\060\045\006\003\125\004\003
\023\036\104\151\147\151\103\145\162\164\040\123\115\111\115\105
\040\122\123\101\064\060\071\066\040\122\157\157\164\040\107\065
\060\202\002\042\060\015\006\011\052\206\110\206\367\015\001\001
\001\005\000\003\202\002\017\000\060\202\002\012\002\202\002\001
\000\340\152\133\331\370\371\175\354\265\173\357\137\335\134\064
```

\330\332\135\321\313\145\165\253\041\174\133\000\324\202\157\105  
\205\101\212\251\022\002\162\062\360\024\365\003\165\273\143\227  
\111\017\100\231\013\032\036\126\247\322\320\341\253\335\345\004  
\033\343\037\024\022\002\210\365\240\200\011\366\047\232\120\360  
\272\343\242\340\254\152\024\221\265\153\070\020\172\242\061\341  
\221\033\267\271\360\053\133\310\167\011\166\267\121\304\066\012  
\231\123\124\104\045\267\011\065\206\027\005\126\223\075\101\267  
\002\327\142\037\212\222\021\207\352\021\155\352\010\021\334\261  
\170\110\111\222\366\264\121\200\170\043\330\376\341\126\032\072  
\220\023\126\064\211\325\342\225\213\137\336\262\314\373\077\070  
\267\205\367\352\236\277\056\241\056\057\115\175\152\021\056\066  
\240\377\021\010\004\225\125\340\033\073\147\223\251\224\125\352  
\062\355\006\072\177\302\177\343\255\023\047\321\064\101\263\060  
\303\277\264\210\370\003\202\244\337\076\253\170\167\240\131\223  
\161\347\335\353\000\004\173\314\110\071\050\340\036\243\025\151  
\310\066\262\241\013\227\337\125\326\357\221\234\244\366\026\367  
\121\012\356\003\043\221\334\004\377\340\335\070\366\042\003\000  
\302\007\161\032\022\311\327\106\052\224\033\315\326\273\033\356  
\277\276\115\120\130\260\013\315\060\166\051\365\317\345\266\152  
\057\166\260\260\151\152\320\155\145\030\065\176\223\274\162\027  
\301\125\102\315\057\302\045\273\364\375\035\241\144\042\124\135  
\342\236\162\101\204\156\161\226\352\105\007\266\136\172\112\206  
\235\163\144\167\070\003\322\017\123\245\125\040\304\115\377\150  
\157\125\251\352\335\161\344\117\331\205\243\174\116\051\002\236  
\013\011\362\032\123\314\000\246\335\321\064\366\015\301\060\261  
\234\002\144\254\065\355\245\260\051\261\322\225\063\017\322\040  
\063\275\354\043\113\362\031\371\332\230\144\344\054\061\037\056  
\341\215\034\004\225\050\115\214\130\315\113\345\163\202\206\214  
\354\250\326\171\134\373\144\273\334\014\114\050\366\027\257\342  
\150\326\026\206\230\333\374\001\334\061\272\370\234\016\371\050  
\106\112\341\375\226\006\105\171\021\150\027\145\134\213\046\207  
\133\002\003\001\000\001\243\102\060\100\060\035\006\003\125\035  
\016\004\026\004\024\321\243\324\127\035\117\125\333\165\114\134  
\102\236\143\026\316\264\306\073\037\060\016\006\003\125\035\017  
\001\001\377\004\004\003\002\001\206\060\017\006\003\125\035\023  
\001\001\377\004\005\060\003\001\001\377\060\015\006\011\052\206  
\110\206\367\015\001\001\014\005\000\003\202\002\001\000\007\247  
\012\336\123\273\232\353\160\277\262\066\220\315\344\247\270\361  
\014\344\135\132\035\170\145\374\311\270\036\043\021\127\174\151  
\065\155\001\377\123\120\277\007\016\272\307\001\077\130\052\224  
\165\003\253\034\013\043\334\033\212\036\067\075\035\130\217\163  
\331\263\052\157\337\020\240\133\014\247\312\260\177\271\044\242  
\001\065\062\345\136\106\101\353\330\177\163\347\102\351\244\121  
\046\167\201\012\250\353\017\012\120\235\176\212\040\147\374\013  
\216\072\021\323\305\214\140\030\331\113\261\374\324\361\264\111  
\116\256\207\341\321\373\166\241\137\363\006\317\227\226\014\351  
\236\165\201\134\123\015\042\374\066\346\111\156\164\333\000\205  
\215\174\042\240\216\373\020\114\324\142\023\133\357\113\162\046

```
\213\374\116\212\217\376\227\020\123\305\170\213\102\144\033\137
\340\211\375\273\011\177\120\340\124\205\046\021\152\035\145\371
\111\051\334\174\066\337\373\075\367\322\254\356\062\215\156\246
\175\071\234\105\304\312\015\365\073\264\171\123\245\057\126\307
\121\305\212\114\144\135\220\103\043\216\153\114\027\170\314\350
\277\365\073\344\250\110\317\255\233\014\337\062\112\323\331\022
\216\043\170\015\055\257\237\257\236\074\011\302\227\000\355\072
\151\034\161\077\071\337\323\217\304\146\365\357\066\224\017\363
\335\222\266\226\137\220\246\335\163\252\246\040\224\224\045\152
\011\014\162\344\023\043\140\114\243\312\027\056\173\147\000\333
\320\315\352\172\037\071\046\127\211\060\167\313\116\345\225\105
\117\137\373\066\134\075\371\040\265\072\020\045\117\223\062\132
\356\301\226\350\351\126\004\260\111\141\115\354\170\250\235\030
\301\377\330\352\057\126\357\225\053\173\004\136\147\343\125\100
\355\071\004\371\013\171\365\152\214\134\017\211\232\220\307\315
\213\336\333\046\065\241\156\315\263\102\362\242\017\073\014\216
\223\377\024\317\374\367\223\367\344\101\010\156\031\122\021\017
\123\031\163\170\014\317\330\205\201\370\255\125\310\260\236\106
\143\257\234\122\356\134\277\360\300\133\067\036\011\040\322\076
\043\306\241\025\112\016\066\176\060\305\171\152\274\042\210\331
\014\122\100\037\335\116\017\147\046\026\322\255\027\034
```

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER

CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "DigiCert SMIME RSA4096 Root G5"

# Issuer: CN=DigiCert SMIME RSA4096 Root G5,O="DigiCert, Inc.",C=US

# Serial Number:05:f6:ba:04:23:83:46:cb:7d:5c:e6:b9:5b:ba:1c:55

# Subject: CN=DigiCert SMIME RSA4096 Root G5,O="DigiCert, Inc.",C=US

# Not Valid Before: Fri Jan 15 00:00:00 2021

# Not Valid After : Sun Jan 14 23:59:59 2046

# Fingerprint (SHA-256):

90:37:0D:3E:FA:88:BF:58:C3:01:05:BA:25:10:4A:35:84:60:A7:FA:52:DF:C2:01:1D:F2:33:A0:F4:17:91:2A

# Fingerprint (SHA1): 5B:C5:AD:E2:9A:A7:54:DA:84:89:53:A5:FE:D7:5B:46:86:D0:57:08

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "DigiCert SMIME RSA4096 Root G5"

CKA\_CERT\_SHA1\_HASH MULTILINE\_OCTAL

```
\133\305\255\342\232\247\124\332\204\211\123\245\376\327\133\106
\206\320\127\010
```

END

CKA\_CERT\_MD5\_HASH MULTILINE\_OCTAL

```
\321\173\340\265\077\065\162\237\175\276\013\245\244\035\251\156
```

```

END
CKA_ISSUER
MULTILINE_OCTAL
\060\117\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\027\060\025\006\003\125\004\012\023\016\104\151\147\151\103\145
\162\164\054\040\111\156\143\056\061\047\060\045\006\003\125\004
\003\023\036\104\151\147\151\103\145\162\164\040\123\115\111\115
\105\040\122\123\101\064\060\071\066\040\122\157\157\164\040\107
\065
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\020\005\366\272\004\043\203\106\313\175\134\346\271\133\272
\034\125
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "Certainly Root R1"
#
# Issuer: CN=Certainly Root R1,O=Certainly,C=US
# Serial Number:00:8e:0f:f9:4b:90:71:68:65:33:54:f4:d4:44:39:b7:e0
# Subject: CN=Certainly Root R1,O=Certainly,C=US
# Not Valid Before: Thu Apr 01 00:00:00 2021
# Not Valid After : Sun Apr 01 00:00:00 2046
#
Fingerprint (SHA-256):
77:B8:2C:D8:64:4C:43:05:F7:AC:C5:CB:15:6B:45:67:50:04:03:3D:51:C6:0C:62:02:A8:E0:C3:34:67:D3:A0
# Fingerprint (SHA1): A0:50:EE:0F:28:71:F4:27:B2:12:6D:6F:50:96:25:BA:CC:86:42:AF
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Certainly Root R1"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\075\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\022\060\020\006\003\125\004\012\023\011\103\145\162\164\141\151
\156\154\171\061\032\060\030\006\003\125\004\003\023\021\103\145
\162\164\141\151\156\154\171\040\122\157\157\164\040\122\061
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\075\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\022\060\020\006\003\125\004\012\023\011\103\145\162\164\141\151
\156\154\171\061\032\060\030\006\003\125\004\003\023\021\103\145

```

\162\164\141\151\156\154\171\040\122\157\157\164\040\122\061  
END  
CKA\_SERIAL\_NUMBER  
MULTILINE\_OCTAL  
\002\021\000\216\017\371\113\220\161\150\145\063\124\364\324\104  
\071\267\340  
END  
CKA\_VALUE MULTILINE\_OCTAL  
\060\202\005\107\060\202\003\057\240\003\002\001\002\002\021\000  
\216\017\371\113\220\161\150\145\063\124\364\324\104\071\267\340  
\060\015\006\011\052\206\110\206\367\015\001\001\013\005\000\060  
\075\061\013\060\011\006\003\125\004\006\023\002\125\123\061\022  
\060\020\006\003\125\004\012\023\011\103\145\162\164\141\151\156  
\154\171\061\032\060\030\006\003\125\004\003\023\021\103\145\162  
\164\141\151\156\154\171\040\122\157\157\164\040\122\061\060\036  
\027\015\062\061\060\064\060\061\060\060\060\060\060\132\027  
\015\064\066\060\064\060\061\060\060\060\060\060\132\060\075  
\061\013\060\011\006\003\125\004\006\023\002\125\123\061\022\060  
\020\006\003\125\004\012\023\011\103\145\162\164\141\151\156\154  
\171\061\032\060\030\006\003\125\004\003\023\021\103\145\162\164  
\141\151\156\154\171\040\122\157\157\164\040\122\061\060\202\002  
\042\060\015\006\011\052\206\110\206\367\015\001\001\001\005\000  
\003\202\002\017\000\060\202\002\012\002\202\002\001\000\320\066  
\324\037\352\335\253\344\321\266\346\373\042\300\335\023\015\152  
\173\042\023\034\227\074\150\143\146\062\234\003\265\215\244\201  
\203\332\170\060\021\317\334\262\053\276\222\277\216\344\304\023  
\276\244\150\114\332\002\150\026\164\276\262\335\004\344\153\052  
\335\067\037\140\054\333\365\367\241\174\225\267\014\160\206\056  
\361\072\357\122\367\314\323\233\371\213\276\016\337\061\267\235  
\150\134\222\246\365\345\363\012\064\265\377\173\242\344\207\241  
\306\257\027\000\357\003\221\355\251\034\116\161\075\322\213\154  
\211\364\170\206\346\152\111\240\316\265\322\260\253\233\366\364  
\324\056\343\162\371\066\306\353\025\267\045\214\072\374\045\015  
\263\042\163\041\164\310\112\226\141\222\365\057\013\030\245\364  
\255\342\356\101\275\001\171\372\226\214\215\027\002\060\264\371  
\257\170\032\214\264\066\020\020\007\005\160\320\364\061\220\212  
\121\305\206\046\171\262\021\210\136\305\360\012\124\315\111\246  
\277\002\234\322\104\247\355\343\170\357\106\136\155\161\321\171  
\160\034\106\137\121\351\311\067\334\137\176\151\173\101\337\064  
\105\340\073\204\364\241\212\012\066\236\067\314\142\122\341\211  
\015\050\371\172\043\261\015\075\075\232\375\235\201\357\054\220  
\300\173\104\116\273\111\340\016\112\126\222\274\313\265\335\171  
\027\211\221\336\141\211\164\222\250\343\062\205\276\116\205\244  
\113\131\313\053\305\170\216\161\124\320\002\067\231\214\345\111  
\352\340\124\162\244\021\006\057\013\214\301\133\276\265\241\260  
\123\156\234\270\140\221\037\131\153\371\055\364\224\012\227\265  
\354\305\166\003\124\033\145\122\272\114\222\126\121\065\240\100  
\330\051\333\256\122\166\073\055\060\100\233\212\320\102\126\264

\267\210\001\244\207\073\123\226\315\243\026\217\363\146\252\027  
\261\307\140\340\301\103\005\014\356\233\133\140\157\006\134\207  
\133\047\371\100\021\236\234\063\301\267\345\065\127\005\177\047  
\316\027\040\214\034\374\361\373\332\061\051\111\355\365\013\204  
\247\117\301\366\116\302\050\234\372\356\340\257\007\373\063\021  
\172\041\117\013\041\020\266\100\072\253\042\072\004\234\213\233  
\204\206\162\232\322\247\245\304\264\165\221\251\053\043\002\003  
\001\000\001\243\102\060\100\060\016\006\003\125\035\017\001\001  
\377\004\004\003\002\001\006\060\017\006\003\125\035\023\001\001  
\377\004\005\060\003\001\001\377\060\035\006\003\125\035\016\004  
\026\004\024\340\252\077\045\215\237\104\134\301\072\350\056\256  
\167\114\204\076\147\014\364\060\015\006\011\052\206\110\206\367  
\015\001\001\013\005\000\003\202\002\001\000\271\127\257\270\022  
\332\127\203\217\150\013\063\035\003\123\125\364\225\160\344\053  
\075\260\071\353\372\211\142\375\367\326\030\004\057\041\064\335  
\361\150\360\325\226\132\336\302\200\243\301\215\306\152\367\131  
\167\256\025\144\317\133\171\005\167\146\352\214\323\153\015\335  
\361\131\054\301\063\245\060\200\025\105\007\105\032\061\042\266  
\222\000\253\231\115\072\217\167\257\251\042\312\057\143\312\025  
\326\307\306\360\075\154\374\034\015\230\020\141\236\021\242\042  
\327\012\362\221\172\153\071\016\057\060\303\066\111\237\340\351  
\017\002\104\120\067\224\125\175\352\237\366\073\272\224\245\114  
\351\274\076\121\264\350\312\222\066\124\155\134\045\050\332\335  
\255\024\375\323\356\342\042\005\353\320\362\267\150\022\327\132  
\212\101\032\306\222\245\132\073\143\105\117\277\341\072\167\042  
\057\134\277\106\371\132\003\205\023\102\137\312\336\123\327\142  
\265\246\065\004\302\107\377\231\375\204\337\134\316\351\136\200  
\050\101\362\175\347\036\220\330\117\166\076\202\074\015\374\245  
\003\372\173\032\331\105\036\140\332\304\216\371\374\053\311\173  
\225\305\052\377\252\211\337\202\061\017\162\377\014\047\327\012  
\036\126\000\120\036\014\220\301\226\265\330\024\205\273\247\015  
\026\301\370\007\044\033\272\205\241\032\005\011\200\272\225\143  
\311\072\354\045\237\177\235\272\244\107\025\233\104\160\361\152  
\113\326\070\136\103\363\030\176\120\156\351\132\050\346\145\346  
\167\033\072\375\035\276\003\046\243\333\324\341\273\176\226\047  
\053\035\356\244\373\332\045\124\023\003\336\071\306\303\037\115  
\220\354\217\033\112\322\034\355\205\225\070\120\171\106\326\301  
\220\120\061\251\134\232\156\035\365\063\126\213\247\231\322\362  
\310\054\063\223\222\060\307\116\214\145\063\020\144\027\375\044  
\027\226\321\215\302\072\152\053\353\023\213\104\362\041\363\112  
\032\267\167\137\327\355\210\244\162\345\071\037\225\235\276\147  
\301\160\021\075\273\364\370\111\267\343\046\227\072\237\322\137  
\174\373\300\231\174\071\051\340\173\035\277\015\247\217\322\051  
\064\156\044\025\313\336\220\136\277\032\304\146\352\302\346\272  
\071\137\212\231\251\101\131\007\260\054\257

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

```

CK_BBOOL CK_TRUE
CKA_NSS_SERVER_DISTRICT_AFTER CK_BBOOL CK_FALSE
CKA_NSS_EMAIL_DISTRICT_AFTER CK_BBOOL CK_FALSE

# Trust for "Certainly Root R1"
# Issuer: CN=Certainly Root R1,O=Certainly,C=US
# Serial Number:00:8e:0f:f9:4b:90:71:68:65:33:54:f4:d4:44:39:b7:e0
# Subject: CN=Certainly Root R1,O=Certainly,C=US
# Not
  Valid Before: Thu Apr 01 00:00:00 2021
# Not Valid After : Sun Apr 01 00:00:00 2046
# Fingerprint (SHA-256):
77:B8:2C:D8:64:4C:43:05:F7:AC:C5:CB:15:6B:45:67:50:04:03:3D:51:C6:0C:62:02:A8:E0:C3:34:67:D3:A0
# Fingerprint (SHA1): A0:50:EE:0F:28:71:F4:27:B2:12:6D:6F:50:96:25:BA:CC:86:42:AF
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Certainly Root R1"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\240\120\356\017\050\161\364\047\262\022\155\157\120\226\045\272
\314\206\102\257
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\007\160\324\076\202\207\240\372\063\066\023\364\372\063\347\022
END
CKA_ISSUER MULTILINE_OCTAL
\060\075\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\022\060\020\006\003\125\004\012\023\011\103\145\162\164\141\151
\156\154\171\061\032\060\030\006\003\125\004\003\023\021\103\145
\162\164\141\151\156\154\171\040\122\157\157\164\040\122\061
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\021\000\216\017\371\113\220\161\150\145\063\124\364\324\104
\071\267\340
END
CKA_TRUST_SERVER_AUTH
CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "Certainly Root E1"
#
# Issuer: CN=Certainly Root E1,O=Certainly,C=US
# Serial Number:06:25:33:b1:47:03:33:27:5c:f9:8d:9a:b9:bf:cc:f8
# Subject: CN=Certainly Root E1,O=Certainly,C=US

```

```
# Not Valid Before: Thu Apr 01 00:00:00 2021
# Not Valid After : Sun Apr 01 00:00:00 2046
# Fingerprint (SHA-256):
B4:58:5F:22:E4:AC:75:6A:4E:86:12:A1:36:1C:5D:9D:03:1A:93:FD:84:FE:BB:77:8F:A3:06:8B:0F:C4:2D:C2
# Fingerprint (SHA1): F9:E1:6D:DC:01:89:CF:D5:82:45:63:3E:C5:37:7D:C2:EB:93:6F:2B
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "Certainly Root E1"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE
CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\075\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\022\060\020\006\003\125\004\012\023\011\103\145\162\164\141\151
\156\154\171\061\032\060\030\006\003\125\004\003\023\021\103\145
\162\164\141\151\156\154\171\040\122\157\157\164\040\105\061
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\075\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\022\060\020\006\003\125\004\012\023\011\103\145\162\164\141\151
\156\154\171\061\032\060\030\006\003\125\004\003\023\021\103\145
\162\164\141\151\156\154\171\040\122\157\157\164\040\105\061
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\020\006\045\063\261\107\003\063\047\134\371\215\232\271\277
\314\370
END
CKA_VALUE MULTILINE_OCTAL
\060\202\001\367\060\202\001\175\240\003\002\001\002\002\020\006
\045\063\261\107\003\063\047\134\371\215\232\271\277\314\370\060
\012\006\010\052\206\110\316\075\004\003\003\060\075\061\013\060
\011\006\003\125\004\006\023\002\125\123\061\022\060\020\006\003
\125\004\012\023\011\103\145\162\164\141\151\156\154\171\061\032
\060\030\006\003\125\004\003\023\021\103\145\162\164\141\151\156
\154\171\040\122\157\157\164\040\105\061\060\036\027\015\062\061
\060\064\060\061\060\060\060\060\060\060\132\027\015\064\066\060
\064\060\061\060\060\060\060\060\132\060\075\061\013\060\011
\006\003\125\004\006\023\002\125\123\061\022\060\020\006\003\125
\004\012\023\011\103\145\162\164\141\151\156\154\171\061\032\060
\030\006\003\125\004\003\023\021\103\145\162\164\141\151\156\154
\171\040\122\157\157\164\040\105\061\060\166\060\020\006\007\052
\206\110\316\075\002\001\006\005\053\201\004\000\042\003\142\000
\004\336\157\370\177\034\337\355\371\107\207\206\261\244\300\212
\370\202\227\200\352\217\310\112\136\052\175\210\150\247\001\142
\024\221\044\172\134\236\243\027\175\212\206\041\064\030\120\033
\020\336\320\067\113\046\307\031\140\200\351\064\275\140\031\066
```



```
\100\326\051\207\011\074\221\172\366\274\023\043\335\131\116\004
\136\317\310\002\034\030\123\301\061\330\332\040\351\104\215\344
\166\243\102\060\100\060\016\006\003\125\035\017\001\001\377\004
\004\003\002\001\006\060\017\006\003\125\035\023\001\001\377\004
\005\060\003\001\001\377\060\035\006\003\125\035\016\004\026\004
\024\363\050\030\313\144\165\356\051\052\353\355\256\043\130\070
\205\353\310\042\007\060\012\006\010\052\206\110\316\075\004\003
\003\003\150\000\060\145\002\061\000\261\216\132\040\303\262\031
\142\115\336\260\117\337\156\322\160\212\361\237\176\152\214\346
\272\336\203\151\312\151\263\251\005\265\226\222\027\207\302\322
\352\320\173\316\330\101\133\174\256\002\060\106\336\352\313\135
\232\354\062\302\145\026\260\114\060\134\060\363\332\116\163\206
\006\330\316\211\004\110\067\067\370\335\063\121\235\160\257\173
\125\330\001\056\175\005\144\016\206\270\221
```

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "Certainly Root E1"

# Issuer: CN=Certainly

Root E1,O=Certainly,C=US

# Serial Number:06:25:33:b1:47:03:33:27:5c:f9:8d:9a:b9:bf:cc:f8

# Subject: CN=Certainly Root E1,O=Certainly,C=US

# Not Valid Before: Thu Apr 01 00:00:00 2021

# Not Valid After : Sun Apr 01 00:00:00 2046

# Fingerprint (SHA-256):

B4:58:5F:22:E4:AC:75:6A:4E:86:12:A1:36:1C:5D:9D:03:1A:93:FD:84:FE:BB:77:8F:A3:06:8B:0F:C4:2D:C2

# Fingerprint (SHA1): F9:E1:6D:DC:01:89:CF:D5:82:45:63:3E:C5:37:7D:C2:EB:93:6F:2B

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "Certainly Root E1"

CKA\_CERT\_SHA1\_HASH MULTILINE\_OCTAL

```
\371\341\155\334\001\211\317\325\202\105\143\076\305\067\175\302
\353\223\157\053
```

END

CKA\_CERT\_MD5\_HASH MULTILINE\_OCTAL

```
\012\236\312\315\076\122\120\306\066\363\113\243\355\247\123\351
```

END

CKA\_ISSUER MULTILINE\_OCTAL

```
\060\075\061\013\060\011\006\003\125\004\006\023\002\125\123\061
\022\060\020\006\003\125\004\012\023\011\103\145\162\164\141\151
\156\154\171\061\032\060\030\006\003\125\004\003\023\021\103\145
\162\164\141\151\156\154\171\040\122\157\157\164\040\105\061
```

END

```

CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\020\006\045\063\261\107\003\063\047\134\371\215\232\271\277
\314\370
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "E-Tugra Global Root CA RSA v3"
#
# Issuer: CN=E-Tugra Global Root CA RSA v3,OU=E-Tugra Trust Center,O=E-Tugra EBG A.S.,L=Ankara,C=TR
# Serial Number:0d:4d:c5:cd:16:22:95:96:08:7e:b8:0b:7f:15:06:34:fb:79:10:34
# Subject: CN=E-Tugra Global Root CA RSA v3,OU=E-Tugra Trust Center,O=E-Tugra EBG
A.S.,L=Ankara,C=TR
# Not Valid Before: Wed Mar 18 09:07:17 2020
# Not Valid After : Sun Mar 12 09:07:17 2045
# Fingerprint (SHA-256):
EF:66:B0:B1:0A:3C:DB:9F:2E:36:48:C7:6B:D2:AF:18:EA:D2:BF:E6:F1:17:65:5E:28:C4:06:0D:A1:A3:F4:C2
# Fingerprint (SHA1):
E9:A8:5D:22:14:52:1C:5B:AA:0A:B4:BE:24:6A:23:8A:C9:BA:E2:A9
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "E-Tugra Global Root CA RSA v3"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\201\200\061\013\060\011\006\003\125\004\006\023\002\124\122
\061\017\060\015\006\003\125\004\007\023\006\101\156\153\141\162
\141\061\031\060\027\006\003\125\004\012\023\020\105\055\124\165
\147\162\141\040\105\102\107\040\101\056\123\056\061\035\060\033
\006\003\125\004\013\023\024\105\055\124\165\147\162\141\040\124
\162\165\163\164\040\103\145\156\164\145\162\061\046\060\044\006
\003\125\004\003\023\035\105\055\124\165\147\162\141\040\107\154
\157\142\141\154\040\122\157\157\164\040\103\101\040\122\123\101
\040\166\063
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\201\200\061\013\060\011\006\003\125\004\006\023\002\124\122
\061\017\060\015\006\003\125\004\007\023\006\101\156\153\141\162
\141\061\031\060\027\006\003\125\004\012\023\020\105\055\124\165
\147\162\141\040\105\102\107\040\101\056\123\056\061\035\060\033
\006\003\125\004\013\023\024\105\055\124\165\147\162\141\040\124
\162\165\163\164\040\103\145\156\164\145\162\061\046\060\044\006

```

\003\125\004\003\023\035\105\055\124\165\147\162\141\040\107\154  
\157\142\141\154\040\122\157\157\164\040\103\101\040\122\123\101  
\040\166\063

END

CKA\_SERIAL\_NUMBER

MULTILINE\_OCTAL

\002\024\015\115\305\315\026\042\225\226\010\176\270\013\177\025  
\006\064\373\171\020\064

END

CKA\_VALUE MULTILINE\_OCTAL

\060\202\005\363\060\202\003\333\240\003\002\001\002\002\024\015  
\115\305\315\026\042\225\226\010\176\270\013\177\025\006\064\373  
\171\020\064\060\015\006\011\052\206\110\206\367\015\001\001\013  
\005\000\060\201\200\061\013\060\011\006\003\125\004\006\023\002  
\124\122\061\017\060\015\006\003\125\004\007\023\006\101\156\153  
\141\162\141\061\031\060\027\006\003\125\004\012\023\020\105\055  
\124\165\147\162\141\040\105\102\107\040\101\056\123\056\061\035  
\060\033\006\003\125\004\013\023\024\105\055\124\165\147\162\141  
\040\124\162\165\163\164\040\103\145\156\164\145\162\061\046\060  
\044\006\003\125\004\003\023\035\105\055\124\165\147\162\141\040  
\107\154\157\142\141\154\040\122\157\157\164\040\103\101\040\122  
\123\101\040\166\063\060\036\027\015\062\060\060\063\061\070\060  
\071\060\067\061\067\132\027\015\064\065\060\063\061\062\060\071  
\060\067\061\067\132\060\201\200\061\013\060\011\006\003\125\004  
\006\023\002\124\122\061\017\060\015\006\003\125\004\007\023\006  
\101\156\153\141\162\141\061\031\060\027\006\003\125\004\012\023  
\020\105\055\124\165\147\162\141\040\105\102\107\040\101\056\123  
\056\061\035\060\033\006\003\125\004\013\023\024\105\055\124\165  
\147\162\141\040\124\162\165\163\164\040\103\145\156\164\145\162  
\061\046\060\044\006\003\125\004\003\023\035\105\055\124\165\147  
\162\141\040\107\154\157\142\141\154\040\122\157\157\164\040\103  
\101\040\122\123\101\040\166\063\060\202\002\042\060\015\006\011  
\052\206\110\206\367\015\001\001\001\005\000\003\202\002\017\000  
\060\202\002\012\002\202\002\001\000\242\146\360\211\267\162\173  
\356\011\311\143\322\323\103\335\136\303\246\204\070\112\361\215  
\201\273\024\275\107\350\100\027\363\075\303\170\105\162\246\056  
\220\336\232\072\324\040\161\312\274\237\035\113\227\012\307\061  
\272\076\327\376\045\251\052\216\066\364\321\057\307\267\251\135  
\063\334\060\160\370\100\154\113\262\246\061\141\321\064\074\075  
\061\172\307\257\304\247\247\204\341\227\244\350\113\366\027\174  
\356\074\007\355\342\212\127\334\266\373\370\103\045\120\352\047  
\201\250\206\274\217\122\112\226\072\140\032\226\273\375\163\364  
\205\375\203\375\177\204\155\064\154\177\152\267\113\001\003\277  
\255\151\267\327\062\331\365\127\152\351\206\202\076\245\146\061  
\263\026\075\302\363\046\140\062\323\122\036\260\154\244\067\076  
\364\365\257\353\341\337\200\006\317\052\101\347\146\011\341\113  
\227\347\167\275\041\155\051\266\147\303\055\176\355\326\171\145  
\321\317\072\266\321\261\136\126\141\120\172\132\316\116\120\061

\200\003\230\107\347\344\030\174\104\132\306\244\263\073\306\306  
\303\072\360\154\303\213\310\244\221\005\363\365\331\266\252\006  
\241\267\253\344\261\352\041\024\134\203\244\374\377\266\120\323  
\214\022\046\231\166\160\351\300\017\246\164\374\273\320\033\170  
\316\162\222\342\050\234\274\346\351\011\330\072\323\211\346\276  
\056\167\337\001\012\157\226\366\345\215\074\115\122\166\032\126  
\341\163\176\027\254\075\255\154\243\122\022\030\160\346\200\116  
\063\362\176\046\062\254\005\215\070\244\346\166\074\237\020\151  
\016\155\235\322\301\171\040\153\133\317\063\215\321\224\166\065  
\347\135\125\307\267\254\050\253\106\314\347\073\041\265\012\012  
\344\112\131\334\201\065\113\104\225\022\012\147\245\241\377\133  
\000\007\322\300\314\371\077\374\237\063\362\000\370\214\154\207  
\235\006\055\361\357\343\346\006\372\305\146\023\133\374\120\007  
\236\161\206\262\332\157\164\060\317\223\123\350\334\042\326\336  
\040\037\141\215\243\056\243\170\062\220\154\334\254\062\265\005  
\344\365\074\063\015\326\340\207\167\027\114\235\260\330\011\250  
\015\127\367\104\205\360\310\004\276\134\135\132\343\027\216\124  
\143\151\177\111\164\144\005\214\243\002\003\001\000\001\243\143  
\060\141\060\017\006\003\125\035\023\001\001\377\004\005\060\003  
\001\001\377\060\037\006\003\125\035\043\004\030\060\026\200\024  
\262\264\256\346\055\367\046\325\252\165\055\166\113\300\033\123  
\041\320\110\357\060\035\006\003\125\035\016\004\026\004\024\262  
\264\256\346\055\367\046\325\252\165\055\166\113\300\033\123\041  
\320\110\357\060\016\006\003\125\035\017\001\001\377\004\004\003  
\002\001\006\060\015\006\011\052\206\110\206\367\015\001\001\013  
\005\000\003\202\002\001\000\211\250\162\177\214\353\316\056\030  
\304\020\200\055\020\014\377\373\024\315\004\340\024\074\116\232  
\373\237\051\277\042\236\127\271\202\163\022\143\046\265\314\220  
\351\322\052\051\356\234\055\314\054\231\276\105\047\344\261\161  
\355\344\070\225\061\101\362\175\172\143\170\337\312\066\026\057  
\202\210\237\274\021\107\117\166\115\310\055\216\353\337\055\174  
\116\073\332\256\366\343\332\135\024\246\256\350\205\104\235\006  
\156\216\373\357\172\112\152\055\053\050\030\376\277\220\054\165  
\026\237\017\352\226\175\005\356\233\023\245\104\154\370\003\320  
\335\043\341\375\003\022\022\010\364\030\064\263\340\067\013\167  
\021\001\110\277\141\264\265\370\031\331\313\115\352\243\214\357  
\375\360\006\265\155\222\364\112\141\120\204\355\354\111\323\344  
\276\150\346\056\343\061\013\124\013\032\222\326\202\330\266\242  
\145\074\146\004\371\125\332\154\373\333\265\024\146\115\224\203  
\073\315\036\246\053\262\376\167\100\206\253\347\337\012\311\375  
\366\335\207\126\030\330\260\054\125\140\226\372\010\176\122\220  
\365\113\246\056\207\174\313\040\333\006\076\240\135\003\167\175  
\242\074\023\033\051\242\023\125\240\075\024\042\257\157\270\320  
\232\033\162\335\005\001\215\206\140\277\244\147\356\265\245\015  
\321\177\346\032\053\142\146\303\007\272\347\240\110\034\070\303  
\351\105\373\247\177\374\355\002\150\032\312\167\022\167\246\000  
\125\050\024\354\326\307\022\242\033\145\102\351\221\350\313\076  
\207\211\124\135\331\257\235\227\234\151\347\012\377\017\132\170

```
\213\143\052\114\175\107\224\077\336\113\351\123\320\060\361\305
\366\236\111\337\073\240\221\243\243\376\315\130\314\352\337\257
\157\050\073\240\151\233\217\354\254\256\053\124\235\233\004\261
\107\040\257\226\022\076\143\224\035\004\347\056\273\206\307\014
\232\210\277\166\107\357\367\260\013\227\146\322\104\317\140\122
\007\341\325\054\112\072\047\141\167\312\327\217\347\207\016\060
\377\014\273\004\342\141\303\242\310\227\141\216\264\060\152\074
\155\302\007\137\112\163\057\077\371\026\212\001\146\357\272\221
\312\122\127\173\256\324\346\017\335\013\172\177\213\236\046\040
\317\073\357\201\161\203\131
```

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "E-Tugra Global Root CA RSA v3"

# Issuer: CN=E-Tugra

Global Root CA RSA v3,OU=E-Tugra Trust Center,O=E-Tugra EBG A.S.,L=Ankara,C=TR

# Serial Number:0d:4d:c5:cd:16:22:95:96:08:7e:b8:0b:7f:15:06:34:fb:79:10:34

# Subject: CN=E-Tugra Global Root CA RSA v3,OU=E-Tugra Trust Center,O=E-Tugra EBG A.S.,L=Ankara,C=TR

# Not Valid Before: Wed Mar 18 09:07:17 2020

# Not Valid After : Sun Mar 12 09:07:17 2045

# Fingerprint (SHA-256):

EF:66:B0:B1:0A:3C:DB:9F:2E:36:48:C7:6B:D2:AF:18:EA:D2:BF:E6:F1:17:65:5E:28:C4:06:0D:A1:A3:F4:C2

# Fingerprint (SHA1): E9:A8:5D:22:14:52:1C:5B:AA:0A:B4:BE:24:6A:23:8A:C9:BA:E2:A9

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "E-Tugra Global Root CA RSA v3"

CKA\_CERT\_SHA1\_HASH MULTILINE\_OCTAL

```
\351\250\135\042\024\122\034\133\252\012\264\276\044\152\043\212
\311\272\342\251
```

END

CKA\_CERT\_MD5\_HASH MULTILINE\_OCTAL

```
\042\276\020\366\302\370\003\210\163\137\063\051\107\050\107\244
```

END

CKA\_ISSUER MULTILINE\_OCTAL

```
\060\201\200\061\013\060\011\006\003\125\004\006\023\002\124\122
\061\017\060\015\006\003\125\004\007\023\006\101\156\153\141\162
\141\061\031\060\027\006\003\125\004\012\023\020\105\055\124\165
\147\162\141\040\105\102\107\040\101\056\123\056\061\035\060\033
\006\003\125\004\013\023\024\105\055\124\165\147\162\141\040\124
\162\165\163\164\040\103\145\156\164\145\162\061\046\060\044\006
\003\125\004\003\023\035\105\055\124\165\147\162\141\040\107\154
\157\142\141\154\040\122\157\157\164\040\103\101\040\122\123\101
```

```

\040\166\063
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\024\015\115\305\315\026\042\225\226\010\176\270\013\177\025
\006\064\373\171\020\064
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "E-Tugra Global Root CA ECC v3"
#
# Issuer: CN=E-Tugra Global Root CA ECC v3,OU=E-Tugra Trust Center,O=E-Tugra EBG
A.S.,L=Ankara,C=TR
# Serial Number:26:46:19:77:31:e1:4f:6f:28:36:de:39:51:86:e6:d4:97:88:22:c1
# Subject: CN=E-Tugra Global Root CA ECC v3,OU=E-Tugra Trust Center,O=E-Tugra EBG
A.S.,L=Ankara,C=TR
# Not Valid Before: Wed Mar 18 09:46:58 2020
# Not Valid After : Sun Mar 12 09:46:58 2045
# Fingerprint (SHA-256):
87:3F:46:85:FA:7F:56:36:25:25:2E:6D:36:BC:D7:F1:6F:C2:49:51:F2:64:E4:7E:1B:95:4F:49:08:CD:CA:13
# Fingerprint (SHA1): 8A:2F:AF:57:53:B1:B0:E6:A1:04:EC:5B:6A:69:71:6D:F6:1C:E2:84
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "E-Tugra Global Root CA ECC v3"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\201\200\061\013\060\011\006\003\125\004\006\023\002\124\122
\061\017\060\015\006\003\125\004\007\023\006\101\156\153\141\162
\141\061\031\060\027\006\003\125\004\012\023\020\105\055\124\165
\147\162\141\040\105\102\107\040\101\056\123\056\061\035\060\033
\006\003\125\004\013\023\024\105\055\124\165\147\162\141\040\124
\162\165\163\164\040\103\145\156\164\145\162\061\046\060\044\006
\003\125\004\003\023\035\105\055\124\165\147\162\141\040\107\154
\157\142\141\154\040\122\157\157\164\040\103\101\040\105\103\103
\040\166\063
END
CKA_ID
UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\201\200\061\013\060\011\006\003\125\004\006\023\002\124\122
\061\017\060\015\006\003\125\004\007\023\006\101\156\153\141\162
\141\061\031\060\027\006\003\125\004\012\023\020\105\055\124\165

```

\147\162\141\040\105\102\107\040\101\056\123\056\061\035\060\033  
\006\003\125\004\013\023\024\105\055\124\165\147\162\141\040\124  
\162\165\163\164\040\103\145\156\164\145\162\061\046\060\044\006  
\003\125\004\003\023\035\105\055\124\165\147\162\141\040\107\154  
\157\142\141\154\040\122\157\157\164\040\103\101\040\105\103\103  
\040\166\063

END

CKA\_SERIAL\_NUMBER MULTILINE\_OCTAL

\002\024\046\106\031\167\061\341\117\157\050\066\336\071\121\206  
\346\324\227\210\042\301

END

CKA\_VALUE

MULTILINE\_OCTAL

\060\202\002\245\060\202\002\052\240\003\002\001\002\002\024\046  
\106\031\167\061\341\117\157\050\066\336\071\121\206\346\324\227  
\210\042\301\060\012\006\010\052\206\110\316\075\004\003\003\060  
\201\200\061\013\060\011\006\003\125\004\006\023\002\124\122\061  
\017\060\015\006\003\125\004\007\023\006\101\156\153\141\162\141  
\061\031\060\027\006\003\125\004\012\023\020\105\055\124\165\147  
\162\141\040\105\102\107\040\101\056\123\056\061\035\060\033\006  
\003\125\004\013\023\024\105\055\124\165\147\162\141\040\124\162  
\165\163\164\040\103\145\156\164\145\162\061\046\060\044\006\003  
\125\004\003\023\035\105\055\124\165\147\162\141\040\107\154\157  
\142\141\154\040\122\157\157\164\040\103\101\040\105\103\103\040  
\166\063\060\036\027\015\062\060\060\063\061\070\060\071\064\066  
\065\070\132\027\015\064\065\060\063\061\062\060\071\064\066\065  
\070\132\060\201\200\061\013\060\011\006\003\125\004\006\023\002  
\124\122\061\017\060\015\006\003\125\004\007\023\006\101\156\153  
\141\162\141\061\031\060\027\006\003\125\004\012\023\020\105\055  
\124\165\147\162\141\040\105\102\107\040\101\056\123\056\061\035  
\060\033\006\003\125\004\013\023\024\105\055\124\165\147\162\141  
\040\124\162\165\163\164\040\103\145\156\164\145\162\061\046\060  
\044\006\003\125\004\003\023\035\105\055\124\165\147\162\141\040  
\107\154\157\142\141\154\040\122\157\157\164\040\103\101\040\105  
\103\103\040\166\063\060\166\060\020\006\007\052\206\110\316\075  
\002\001\006\005\053\201\004\000\042\003\142\000\004\216\230\051  
\277\307\020\036\047\333\253\003\314\050\054\330\136\110\031\020  
\051\314\313\131\201\314\214\270\222\027\211\203\052\222\366\303  
\244\035\114\142\325\237\326\240\106\334\034\274\166\301\343\107  
\320\133\023\332\347\245\263\146\110\347\041\232\112\117\206\012  
\175\154\352\115\062\200\012\262\172\011\233\151\113\230\201\342  
\056\354\002\160\226\037\375\365\106\316\312\334\202\243\143\060  
\141\060\017\006\003\125\035\023\001\001\377\004\005\060\003\001  
\001\377\060\037\006\003\125\035\043\004\030\060\026\200\024\377  
\202\061\162\076\371\304\146\154\255\070\236\321\260\121\210\245  
\220\314\365\060\035\006\003\125\035\016\004\026\004\024\377\202  
\061\162\076\371\304\146\154\255\070\236\321\260\121\210\245\220  
\314\365\060\016\006\003\125\035\017\001\001\377\004\004\003\002

```
\001\006\060\012\006\010\052\206\110\316\075\004\003\003\003\151
\000\060\146\002\061\000\346\005\130\151\141\345\055\312\015\313
\361\031\010\275\326\375\121\222\032\176\143\124\004\220\221\232
\065\221\071\231\372\007\251\146\223\272\310\150\324\212\077\372
\355\156\026\002\047\267\002\061\000\335\132\027\053\166\035\145
\102\226\246\254\135\212\171\126\330\212\033\337\232\336\137\307
\120\217\261\133\161\014\046\337\152\100\000\354\063\221\041\161
\276\150\344\043\244\331\255\241\067
```

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "E-Tugra Global Root CA ECC v3"

# Issuer: CN=E-Tugra Global

Root CA ECC v3,OU=E-Tugra Trust Center,O=E-Tugra EBG A.S.,L=Ankara,C=TR

# Serial Number:26:46:19:77:31:e1:4f:6f:28:36:de:39:51:86:e6:d4:97:88:22:c1

# Subject: CN=E-Tugra Global Root CA ECC v3,OU=E-Tugra Trust Center,O=E-Tugra EBG  
A.S.,L=Ankara,C=TR

# Not Valid Before: Wed Mar 18 09:46:58 2020

# Not Valid After : Sun Mar 12 09:46:58 2045

# Fingerprint (SHA-256):

87:3F:46:85:FA:7F:56:36:25:25:2E:6D:36:BC:D7:F1:6F:C2:49:51:F2:64:E4:7E:1B:95:4F:49:08:CD:CA:13

# Fingerprint (SHA1): 8A:2F:AF:57:53:B1:B0:E6:A1:04:EC:5B:6A:69:71:6D:F6:1C:E2:84

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "E-Tugra Global Root CA ECC v3"

CKA\_CERT\_SHA1\_HASH MULTILINE\_OCTAL

```
\212\057\257\127\123\261\260\346\241\004\354\133\152\151\161\155
\366\034\342\204
```

END

CKA\_CERT\_MD5\_HASH MULTILINE\_OCTAL

```
\106\274\201\273\361\265\036\367\113\226\274\024\342\347\047\144
```

END

CKA\_ISSUER MULTILINE\_OCTAL

```
\060\201\200\061\013\060\011\006\003\125\004\006\023\002\124\122
\061\017\060\015\006\003\125\004\007\023\006\101\156\153\141\162
\141\061\031\060\027\006\003\125\004\012\023\020\105\055\124\165
\147\162\141\040\105\102\107\040\101\056\123\056\061\035\060\033
\006\003\125\004\013\023\024\105\055\124\165\147\162\141\040\124
\162\165\163\164\040\103\145\156\164\145\162\061\046\060\044\006
\003\125\004\003\023\035\105\055\124\165\147\162\141\040\107\154
\157\142\141\154\040\122\157\157\164\040\103\101\040\105\103\103
\040\166\063
```

END



```

CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\024\046\106\031\167\061\341\117\157\050\066\336\071\121\206
\346\324\227\210\042\301
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

#
# Certificate "DIGITALSIGN GLOBAL ROOT RSA CA"
#
# Issuer: CN=DIGITALSIGN GLOBAL ROOT RSA CA,O=DigitalSign Certificadora Digital,C=PT
# Serial
Number:5d:59:c8:ca:ab:09:57:f5:e6:b5:da:29:94:04:6a:ff:c5:d4:95:87
# Subject: CN=DIGITALSIGN GLOBAL ROOT RSA CA,O=DigitalSign Certificadora Digital,C=PT
# Not Valid Before: Thu Jan 21 10:50:34 2021
# Not Valid After : Mon Jan 15 10:50:34 2046
# Fingerprint (SHA-256):
82:BD:5D:85:1A:CF:7F:6E:1B:A7:BF:CB:C5:30:30:D0:E7:BC:3C:21:DF:77:2D:85:8C:AB:41:D1:99:BD:F5:95
# Fingerprint (SHA1): B9:82:07:97:AE:52:A5:68:6F:46:07:DF:FD:03:72:3D:92:86:88:2D
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "DIGITALSIGN GLOBAL ROOT RSA CA"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\142\061\013\060\011\006\003\125\004\006\023\002\120\124\061
\052\060\050\006\003\125\004\012\014\041\104\151\147\151\164\141
\154\123\151\147\156\040\103\145\162\164\151\146\151\143\141\144
\157\162\141\040\104\151\147\151\164\141\154\061\047\060\045\006
\003\125\004\003\014\036\104\111\107\111\124\101\114\123\111\107
\116\040\107\114\117\102\101\114\040\122\117\117\124\040\122\123
\101\040\103\101
END
CKA_ID
UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\142\061\013\060\011\006\003\125\004\006\023\002\120\124\061
\052\060\050\006\003\125\004\012\014\041\104\151\147\151\164\141
\154\123\151\147\156\040\103\145\162\164\151\146\151\143\141\144
\157\162\141\040\104\151\147\151\164\141\154\061\047\060\045\006
\003\125\004\003\014\036\104\111\107\111\124\101\114\123\111\107
\116\040\107\114\117\102\101\114\040\122\117\117\124\040\122\123
\101\040\103\101
END

```

CKA\_SERIAL\_NUMBER MULTILINE\_OCTAL

\002\024\135\131\310\312\253\011\127\365\346\265\332\051\224\004  
\152\377\305\324\225\207

END

CKA\_VALUE MULTILINE\_OCTAL

\060\202\005\265\060\202\003\235\240\003\002\001\002\002\024\135  
\131\310\312\253\011\127\365\346\265\332\051\224\004\152\377\305  
\324\225\207\060\015\006\011\052\206\110\206\367\015\001\001\015  
\005\000\060\142\061\013\060\011\006\003\125\004\006\023\002\120  
\124\061\052\060\050\006\003\125\004\012\014\041\104\151\147\151  
\164\141\154\123\151\147\156\040\103\145\162\164\151\146\151\143  
\141\144\157\162\141\040\104\151\147\151\164\141\154\061\047\060  
\045\006\003\125\004\003\014\036\104\111\107\111\124\101\114\123  
\111\107\116\040\107\114\117\102\101\114\040\122\117\117\124\040  
\122\123\101\040\103\101\060\036\027\015\062\061\060\061\062\061  
\061\060\065\060\063\064\132\027\015\064\066\060\061\061\065\061  
\060\065\060\063\064\132\060\142\061\013\060\011\006\003\125\004  
\006\023\002\120\124\061\052\060\050\006\003\125\004\012\014\041  
\104\151\147\151\164\141\154\123\151\147\156\040\103\145\162\164  
\151\146\151\143\141\144\157\162\141\040\104\151\147\151\164\141  
\154\061\047\060\045\006\003\125\004\003\014\036\104\111\107\111  
\124\101\114\123\111\107\116\040\107\114\117\102\101\114\040\122  
\117\117\124\040\122\123\101\040\103\101\060\202\002\042\060\015  
\006\011\052\206\110\206\367\015\001\001\001\005\000\003\202\002  
\017\000\060\202\002\012\002\202\002\001\000\310\207\266\070\323  
\034\360\336\022\370\203\307\304\212\342\211\270\264\042\172\170  
\370\014\146\121\150\166\067\012\325\117\302\132\010\270\026\134  
\367\162\001\011\067\204\201\052\124\153\327\222\320\154\372\250  
\247\103\022\064\353\016\333\067\017\051\376\212\061\121\102\350  
\113\234\220\250\310\054\021\323\375\240\051\176\316\336\224\366  
\202\340\130\264\116\105\045\361\042\362\075\323\017\173\124\032  
\334\062\266\326\121\116\176\101\264\127\270\054\306\271\016\056  
\312\127\361\325\310\323\130\347\245\351\102\021\256\323\040\045  
\224\151\327\217\312\242\015\303\323\237\007\150\077\025\322\147  
\056\123\375\166\202\233\013\163\251\051\015\236\021\223\024\010  
\230\354\236\124\022\112\126\242\006\025\354\153\154\056\222\140  
\056\206\015\256\202\037\121\115\343\262\007\327\020\031\127\042  
\366\251\151\104\204\363\331\075\240\006\277\314\210\176\177\365  
\316\133\245\302\052\152\164\102\352\157\246\377\371\150\261\320  
\137\275\221\322\125\157\063\127\114\036\235\344\342\213\301\205  
\145\240\340\152\234\000\000\210\222\335\130\010\026\362\160\061  
\250\034\341\336\275\116\161\351\326\276\176\265\241\132\303\115  
\367\277\233\275\224\244\375\365\252\123\223\106\311\046\001\004  
\160\304\240\161\272\316\045\146\373\221\176\125\160\356\111\012  
\115\142\177\302\120\232\162\362\030\147\235\351\105\250\064\204  
\350\370\201\366\321\132\042\036\007\117\073\263\177\335\021\245  
\163\334\276\251\031\072\151\251\155\033\062\342\211\252\245\047  
\013\132\176\164\342\017\144\071\135\176\134\271\301\027\374\307

\215\136\311\354\044\355\322\362\077\172\204\105\067\002\276\076  
\153\131\304\346\133\026\155\300\252\236\252\265\131\056\054\160  
\125\234\314\231\226\230\044\124\321\216\332\312\264\021\264\267  
\160\103\037\157\220\013\040\240\250\166\023\145\333\333\043\132  
\165\113\241\013\061\167\012\356\175\150\141\032\023\214\352\121  
\176\134\126\243\127\114\135\241\353\023\145\277\124\024\314\363  
\356\334\327\354\074\227\362\170\126\270\337\162\134\160\374\316  
\006\335\237\322\007\061\357\347\122\221\236\315\272\327\300\030  
\104\007\061\145\111\062\151\023\112\353\217\002\003\001\000\001  
\243\143\060\141\060\017\006\003\125\035\023\001\001\377\004\005  
\060\003\001\001\377\060\037\006\003\125\035\043\004\030\060\026  
\200\024\265\066\274\074\214\032\253\054\366\131\031\055\203\024  
\332\223\045\025\326\206\060\035\006\003\125\035\016\004\026\004  
\024\265\066\274\074\214\032\253\054\366\131\031\055\203\024\332  
\223\045\025\326\206\060\016\006\003\125\035\017\001\001\377\004  
\004\003\002\001\006\060\015\006\011\052\206\110\206\367\015\001  
\001\015\005\000\003\202\002\001\000\024\373\061\045\070\061\370  
\312\010\262\043\166\070\255\370\323\131\365\314\264\127\045\341  
\104\276\176\374\026\354\256\372\046\237\117\147\026\112\126\360  
\375\355\307\031\001\064\216\220\132\055\326\200\134\354\161\322  
\201\045\202\036\000\161\337\232\321\325\035\042\273\321\245\363  
\142\017\264\353\334\044\163\376\246\126\315\232\024\305\004\065  
\026\061\242\007\353\245\000\342\266\370\137\162\375\077\141\111  
\216\336\176\115\070\327\172\036\164\067\154\121\334\276\000\004  
\270\070\024\363\040\301\355\233\247\043\375\015\102\204\035\177  
\362\163\303\320\170\143\361\237\354\327\133\351\361\276\154\240  
\113\003\236\215\151\341\024\332\210\020\201\043\123\377\332\124  
\053\013\306\271\226\225\004\030\106\363\173\250\227\330\133\150  
\244\344\070\034\016\105\345\230\323\011\256\232\136\354\263\171  
\015\071\162\362\364\224\235\016\236\140\042\346\250\366\114\205  
\315\007\202\072\150\071\315\075\137\343\070\364\266\257\073\153  
\112\237\140\121\105\242\100\002\345\252\014\343\076\321\170\324  
\242\164\234\046\272\005\232\050\160\112\076\246\013\320\035\111  
\360\272\370\256\101\020\176\244\007\022\275\250\317\051\075\127  
\273\307\361\103\107\000\076\256\160\030\132\040\173\011\313\072  
\072\160\200\345\114\140\230\301\025\301\035\112\367\310\360\233  
\341\162\255\347\135\150\130\013\004\261\214\274\237\267\373\156  
\213\133\004\125\373\353\043\125\327\170\120\332\045\313\276\047  
\066\273\044\032\171\034\121\321\376\023\273\377\170\054\334\244  
\276\057\366\305\113\123\317\247\114\231\136\160\254\131\210\004  
\256\144\004\277\173\246\172\115\323\350\167\275\241\176\120\025  
\363\357\111\060\205\115\041\127\252\333\054\165\227\255\201\001  
\207\242\261\160\235\036\006\132\003\140\261\077\246\155\202\054  
\324\024\261\201\245\350\075\210\035\264\162\054\130\067\212\216  
\070\224\270\163\335\251\340\270\366\167\242\263\174\130\336\256  
\151\072\265\213\245\032\273\362\330\164\006\234\375\142\163\040  
\041\166\261\176\160\236\031\324\353\027\142\031\070\231\315\066  
\053\107\376\061\313\337\271\344\254\010\323\330\246\353\324\236

```

\176\113\144\244\125\135\053\027\311
END
CKA_NSS_MOZILLA_CA_POLICY
CK_BBOOL CK_TRUE
CKA_NSS_SERVER_DISTRUST_AFTER CK_BBOOL CK_FALSE
CKA_NSS_EMAIL_DISTRUST_AFTER CK_BBOOL CK_FALSE

# Trust for "DIGITALSIGN GLOBAL ROOT RSA CA"
# Issuer: CN=DIGITALSIGN GLOBAL ROOT RSA CA,O=DigitalSign Certificadora Digital,C=PT
# Serial Number:5d:59:c8:ca:ab:09:57:f5:e6:b5:da:29:94:04:6a:ff:c5:d4:95:87
#
Subject: CN=DIGITALSIGN GLOBAL ROOT RSA CA,O=DigitalSign Certificadora Digital,C=PT
# Not Valid Before: Thu Jan 21 10:50:34 2021
# Not Valid After : Mon Jan 15 10:50:34 2046
# Fingerprint (SHA-256):
82:BD:5D:85:1A:CF:7F:6E:1B:A7:BF:CB:C5:30:30:D0:E7:BC:3C:21:DF:77:2D:85:8C:AB:41:D1:99:BD:F5:95
# Fingerprint (SHA1): B9:82:07:97:AE:52:A5:68:6F:46:07:DF:FD:03:72:3D:92:86:88:2D
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "DIGITALSIGN GLOBAL ROOT RSA CA"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\271\202\007\227\256\122\245\150\157\106\007\337\375\003\162\075
\222\206\210\055
END
CKA_CERT_MD5_HASH MULTILINE_OCTAL
\033\032\275\032\171\306\333\264\355\263\207\314\251\323\116\170
END
CKA_ISSUER MULTILINE_OCTAL
\060\142\061\013\060\011\006\003\125\004\006\023\002\120\124\061
\052\060\050\006\003\125\004\012\014\041\104\151\147\151\164\141
\154\123\151\147\156\040\103\145\162\164\151\146\151\143\141\144
\157\162\141\040\104\151\147\151\164\141\154\061\047\060\045\006
\003\125\004\003\014\036\104\111\107\111\124\101\114\123\111\107
\116\040\107\114\117\102\101\114\040\122\117\117\124\040\122\123
\101\040\103\101
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\024\135\131\310\312\253\011\127\365\346\265\332\051\224\004
\152\377\305\324\225\207
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

```

```

#
# Certificate "DIGITALSIGN GLOBAL ROOT ECDSA CA"
#
# Issuer: CN=DIGITALSIGN GLOBAL ROOT ECDSA CA,O=DigitalSign Certificadora Digital,C=PT
# Serial Number:36:2d:8f:72:88:a2:28:27:e4:00:ff:24:c6:2d:e4:eb:fa:9d:b6:e1
# Subject: CN=DIGITALSIGN GLOBAL ROOT ECDSA CA,O=DigitalSign Certificadora Digital,C=PT
# Not Valid Before: Thu Jan 21 11:07:50 2021
# Not Valid After : Mon Jan 15 11:07:50 2046
# Fingerprint
(SHA-256):
26:1D:71:14:AE:5F:8F:F2:D8:C7:20:9A:9D:E4:28:9E:6A:FC:9D:71:70:23:D8:54:50:90:91:99:F1:85:7C:FE
# Fingerprint (SHA1): 67:A8:08:EB:8F:88:F5:80:6C:05:45:1B:17:F3:D7:00:2F:D2:4A:8A
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "DIGITALSIGN GLOBAL ROOT ECDSA CA"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\144\061\013\060\011\006\003\125\004\006\023\002\120\124\061
\052\060\050\006\003\125\004\012\014\041\104\151\147\151\164\141
\154\123\151\147\156\040\103\145\162\164\151\146\151\143\141\144
\157\162\141\040\104\151\147\151\164\141\154\061\051\060\047\006
\003\125\004\003\014\040\104\111\107\111\124\101\114\123\111\107
\116\040\107\114\117\102\101\114\040\122\117\117\124\040\105\103
\104\123\101\040\103\101
END
CKA_ID UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\144\061\013\060\011\006\003\125\004\006\023\002\120\124\061
\052\060\050\006\003\125\004\012\014\041\104\151\147\151\164\141
\154\123\151\147\156\040\103\145\162\164\151\146\151\143\141\144
\157\162\141\040\104\151\147\151\164\141\154\061\051\060\047\006
\003\125\004\003\014\040\104\111\107\111\124\101\114\123\111\107
\116\040\107\114\117\102\101\114\040\122\117\117\124\040\105\103
\104\123\101\040\103\101
END
CKA_SERIAL_NUMBER
MULTILINE_OCTAL
\002\024\066\055\217\162\210\242\050\047\344\000\377\044\306\055
\344\353\372\235\266\341
END
CKA_VALUE MULTILINE_OCTAL
\060\202\002\152\060\202\001\360\240\003\002\001\002\002\024\066
\055\217\162\210\242\050\047\344\000\377\044\306\055\344\353\372
\235\266\341\060\012\006\010\052\206\110\316\075\004\003\003\060
\144\061\013\060\011\006\003\125\004\006\023\002\120\124\061\052
\060\050\006\003\125\004\012\014\041\104\151\147\151\164\141\154

```

\123\151\147\156\040\103\145\162\164\151\146\151\143\141\144\157  
\162\141\040\104\151\147\151\164\141\154\061\051\060\047\006\003  
\125\004\003\014\040\104\111\107\111\124\101\114\123\111\107\116  
\040\107\114\117\102\101\114\040\122\117\117\124\040\105\103\104  
\123\101\040\103\101\060\036\027\015\062\061\060\061\062\061\061  
\061\060\067\065\060\132\027\015\064\066\060\061\061\065\061\061  
\060\067\065\060\132\060\144\061\013\060\011\006\003\125\004\006  
\023\002\120\124\061\052\060\050\006\003\125\004\012\014\041\104  
\151\147\151\164\141\154\123\151\147\156\040\103\145\162\164\151  
\146\151\143\141\144\157\162\141\040\104\151\147\151\164\141\154  
\061\051\060\047\006\003\125\004\003\014\040\104\111\107\111\124  
\101\114\123\111\107\116\040\107\114\117\102\101\114\040\122\117  
\117\124\040\105\103\104\123\101\040\103\101\060\166\060\020\006  
\007\052\206\110\316\075\002\001\006\005\053\201\004\000\042\003  
\142\000\004\156\013\243\253\063\115\034\352\112\350\374\004\215  
\024\240\175\360\010\054\137\203\253\223\321\322\173\272\327\111  
\175\217\354\022\120\137\324\271\313\345\360\371\063\143\037\311  
\127\354\100\330\021\013\227\350\122\026\314\051\216\364\006\206  
\036\070\334\075\127\304\356\252\275\310\124\004\046\132\047\023  
\121\107\075\037\037\032\216\250\225\244\063\320\314\107\314\155  
\270\374\110\243\143\060\141\060\017\006\003\125\035\023\001\001  
\377\004\005\060\003\001\001\377\060\037\006\003\125\035\043\004  
\030\060\026\200\024\316\257\112\213\032\165\342\361\070\347\002  
\360\026\255\136\352\144\325\173\264\060\035\006\003\125\035\016  
\004\026\004\024\316\257\112\213\032\165\342\361\070\347\002\360  
\026\255\136\352\144\325\173\264\060\016\006\003\125\035\017\001  
\001\377\004\004\003\002\001\006\060\012\006\010\052\206\110\316  
\075\004\003\003\003\150\000\060\145\002\060\012\210\304\161\234  
\104\003\115\215\264\307\274\250\256\331\060\047\065\152\153\026  
\143\327\374\347\131\341\247\211\033\114\061\232\043\125\104\346  
\363\103\041\325\107\047\157\155\127\001\252\002\061\000\373\262  
\352\342\227\177\121\265\237\110\353\274\157\065\211\250\144\160  
\253\127\166\315\300\306\024\140\312\177\342\202\000\163\367\314  
\065\352\216\044\233\345\010\131\307\004\214\163\170\376

END

CKA\_NSS\_Mozilla\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "DIGITALSIGN GLOBAL ROOT ECDSA CA"

# Issuer: CN=DIGITALSIGN GLOBAL ROOT ECDSA CA,O=DigitalSign Certificadora Digital,C=PT

# Serial Number:36:2d:8f:72:88:a2:28:27:e4:00:ff:24:c6:2d:e4:eb:fa:9d:b6:e1

# Subject: CN=DIGITALSIGN GLOBAL ROOT ECDSA CA,O=DigitalSign Certificadora Digital,C=PT

# Not Valid Before: Thu Jan 21 11:07:50 2021

# Not Valid After : Mon Jan 15 11:07:50 2046

# Fingerprint (SHA-256):

26:1D:71:14:AE:5F:8F:F2:D8:C7:20:9A:9D:E4:28:9E:6A:FC:9D:71:70:23:D8:54:50:90:91:99:F1:85:7C:FE

```

# Fingerprint (SHA1): 67:A8:08:EB:8F:88:F5:80:6C:05:45:1B:17:F3:D7:00:2F:D2:4A:8A
CKA_CLASS CK_OBJECT_CLASS CKO_NSS_TRUST
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "DIGITALSIGN GLOBAL ROOT ECDSA CA"
CKA_CERT_SHA1_HASH MULTILINE_OCTAL
\147\250\010\353\217\210\365\200\154\005\105\033\027\363\327\000
\057\322\112\212
END
CKA_CERT_MD5_HASH
MULTILINE_OCTAL
\252\055\241\316\377\041\302\210\313\132\036\214\341\311\222\217
END
CKA_ISSUER MULTILINE_OCTAL
\060\144\061\013\060\011\006\003\125\004\006\023\002\120\124\061
\052\060\050\006\003\125\004\012\014\041\104\151\147\151\164\141
\154\123\151\147\156\040\103\145\162\164\151\146\151\143\141\144
\157\162\141\040\104\151\147\151\164\141\154\061\051\060\047\006
\003\125\004\003\014\040\104\111\107\111\124\101\114\123\111\107
\116\040\107\114\117\102\101\114\040\122\117\117\124\040\105\103
\104\123\101\040\103\101
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\024\066\055\217\162\210\242\050\047\344\000\377\044\306\055
\344\353\372\235\266\341
END
CKA_TRUST_SERVER_AUTH CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_EMAIL_PROTECTION CK_TRUST CKT_NSS_TRUSTED_DELEGATOR
CKA_TRUST_CODE_SIGNING CK_TRUST CKT_NSS_MUST_VERIFY_TRUST
CKA_TRUST_STEP_UP_APPROVED CK_BBOOL CK_FALSE

```

```
#
```

```
# Certificate "Security Communication RootCA3"
```

```
#
```

```
#
```

```
Issuer: CN=Security Communication RootCA3,O="SECOM Trust Systems CO.,LTD.",C=JP
```

```
# Serial Number:00:e1:7c:37:40:fd:1b:fe:67
```

```
# Subject: CN=Security Communication RootCA3,O="SECOM Trust Systems CO.,LTD.",C=JP
```

```
# Not Valid Before: Thu Jun 16 06:17:16 2016
```

```
# Not Valid After : Mon Jan 18 06:17:16 2038
```

```
# Fingerprint (SHA-256):
```

```
24:A5:5C:2A:B0:51:44:2D:06:17:76:65:41:23:9A:4A:D0:32:D7:C5:51:75:AA:34:FF:DE:2F:BC:4F:5C:52:94
```

```
# Fingerprint (SHA1): C3:03:C8:22:74:92:E5:61:A2:9C:5F:79:91:2B:1E:44:13:91:30:3A
```

```
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
```

```
CKA_TOKEN CK_BBOOL CK_TRUE
```

```
CKA_PRIVATE CK_BBOOL CK_FALSE
```

```
CKA_MODIFIABLE CK_BBOOL CK_FALSE
```

```
CKA_LABEL UTF8 "Security Communication RootCA3"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\135\061\013\060\011\006\003\125\004\006\023\002\112\120\061
\045\060\043\006\003\125\004\012\023\034\123\105\103\117\115\040
\124\162\165\163\164\040\123\171\163\164\145\155\163\040\103\117
\056\054\114\124\104\056\061\047\060\045\006\003\125\004\003\023
\036\123\145\143\165\162\151\164\171\040\103\157\155\155\165\156
\151\143\141\164\151\157\156\040\122\157\157\164\103\101\063
END
CKA_ID
UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\135\061\013\060\011\006\003\125\004\006\023\002\112\120\061
\045\060\043\006\003\125\004\012\023\034\123\105\103\117\115\040
\124\162\165\163\164\040\123\171\163\164\145\155\163\040\103\117
\056\054\114\124\104\056\061\047\060\045\006\003\125\004\003\023
\036\123\145\143\165\162\151\164\171\040\103\157\155\155\165\156
\151\143\141\164\151\157\156\040\122\157\157\164\103\101\063
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\011\000\341\174\067\100\375\033\376\147
END
CKA_VALUE MULTILINE_OCTAL
\060\202\005\177\060\202\003\147\240\003\002\001\002\002\011\000
\341\174\067\100\375\033\376\147\060\015\006\011\052\206\110\206
\367\015\001\001\014\005\000\060\135\061\013\060\011\006\003\125
\004\006\023\002\112\120\061\045\060\043\006\003\125\004\012\023
\034\123\105\103\117\115\040\124\162\165\163\164\040\123\171\163
\164\145\155\163\040\103\117\056\054\114\124\104\056\061\047\060
\045\006\003\125\004\003\023\036\123\145\143\165\162\151\164\171
\040\103\157\155\155\165\156\151\143\141\164\151\157\156\040\122
\157\157\164\103\101\063\060\036\027\015\061\066\060\066\061\066
\060\066\061\067\061\066\132\027\015\063\070\060\061\061\070\060
\066\061\067\061\066\132\060\135\061\013\060\011\006\003\125\004
\006\023\002\112\120\061\045\060\043\006\003\125\004\012\023\034
\123\105\103\117\115\040\124\162\165\163\164\040\123\171\163\164
\145\155\163\040\103\117\056\054\114\124\104\056\061\047\060\045
\006\003\125\004\003\023\036\123\145\143\165\162\151\164\171\040
\103\157\155\155\165\156\151\143\141\164\151\157\156\040\122\157
\157\164\103\101\063\060\202\002\042\060\015\006\011\052\206\110
\206\367\015\001\001\001\005\000\003\202\002\017\000\060\202\002
\012\002\202\002\001\000\343\311\162\111\367\060\336\011\174\251
\100\201\130\323\264\072\335\272\141\017\223\120\156\151\074\065
\302\356\133\163\220\033\147\114\041\354\137\065\273\071\076\053
\012\140\357\273\155\053\206\373\161\242\310\254\344\126\224\371
\311\257\261\162\324\040\254\164\322\270\025\255\121\376\205\164
\241\271\020\376\005\200\371\122\223\263\100\075\165\020\254\300
```



\226\267\247\176\166\274\343\033\122\031\316\021\037\013\004\064  
\365\330\365\151\074\167\363\144\364\015\252\205\336\340\011\120  
\004\027\226\204\267\310\212\274\115\162\374\034\273\317\363\006  
\115\371\237\144\367\176\246\146\206\065\161\310\021\200\114\301  
\161\100\130\036\276\240\163\366\374\076\120\341\340\057\046\075  
\176\134\043\265\171\160\336\372\340\321\245\326\014\101\161\173  
\367\352\214\034\210\307\354\213\365\321\057\125\226\106\174\132  
\073\130\073\373\272\330\055\265\045\332\172\116\317\104\256\041  
\246\236\230\312\040\156\174\273\210\205\133\373\300\020\142\273  
\362\371\047\107\357\321\211\071\103\304\337\336\341\101\277\124  
\163\040\227\055\154\332\363\324\007\243\346\271\330\157\256\374  
\214\031\056\323\147\147\053\225\333\130\134\265\152\002\363\270  
\203\136\264\153\276\101\176\127\011\165\104\120\125\315\132\021  
\141\041\012\141\302\251\210\375\023\274\055\211\057\315\141\340  
\225\276\312\265\173\341\173\064\147\013\037\266\014\307\174\036  
\031\123\312\247\261\112\025\040\126\024\160\075\053\202\054\017  
\235\025\035\107\200\107\377\170\231\016\061\257\157\076\217\355  
\206\151\036\173\030\210\024\262\302\374\202\063\056\234\113\055  
\373\160\073\161\252\053\173\046\047\363\032\302\334\373\027\270  
\241\352\313\240\264\256\323\224\176\172\320\253\303\354\070\055  
\021\056\210\277\324\077\255\022\073\102\254\217\002\156\175\314  
\321\137\141\276\241\274\072\152\110\352\046\125\042\026\135\137  
\015\377\047\063\237\030\003\164\212\133\122\040\107\153\105\115  
\042\167\214\125\047\360\257\036\214\311\203\042\124\267\232\320  
\117\331\316\374\331\056\034\226\050\261\002\323\003\275\045\122  
\034\064\146\117\043\253\364\167\202\226\035\321\127\060\010\021  
\005\375\127\321\331\307\002\003\001\000\001\243\102\060\100\060  
\035\006\003\125\035\016\004\026\004\024\144\024\174\374\130\162  
\026\246\012\051\064\025\157\052\313\274\374\257\250\253\060\016  
\006\003\125\035\017\001\001\377\004\004\003\002\001\006\060\017  
\006\003\125\035\023\001\001\377\004\005\060\003\001\001\377\060  
\015\006\011\052\206\110\206\367\015\001\001\014\005\000\003\202  
\002\001\000\334\002\043\010\342\357\041\072\307\015\267\046\322  
\142\223\247\245\043\162\007\040\202\140\337\030\327\124\255\151  
\045\222\236\331\024\317\231\271\122\201\317\256\154\212\073\132  
\071\310\154\001\103\302\042\155\002\360\142\315\116\143\103\300  
\024\332\364\143\360\352\364\161\356\116\207\343\161\251\364\311  
\127\345\056\137\034\171\273\043\252\207\104\127\351\275\065\115  
\101\273\113\050\243\230\262\033\331\013\027\007\345\367\352\235  
\365\166\327\277\304\266\201\130\377\310\377\144\151\142\171\255  
\156\016\037\177\356\035\151\345\267\162\161\263\376\245\001\065  
\224\124\053\300\122\155\217\125\304\311\322\270\313\312\064\010  
\121\205\240\365\274\264\027\130\352\012\134\172\275\143\306\072  
\057\377\226\111\031\204\352\147\330\004\261\141\364\000\133\112  
\267\234\161\067\031\205\171\277\201\260\307\023\016\166\161\076  
\072\200\006\256\006\026\247\215\265\302\304\313\377\100\245\134  
\215\245\311\072\355\162\201\312\134\230\074\322\064\003\167\010  
\375\360\051\131\135\041\010\307\140\277\244\161\173\270\331\036

```
\202\276\011\257\145\157\050\253\277\113\265\356\076\010\107\047
\240\017\157\017\213\077\254\225\030\363\271\016\334\147\125\156
\142\236\106\016\321\004\170\312\162\256\166\331\245\370\262\337
\210\011\141\213\357\044\116\321\131\077\132\324\075\311\223\074
\053\144\365\201\015\026\226\367\222\303\376\061\157\350\052\062
\164\016\364\114\230\112\030\016\060\124\325\305\353\274\305\025
\236\350\231\041\353\047\053\011\012\333\361\346\160\030\126\273
\014\344\276\371\350\020\244\023\222\270\034\340\333\147\035\123
\003\244\042\247\334\135\222\020\074\352\377\374\033\020\032\303
\330\320\234\235\145\313\320\053\047\061\003\036\066\341\075\166
\165\014\377\105\046\271\335\121\274\043\307\137\330\330\207\020
\100\022\015\075\070\067\347\104\074\030\300\123\011\144\217\377
\325\232\246\174\160\056\163\125\041\350\337\377\203\271\035\076
\062\036\326\246\175\054\361\146\351\134\035\247\243\316\136\045
\062\053\343\225\254\052\007\316\264\050\170\206\074\055\246\235
\115\322\164\060\335\144\121\025\333\203\203\121\327\257\375\063
\235\115\146
```

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "Security Communication RootCA3"

# Issuer: CN=Security Communication RootCA3,O="SECOM Trust Systems CO.,LTD.",C=JP

# Serial Number:00:e1:7c:37:40:fd:1b:fe:67

# Subject: CN=Security Communication RootCA3,O="SECOM Trust Systems CO.,LTD.",C=JP

# Not Valid Before: Thu Jun 16 06:17:16 2016

# Not Valid After : Mon Jan 18 06:17:16 2038

# Fingerprint (SHA-256):

24:A5:5C:2A:B0:51:44:2D:06:17:76:65:41:23:9A:4A:D0:32:D7:C5:51:75:AA:34:FF:DE:2F:BC:4F:5C:52:94

#

Fingerprint (SHA1): C3:03:C8:22:74:92:E5:61:A2:9C:5F:79:91:2B:1E:44:13:91:30:3A

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "Security Communication RootCA3"

CKA\_CERT\_SHA1\_HASH MULTILINE\_OCTAL

```
\303\003\310\042\164\222\345\141\242\234\137\171\221\053\036\104
\023\221\060\072
```

END

CKA\_CERT\_MD5\_HASH MULTILINE\_OCTAL

```
\034\232\026\377\236\134\340\115\212\024\001\364\065\135\051\046
```

END

CKA\_ISSUER MULTILINE\_OCTAL

```
\060\135\061\013\060\011\006\003\125\004\006\023\002\112\120\061
\045\060\043\006\003\125\004\012\023\034\123\105\103\117\115\040
```

```
\124\162\165\163\164\040\123\171\163\164\145\155\163\040\103\117
\056\054\114\124\104\056\061\047\060\045\006\003\125\004\003\023
\036\123\145\143\165\162\151\164\171\040\103\157\155\155\165\156
\151\143\141\164\151\157\156\040\122\157\157\164\103\101\063
```

END

CKA\_SERIAL\_NUMBER MULTILINE\_OCTAL

```
\002\011\000\341\174\067\100\375\033\376\147
```

END

CKA\_TRUST\_SERVER\_AUTH

CK\_TRUST CKT\_NSS\_TRUSTED\_DELEGATOR

CKA\_TRUST\_EMAIL\_PROTECTION CK\_TRUST CKT\_NSS\_TRUSTED\_DELEGATOR

CKA\_TRUST\_CODE\_SIGNING CK\_TRUST CKT\_NSS\_MUST\_VERIFY\_TRUST

CKA\_TRUST\_STEP\_UP\_APPROVED CK\_BBOOL CK\_FALSE

#

# Certificate "Security Communication ECC RootCA1"

#

# Issuer: CN=Security Communication ECC RootCA1,O="SECOM Trust Systems CO.,LTD.",C=JP

# Serial Number:00:d6:5d:9b:b3:78:81:2e:eb

# Subject: CN=Security Communication ECC RootCA1,O="SECOM Trust Systems CO.,LTD.",C=JP

# Not Valid Before: Thu Jun 16 05:15:28 2016

# Not Valid After : Mon Jan 18 05:15:28 2038

# Fingerprint (SHA-256):

E7:4F:BD:A5:5B:D5:64:C4:73:A3:6B:44:1A:A7:99:C8:A6:8E:07:74:40:E8:28:8B:9F:A1:E5:0E:4B:BA:CA:11

# Fingerprint (SHA1): B8:0E:26:A9:BF:D2:B2:3B:C0:EF:46:C9:BA:C7:BB:F6:1D:0D:41:41

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_CERTIFICATE

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "Security Communication ECC RootCA1"

CKA\_CERTIFICATE\_TYPE

CK\_CERTIFICATE\_TYPE CKC\_X\_509

CKA\_SUBJECT MULTILINE\_OCTAL

```
\060\141\061\013\060\011\006\003\125\004\006\023\002\112\120\061
\045\060\043\006\003\125\004\012\023\034\123\105\103\117\115\040
\124\162\165\163\164\040\123\171\163\164\145\155\163\040\103\117
\056\054\114\124\104\056\061\053\060\051\006\003\125\004\003\023
\042\123\145\143\165\162\151\164\171\040\103\157\155\155\165\156
\151\143\141\164\151\157\156\040\105\103\103\040\122\157\157\164
\103\101\061
```

END

CKA\_ID UTF8 "0"

CKA\_ISSUER MULTILINE\_OCTAL

```
\060\141\061\013\060\011\006\003\125\004\006\023\002\112\120\061
\045\060\043\006\003\125\004\012\023\034\123\105\103\117\115\040
\124\162\165\163\164\040\123\171\163\164\145\155\163\040\103\117
\056\054\114\124\104\056\061\053\060\051\006\003\125\004\003\023
\042\123\145\143\165\162\151\164\171\040\103\157\155\155\165\156
```

\151\143\141\164\151\157\156\040\105\103\103\040\122\157\157\164  
\103\101\061

END

CKA\_SERIAL\_NUMBER MULTILINE\_OCTAL

\002\011\000\326\135\233\263\170\201\056\353

END

CKA\_VALUE

MULTILINE\_OCTAL

\060\202\002\070\060\202\001\276\240\003\002\001\002\002\011\000  
\326\135\233\263\170\201\056\353\060\012\006\010\052\206\110\316  
\075\004\003\003\060\141\061\013\060\011\006\003\125\004\006\023  
\002\112\120\061\045\060\043\006\003\125\004\012\023\034\123\105  
\103\117\115\040\124\162\165\163\164\040\123\171\163\164\145\155  
\163\040\103\117\056\054\114\124\104\056\061\053\060\051\006\003  
\125\004\003\023\042\123\145\143\165\162\151\164\171\040\103\157  
\155\155\165\156\151\143\141\164\151\157\156\040\105\103\103\040  
\122\157\157\164\103\101\061\060\036\027\015\061\066\060\066\061  
\066\060\065\061\065\062\070\132\027\015\063\070\060\061\061\070  
\060\065\061\065\062\070\132\060\141\061\013\060\011\006\003\125  
\004\006\023\002\112\120\061\045\060\043\006\003\125\004\012\023  
\034\123\105\103\117\115\040\124\162\165\163\164\040\123\171\163  
\164\145\155\163\040\103\117\056\054\114\124\104\056\061\053\060  
\051\006\003\125\004\003\023\042\123\145\143\165\162\151\164\171  
\040\103\157\155\155\165\156\151\143\141\164\151\157\156\040\105  
\103\103\040\122\157\157\164\103\101\061\060\166\060\020\006\007  
\052\206\110\316\075\002\001\006\005\053\201\004\000\042\003\142  
\000\004\244\245\157\140\003\003\303\275\061\364\323\027\234\053  
\204\165\254\345\375\075\127\156\327\143\277\346\004\211\222\216  
\201\234\343\351\107\156\312\220\022\310\023\340\247\235\367\145  
\164\037\154\020\262\350\344\351\357\155\205\062\231\104\261\136  
\375\314\166\020\330\133\275\242\306\371\326\102\344\127\166\334  
\220\302\065\251\113\210\074\022\107\155\134\377\111\117\032\112  
\120\261\243\102\060\100\060\035\006\003\125\035\016\004\026\004  
\024\206\034\347\376\055\245\112\213\010\376\050\021\372\276\243  
\146\370\140\131\057\060\016\006\003\125\035\017\001\001\377\004  
\004\003\002\001\006\060\017\006\003\125\035\023\001\001\377\004  
\005\060\003\001\001\377\060\012\006\010\052\206\110\316\075\004  
\003\003\003\150\000\060\145\002\060\025\135\102\075\374\266\356  
\367\073\261\066\350\236\366\304\106\050\111\063\320\130\103\052  
\143\051\314\115\261\264\172\242\271\015\070\245\135\110\052\375  
\313\262\163\135\243\210\010\307\014\002\061\000\300\253\055\016  
\155\355\030\242\333\123\351\045\333\125\010\340\120\314\337\104  
\141\026\202\253\111\260\262\201\354\163\207\170\264\114\262\142  
\033\022\372\026\115\045\113\143\275\036\067\331

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "Security Communication ECC RootCA1"

# Issuer: CN=Security Communication ECC RootCA1,O="SECOM Trust Systems CO.,LTD.",C=JP

# Serial Number:00:d6:5d:9b:b3:78:81:2e:eb

# Subject: CN=Security Communication ECC RootCA1,O="SECOM Trust Systems CO.,LTD.",C=JP

# Not Valid Before: Thu Jun 16 05:15:28 2016

# Not Valid After : Mon Jan 18 05:15:28 2038

# Fingerprint (SHA-256):

E7:4F:BD:A5:5B:D5:64:C4:73:A3:6B:44:1A:A7:99:C8:A6:8E:07:74:40:E8:28:8B:9F:A1:E5:0E:4B:BA:CA:11

# Fingerprint (SHA1):

B8:0E:26:A9:BF:D2:B2:3B:C0:EF:46:C9:BA:C7:BB:F6:1D:0D:41:41

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "Security Communication ECC RootCA1"

CKA\_CERT\_SHA1\_HASH MULTILINE\_OCTAL

\270\016\046\251\277\322\262\073\300\357\106\311\272\307\273\366  
\035\015\101\101

END

CKA\_CERT\_MD5\_HASH MULTILINE\_OCTAL

\176\103\260\222\150\354\005\103\114\230\253\135\065\056\176\206  
END

CKA\_ISSUER MULTILINE\_OCTAL

\060\141\061\013\060\011\006\003\125\004\006\023\002\112\120\061  
\045\060\043\006\003\125\004\012\023\034\123\105\103\117\115\040  
\124\162\165\163\164\040\123\171\163\164\145\155\163\040\103\117  
\056\054\114\124\104\056\061\053\060\051\006\003\125\004\003\023  
\042\123\145\143\165\162\151\164\171\040\103\157\155\155\165\156  
\151\143\141\164\151\157\156\040\105\103\103\040\122\157\157\164  
\103\101\061

END

CKA\_SERIAL\_NUMBER MULTILINE\_OCTAL

\002\011\000\326\135\233\263\170\201\056\353

END

CKA\_TRUST\_SERVER\_AUTH

CK\_TRUST CKT\_NSS\_TRUSTED\_DELEGATOR

CKA\_TRUST\_EMAIL\_PROTECTION CK\_TRUST CKT\_NSS\_TRUSTED\_DELEGATOR

CKA\_TRUST\_CODE\_SIGNING CK\_TRUST CKT\_NSS\_MUST\_VERIFY\_TRUST

CKA\_TRUST\_STEP\_UP\_APPROVED CK\_BBOOL CK\_FALSE

#

# Certificate "BJCA Global Root CA1"

#

# Issuer: CN=BJCA Global Root CA1,O=BEIJING CERTIFICATE AUTHORITY,C=CN

# Serial Number:55:6f:65:e3:b4:d9:90:6a:1b:09:d1:6c:3e:c0:6c:20

# Subject: CN=BJCA Global Root CA1,O=BEIJING CERTIFICATE AUTHORITY,C=CN

```
# Not Valid Before: Thu Dec 19 03:16:17 2019
# Not Valid After : Mon Dec 12 03:16:17 2044
# Fingerprint (SHA-256):
F3:89:6F:88:FE:7C:0A:88:27:66:A7:FA:6A:D2:74:9F:B5:7A:7F:3E:98:FB:76:9C:1F:A7:B0:9C:2C:44:D5:AE
# Fingerprint (SHA1): D5:EC:8D:7B:4C:BA:79:F4:E7:E8:CB:9D:6B:AE:77:83:10:03:21:6A
CKA_CLASS CK_OBJECT_CLASS CKO_CERTIFICATE
CKA_TOKEN CK_BBOOL CK_TRUE
CKA_PRIVATE CK_BBOOL CK_FALSE
CKA_MODIFIABLE CK_BBOOL CK_FALSE
CKA_LABEL UTF8 "BJCA Global Root CA1"
CKA_CERTIFICATE_TYPE CK_CERTIFICATE_TYPE CKC_X_509
CKA_SUBJECT MULTILINE_OCTAL
\060\124\061\013\060\011\006\003\125\004\006\023\002\103\116\061
\046\060\044\006\003\125\004\012\014\035\102\105\111\112\111\116
\107\040\103\105\122\124\111\106\111\103\101\124\105\040\101\125
\124\110\117\122\111\124\131\061\035\060\033\006\003\125\004\003
\014\024\102\112\103\101\040\107\154\157\142\141\154\040\122\157
\157\164\040\103\101\061
END
CKA_ID
UTF8 "0"
CKA_ISSUER MULTILINE_OCTAL
\060\124\061\013\060\011\006\003\125\004\006\023\002\103\116\061
\046\060\044\006\003\125\004\012\014\035\102\105\111\112\111\116
\107\040\103\105\122\124\111\106\111\103\101\124\105\040\101\125
\124\110\117\122\111\124\131\061\035\060\033\006\003\125\004\003
\014\024\102\112\103\101\040\107\154\157\142\141\154\040\122\157
\157\164\040\103\101\061
END
CKA_SERIAL_NUMBER MULTILINE_OCTAL
\002\020\125\157\145\343\264\331\220\152\033\011\321\154\076\300
\154\040
END
CKA_VALUE MULTILINE_OCTAL
\060\202\005\164\060\202\003\134\240\003\002\001\002\002\020\125
\157\145\343\264\331\220\152\033\011\321\154\076\300\154\040\060
\015\006\011\052\206\110\206\367\015\001\001\013\005\000\060\124
\061\013\060\011\006\003\125\004\006\023\002\103\116\061\046\060
\044\006\003\125\004\012\014\035\102\105\111\112\111\116\107\040
\103\105\122\124\111\106\111\103\101\124\105\040\101\125\124\110
\117\122\111\124\131\061\035\060\033\006\003\125\004\003\014\024
\102\112\103\101\040\107\154\157\142\141\154\040\122\157\157\164
\040\103\101\061\060\036\027\015\061\071\061\062\061\071\060\063
\061\066\061\067\132\027\015\064\064\061\062\061\062\060\063\061
\066\061\067\132\060\124\061\013\060\011\006\003\125\004\006\023
\002\103\116\061\046\060\044\006\003\125\004\012\014\035\102\105
\111\112\111\116\107\040\103\105\122\124\111\106\111\103\101\124
\105\040\101\125\124\110\117\122\111\124\131\061\035\060\033\006
```

\003\125\004\003\014\024\102\112\103\101\040\107\154\157\142\141  
\154\040\122\157\157\164\040\103\101\061\060\202\002\042\060\015  
\006\011\052\206\110\206\367\015\001\001\001\005\000\003\202\002  
\017\000\060\202\002\012\002\202\002\001\000\361\146\010\275\331  
\305\025\141\313\204\004\101\245\151\067\167\035\301\260\173\372  
\303\167\110\220\023\162\144\321\270\174\220\065\235\030\171\210  
\343\227\001\074\107\201\362\016\242\230\015\236\077\067\340\031  
\262\220\362\106\034\222\261\072\141\316\372\267\106\236\003\206  
\327\063\156\355\367\105\214\166\067\336\156\226\221\367\327\176  
\053\207\027\325\213\065\356\204\221\162\127\334\140\303\303\271  
\347\307\147\044\043\117\143\012\143\366\146\175\113\125\247\077  
\170\144\111\151\022\227\340\114\015\323\011\240\062\060\072\372  
\237\300\362\234\305\022\052\056\034\265\004\063\332\244\070\021  
\152\336\306\030\366\107\072\042\101\207\042\374\304\211\050\124  
\330\214\245\060\012\370\027\026\312\254\067\375\171\247\221\027  
\170\070\231\255\130\355\262\336\314\211\175\003\234\263\211\145  
\347\343\073\261\042\206\217\006\155\170\007\375\221\022\177\260  
\153\034\211\015\371\270\313\164\133\007\302\310\364\065\321\144  
\143\172\351\156\232\050\326\060\275\346\033\335\025\257\204\352  
\234\307\312\365\016\352\362\135\051\207\217\151\163\071\276\056  
\044\157\105\041\254\305\324\151\045\006\203\255\172\110\205\023  
\054\015\006\270\154\171\126\374\243\147\062\201\365\127\245\312  
\127\102\151\351\134\044\141\357\342\060\030\116\104\230\125\157  
\172\302\223\330\031\266\336\174\107\212\021\116\111\107\333\050  
\224\002\013\224\112\054\371\022\320\117\350\061\176\154\172\277  
\246\077\233\071\075\002\026\243\030\263\147\254\133\077\054\203  
\053\147\071\201\134\271\176\224\325\144\335\236\217\156\256\350  
\174\133\264\327\152\107\110\327\176\263\324\055\216\126\166\116  
\317\151\361\156\104\154\324\044\352\215\044\241\030\277\275\127  
\376\251\231\065\265\333\020\167\270\075\110\272\326\301\347\361  
\043\076\327\337\205\235\047\074\324\100\275\012\014\275\365\347  
\215\045\326\201\164\207\106\324\051\165\242\102\154\367\163\211  
\347\175\277\172\112\037\323\042\311\025\125\317\337\157\174\125  
\320\244\213\007\021\067\137\203\246\046\127\246\001\133\176\376  
\130\150\007\251\351\172\331\271\350\377\120\037\253\302\264\300  
\316\350\352\375\017\275\215\115\270\274\161\002\003\001\000\001  
\243\102\060\100\060\035\006\003\125\035\016\004\026\004\024\305  
\357\355\314\330\215\041\306\110\344\343\327\024\056\247\026\223  
\345\230\001\060\017\006\003\125\035\023\001\001\377\004\005\060  
\003\001\001\377\060\016\006\003\125\035\017\001\001\377\004\004  
\003\002\001\006\060\015\006\011\052\206\110\206\367\015\001\001  
\013\005\000\003\202\002\001\000\122\202\254\041\064\037\043\362  
\242\330\371\270\257\067\066\040\211\321\067\003\326\151\237\270  
\141\020\272\242\061\230\131\107\350\321\015\045\036\025\101\014  
\340\052\125\325\127\122\313\370\344\307\151\243\035\115\161\002  
\136\137\041\105\140\110\134\011\216\111\020\301\004\334\251\142  
\153\002\360\103\310\116\235\070\111\164\311\062\160\124\155\301  
\107\374\216\264\066\236\324\234\275\335\040\326\123\311\030\251

\265\126\271\166\213\225\147\146\356\275\230\376\256\357\276\156  
\373\140\366\375\131\306\052\033\077\043\112\224\044\060\047\310  
\211\274\353\104\044\232\313\075\276\117\325\172\316\216\027\313  
\142\301\331\336\036\016\172\377\103\206\064\122\274\141\077\074  
\137\273\331\166\264\123\274\227\263\376\212\114\022\056\053\363  
\327\316\341\242\377\335\173\160\373\073\241\115\244\143\002\375  
\070\227\225\077\005\160\240\153\337\142\201\103\213\264\131\015  
\112\214\124\234\305\273\201\237\315\175\245\357\013\045\036\072  
\040\333\034\374\037\230\147\002\012\324\163\104\023\333\121\204  
\032\125\003\126\340\000\176\164\006\377\070\304\162\035\323\250  
\077\150\061\135\323\011\307\056\214\133\143\340\350\334\036\322  
\354\141\036\362\336\345\357\366\231\166\140\055\036\224\162\161  
\306\013\052\062\307\222\116\325\106\327\035\371\251\031\012\310  
\372\225\316\155\043\230\252\013\070\255\232\126\015\157\215\361  
\061\000\210\301\027\234\315\031\066\065\376\125\123\240\340\074  
\063\137\226\136\342\062\351\337\063\273\006\112\251\330\204\163  
\316\167\322\306\254\161\341\134\243\035\014\273\012\337\137\342  
\243\161\330\332\067\132\240\170\053\364\324\175\353\166\355\362  
\141\160\245\145\232\323\211\064\030\253\373\162\076\327\264\075  
\171\134\330\037\241\063\173\331\202\120\014\223\027\252\154\334  
\302\202\273\002\127\066\257\230\047\052\071\120\341\260\211\365  
\045\227\176\107\150\020\264\354\163\312\263\227\321\044\334\366  
\142\240\050\323\265\243\270\144\267\210\142\102\317\235\123\315  
\231\276\144\150\217\117\036\022\110\367\322\051\303\230\050\312  
\362\062\013\223\214\051\117\074\140\062\315\005\226\141\354\362  
\257\376\263\160\054\056\246\362

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "BJCA Global Root CA1"

# Issuer: CN=BJCA Global Root CA1,O=BEIJING CERTIFICATE AUTHORITY,C=CN

# Serial Number:55:6f:65:e3:b4:d9:90:6a:1b:09:d1:6c:3e:c0:6c:20

# Subject: CN=BJCA Global Root CA1,O=BEIJING CERTIFICATE AUTHORITY,C=CN

# Not Valid Before: Thu Dec 19 03:16:17

2019

# Not Valid After : Mon Dec 12 03:16:17 2044

# Fingerprint (SHA-256):

F3:89:6F:88:FE:7C:0A:88:27:66:A7:FA:6A:D2:74:9F:B5:7A:7F:3E:98:FB:76:9C:1F:A7:B0:9C:2C:44:D5:AE

# Fingerprint (SHA1): D5:EC:8D:7B:4C:BA:79:F4:E7:E8:CB:9D:6B:AE:77:83:10:03:21:6A

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "BJCA Global Root CA1"

CKA\_CERT\_SHA1\_HASH MULTILINE\_OCTAL



\325\354\215\173\114\272\171\364\347\350\313\235\153\256\167\203

\020\003\041\152

END

CKA\_CERT\_MD5\_HASH MULTILINE\_OCTAL

\102\062\231\166\103\063\066\044\065\007\202\233\050\371\320\220

END

CKA\_ISSUER MULTILINE\_OCTAL

\060\124\061\013\060\011\006\003\125\004\006\023\002\103\116\061

\046\060\044\006\003\125\004\012\014\035\102\105\111\112\111\116

\107\040\103\105\122\124\111\106\111\103\101\124\105\040\101\125

\124\110\117\122\111\124\131\061\035\060\033\006\003\125\004\003

\014\024\102\112\103\101\040\107\154\157\142\141\154\040\122\157

\157\164\040\103\101\061

END

CKA\_SERIAL\_NUMBER

MULTILINE\_OCTAL

\002\020\125\157\145\343\264\331\220\152\033\011\321\154\076\300

\154\040

END

CKA\_TRUST\_SERVER\_AUTH CK\_TRUST CKT\_NSS\_TRUSTED\_DELEGATOR

CKA\_TRUST\_EMAIL\_PROTECTION CK\_TRUST CKT\_NSS\_TRUSTED\_DELEGATOR

CKA\_TRUST\_CODE\_SIGNING CK\_TRUST CKT\_NSS\_MUST\_VERIFY\_TRUST

CKA\_TRUST\_STEP\_UP\_APPROVED CK\_BBOOL CK\_FALSE

#

# Certificate "BJCA Global Root CA2"

#

# Issuer: CN=BJCA Global Root CA2,O=BEIJING CERTIFICATE AUTHORITY,C=CN

# Serial Number:2c:17:08:7d:64:2a:c0:fe:85:18:59:06:cf:b4:4a:eb

# Subject: CN=BJCA Global Root CA2,O=BEIJING CERTIFICATE AUTHORITY,C=CN

# Not Valid Before: Thu Dec 19 03:18:21 2019

# Not Valid After : Mon Dec 12 03:18:21 2044

# Fingerprint (SHA-256):

57:4D:F6:93:1E:27:80:39:66:7B:72:0A:FD:C1:60:0F:C2:7E:B6:6D:D3:09:29:79:FB:73:85:64:87:21:28:82

# Fingerprint (SHA1): F4:27:86:EB:6E:B8:6D:88:31:67:02:FB:BA:66:A4:53:00:AA:7A:A6

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_CERTIFICATE

CKA\_TOKEN CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE

CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "BJCA Global Root CA2"

CKA\_CERTIFICATE\_TYPE CK\_CERTIFICATE\_TYPE CKC\_X\_509

CKA\_SUBJECT MULTILINE\_OCTAL

\060\124\061\013\060\011\006\003\125\004\006\023\002\103\116\061

\046\060\044\006\003\125\004\012\014\035\102\105\111\112\111\116

\107\040\103\105\122\124\111\106\111\103\101\124\105\040\101\125

\124\110\117\122\111\124\131\061\035\060\033\006\003\125\004\003

\014\024\102\112\103\101\040\107\154\157\142\141\154\040\122\157

\157\164\040\103\101\062

END

CKA\_ID UTF8 "0"

CKA\_ISSUER MULTILINE\_OCTAL

\060\124\061\013\060\011\006\003\125\004\006\023\002\103\116\061  
\046\060\044\006\003\125\004\012\014\035\102\105\111\112\111\116  
\107\040\103\105\122\124\111\106\111\103\101\124\105\040\101\125  
\124\110\117\122\111\124\131\061\035\060\033\006\003\125\004\003  
\014\024\102\112\103\101\040\107\154\157\142\141\154\040\122\157  
\157\164\040\103\101\062

END

CKA\_SERIAL\_NUMBER MULTILINE\_OCTAL

\002\020\054\027\010\175\144\052\300\376\205\030\131\006\317\264  
\112\353

END

CKA\_VALUE

MULTILINE\_OCTAL

\060\202\002\045\060\202\001\253\240\003\002\001\002\002\020\054  
\027\010\175\144\052\300\376\205\030\131\006\317\264\112\353\060  
\012\006\010\052\206\110\316\075\004\003\003\060\124\061\013\060  
\011\006\003\125\004\006\023\002\103\116\061\046\060\044\006\003  
\125\004\012\014\035\102\105\111\112\111\116\107\040\103\105\122  
\124\111\106\111\103\101\124\105\040\101\125\124\110\117\122\111  
\124\131\061\035\060\033\006\003\125\004\003\014\024\102\112\103  
\101\040\107\154\157\142\141\154\040\122\157\157\164\040\103\101  
\062\060\036\027\015\061\071\061\062\061\071\060\063\061\070\062  
\061\132\027\015\064\064\061\062\061\062\060\063\061\070\062\061  
\132\060\124\061\013\060\011\006\003\125\004\006\023\002\103\116  
\061\046\060\044\006\003\125\004\012\014\035\102\105\111\112\111  
\116\107\040\103\105\122\124\111\106\111\103\101\124\105\040\101  
\125\124\110\117\122\111\124\131\061\035\060\033\006\003\125\004  
\003\014\024\102\112\103\101\040\107\154\157\142\141\154\040\122  
\157\157\164\040\103\101\062\060\166\060\020\006\007\052\206\110  
\316\075\002\001\006\005\053\201\004\000\042\003\142\000\004\235  
\313\200\221\215\123\147\265\271\120\261\003\370\345\111\037\101  
\042\011\260\121\122\130\326\053\064\217\305\022\106\024\305\213  
\057\054\204\377\054\156\250\325\361\011\343\003\041\024\304\103  
\075\174\301\054\304\113\152\112\315\351\207\340\175\366\042\276  
\372\112\121\270\060\212\375\341\336\030\022\012\366\107\267\347  
\027\277\047\212\324\101\114\226\074\140\226\301\375\025\034\243  
\102\060\100\060\035\006\003\125\035\016\004\026\004\024\322\112  
\261\121\177\006\360\321\202\037\116\156\137\253\203\374\110\324  
\260\221\060\017\006\003\125\035\023\001\001\377\004\005\060\003  
\001\001\377\060\016\006\003\125\035\017\001\001\377\004\004\003  
\002\001\006\060\012\006\010\052\206\110\316\075\004\003\003\003  
\150\000\060\145\002\060\032\274\133\327\376\251\322\124\016\112  
\135\322\155\261\100\334\364\103\325\322\112\231\031\022\126\200  
\367\203\064\341\065\116\110\155\004\017\127\061\060\060\055\261

```
\252\235\003\070\333\006\002\061\000\313\314\207\123\313\172\337
\040\121\163\220\300\250\133\141\320\305\120\071\375\205\376\301
\343\170\370\246\326\113\275\233\207\217\017\345\326\123\226\253
\074\310\100\332\141\367\123\243\367
```

END

CKA\_NSS\_MOZILLA\_CA\_POLICY

CK\_BBOOL CK\_TRUE

CKA\_NSS\_SERVER\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

CKA\_NSS\_EMAIL\_DISTRICT\_AFTER CK\_BBOOL CK\_FALSE

# Trust for "BJCA Global Root CA2"

# Issuer: CN=BJCA Global Root CA2,O=BEIJING CERTIFICATE AUTHORITY,C=CN

# Serial Number:2c:17:08:7d:64:2a:c0:fe:85:18:59:06:cf:b4:4a:eb

# Subject: CN=BJCA Global Root CA2,O=BEIJING CERTIFICATE AUTHORITY,C=CN

# Not Valid Before: Thu Dec 19 03:18:21 2019

# Not Valid After : Mon Dec 12 03:18:21 2044

# Fingerprint (SHA-256):

57:4D:F6:93:1E:27:80:39:66:7B:72:0A:FD:C1:60:0F:C2:7E:B6:6D:D3:09:29:79:FB:73:85:64:87:21:28:82

# Fingerprint (SHA1): F4:27:86:EB:6E:B8:6D:88:31:67:02:FB:BA:66:A4:53:00:AA:7A:A6

CKA\_CLASS CK\_OBJECT\_CLASS CKO\_NSS\_TRUST

CKA\_TOKEN

CK\_BBOOL CK\_TRUE

CKA\_PRIVATE CK\_BBOOL CK\_FALSE

CKA\_MODIFIABLE CK\_BBOOL CK\_FALSE

CKA\_LABEL UTF8 "BJCA Global Root CA2"

CKA\_CERT\_SHA1\_HASH MULTILINE\_OCTAL

```
\364\047\206\353\156\270\155\210\061\147\002\373\272\146\244\123
\000\252\172\246
```

END

CKA\_CERT\_MD5\_HASH MULTILINE\_OCTAL

```
\136\012\366\107\137\246\024\350\021\001\225\077\115\001\353\074
```

END

CKA\_ISSUER MULTILINE\_OCTAL

```
\060\124\061\013\060\011\006\003\125\004\006\023\002\103\116\061
\046\060\044\006\003\125\004\012\014\035\102\105\111\112\111\116
\107\040\103\105\122\124\111\106\111\103\101\124\105\040\101\125
\124\110\117\122\111\124\131\061\035\060\033\006\003\125\004\003
\014\024\102\112\103\101\040\107\154\157\142\141\154\040\122\157
\157\164\040\103\101\062
```

END

CKA\_SERIAL\_NUMBER MULTILINE\_OCTAL

```
\002\020\054\027\010\175\144\052\300\376\205\030\131\006\317\264
\112\353
```

END

CKA\_TRUST\_SERVER\_AUTH CK\_TRUST CKT\_NSS\_TRUSTED\_DELEGATOR

CKA\_TRUST\_EMAIL\_PROTECTION CK\_TRUST CKT\_NSS\_TRUSTED\_DELEGATOR

CKA\_TRUST\_CODE\_SIGNING CK\_TRUST

CKT\_NSS\_MUST\_VERIFY\_TRUST  
CKA\_TRUST\_STEP\_UP\_APPROVED CK\_BBOOL CK\_FALSE

Found in path(s):

\* /opt/cola/permits/1978342439\_1713364772.434879/0/ca-certificates-bundle-20230506-r0-os-alpine-3-18-0-tar-  
xz/ca-certificates-20230506-tar-bz2/ca-certificates-20230506/certdata.txt

# 1.194 ssl-client 1.36.1-r15

## 1.194.1 Available under license :

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bzip2/libbzip2 version 1.0.4 of 20 December 2006

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