

# 在ISE 3.3中配置受控应用重启

## 目录

---

[简介](#)

[先决条件](#)

[要求](#)

[使用的组件](#)

[背景信息](#)

[配置](#)

[步骤1:创建证书签名请求\(CSR\)](#)

[第二步：导入签署CSR的根CA](#)

[第三步：导入签名的CSR](#)

[第四步：配置重新启动时间](#)

[验证](#)

[故障排除](#)

[相关信息](#)

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## 简介

本文档介绍如何为ISE 3.3中的管理员证书配置受控应用重启。

## 先决条件

### 要求

Cisco 建议您了解以下主题：

- ISE节点/角色
- ISE证书续订/编辑/创建

### 使用的组件

本文档中的信息基于下列硬件和软件版本：

- 身份服务引擎(ISE)软件版本3.3
- 2节点部署

本文档中的信息都是基于特定实验室环境中的设备编写的。本文档中使用的所有设备最初均采用原始（默认）配置。如果您的网络处于活动状态，请确保您了解所有命令的潜在影响。

## 背景信息

在ISE中，当主管理节点(PAN)的管理员证书更改时，会重新加载部署中的所有节点，先加载PAN，然后加载其余节点，这会导致所有服务中断。

当管理证书在任何其他节点中替换时，唯一重新启动的节点是那个节点。

ISE 3.3引入了一项新功能，允许您安排何时重新加载节点。这样可以更好地控制每个节点的重新启动，并有助于避免所有服务中断。

## 配置

有不同的选项可用于更改PAN节点的管理员证书，如下所示：

- 创建证书签名请求(CSR)并分配管理员角色。
- 导入证书、私钥并分配管理员角色。
- 创建自签名证书并分配管理员角色。

本文档介绍使用CSR的方法。

### 步骤1:创建证书签名请求(CSR)

1. 在ISE上，导航到管理>系统>证书>证书签名请求。
2. 点击生成证书签名请求(CSR)。
3. 在使用情况中，选择管理员。
4. 在节点中，选择主要管理节点。
5. 填写证书信息。
6. 单击生成。
7. 导出文件并使用有效的授权对其进行签名。

Deployment    Licensing    **Certificates**    Logging    Maintenance    Upgrade    Health Checks

**Certificate Management** ▾

- System Certificates
- Admin Certificate Node Restart
- Trusted Certificates
- OCSP Client Profile
- Certificate Signing Requests**
- Certificate Periodic Check Se...

---

**Certificate Authority** >

**ISE Certificate Authority Certificates:**

- ISE Root CA - This is not a signing request, but an ability to generate a brand new Root C
- ISE Intermediate CA - This is an Intermediate CA Signing Request.
- Renew ISE OCSP Responder Certificates - This is not a signing request, but an ability to i

**Usage**

Certificate(s) will be used for **Admin** ▾

Allow Wildcard Certificates  ⓘ

**Node(s)**

Generate CSR's for these Nodes:

Node	CSR Friendly Name
<input type="checkbox"/> asc-ise33-1037	asc-ise33-1037#Admin
<input checked="" type="checkbox"/> [redacted]-ise-33-2	[redacted]-ise-33-2#Admin

**Subject**

Common Name (CN)  
\$FQDN\$ ⓘ

---

Organizational Unit (OU) ⓘ

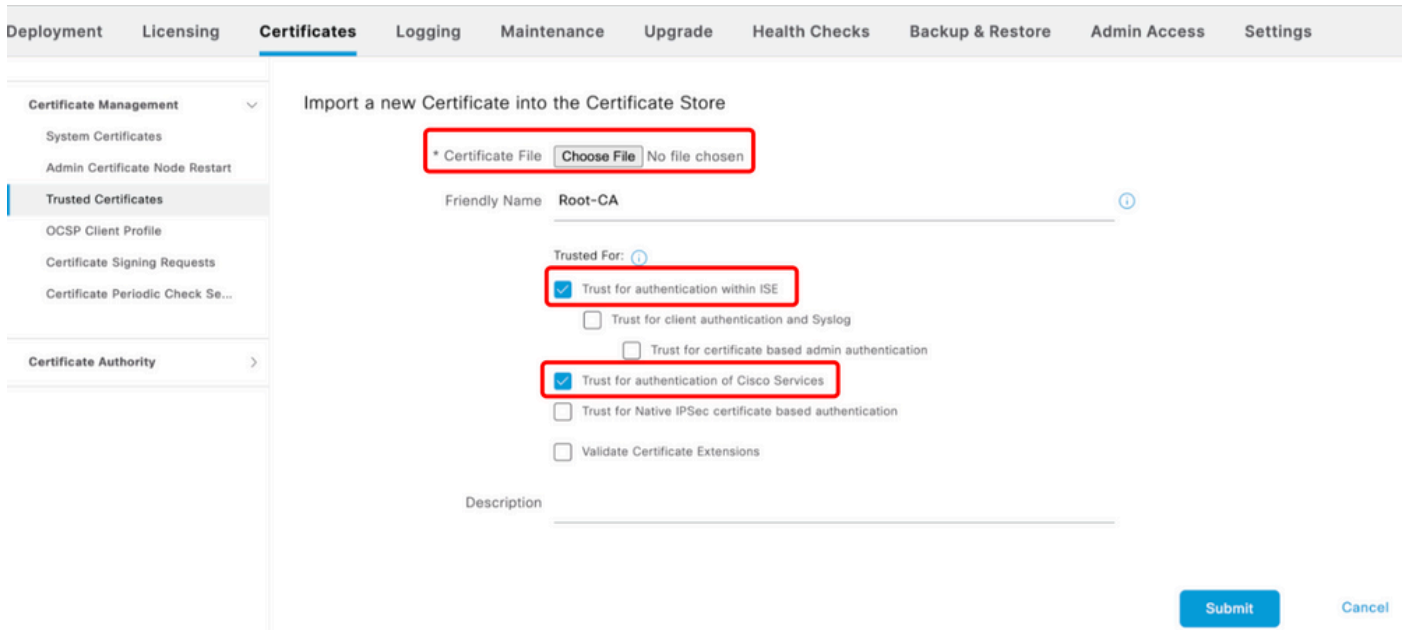
---

Organization (O)  
TAC ⓘ

CSR创建

## 第二步：导入签署CSR的根CA

1. 在ISE上，导航到管理>系统>证书>受信任证书。
2. 单击 Import。
3. 单击Choose File并选择Root CA certificate。
4. 写一个友好名称。
5. 启用复选框：
  1. 信任ISE中的身份验证。
  2. 信任Cisco服务的身份验证。
6. 单击“Submit”。



导入根证书

### 第三步：导入签名的CSR

1. 在ISE上，导航到管理>系统>证书>证书签名请求。
2. 选择CSR并单击Bind Certificate。
3. 点击选择文件并选择签名证书。
4. 配置友好名称。



绑定证书

Deployment Licensing **Certificates** Logging Maintenance Upgrade Health Checks Backup & Restore Admin Access

Certificate Management

- System Certificates
- Admin Certificate Node Restart
- Trusted Certificates
- OCSF Client Profile
- Certificate Signing Requests**
- Certificate Periodic Check Se...

Certificate Authority

### Bind CA Signed Certificate

\* Certificate File  signed.cer

Friendly Name

Validate Certificate Extensions

Usage

Admin: Use certificate to authenticate the ISE Admin Portal and DataConnect

### Deployment Nodes

[Set Restart Time](#)

<input type="checkbox"/>	Hostname	Personas	Role(s)	Services	Restart Time	Restart Status
<input type="checkbox"/>	asc-ise33-1037	Administration, Monit...	SECONDARY	SESSION,PROFILER	Not Configured	
<input type="checkbox"/>	asc-ise33-2	Administration, Monit...	PRIMARY	SESSION,PROFILER	Not Configured	

绑定证书

## 第四步：配置重新启动时间

1. 现在，您可以看到一个新部分。您可以在此处配置重新启动进程。
2. 您可以为每个节点配置时间，也可以同时选择两个节点并应用相同的配置。
3. 选择一个节点，然后单击Set Restart Time。
4. 选择date、time并单击Save。
5. 验证时间，如果全部正确，请单击Submit。

# Set Restart Time

## Scheduler

Restart Now  Restart Later

Set Date

27/09/2023

Set Time

11:00  PM

cancel

save

设置重新启动时间

Deployment Licensing **Certificates** Logging Maintenance Upgrade Health Checks Backup & Restore Admin Access

Certificate Management

- System Certificates
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Certificate Authority

### Bind CA Signed Certificate

\* Certificate File  signed.cer

Friendly Name  ⓘ

Validate Certificate Extensions  ⓘ

Usage

Admin: Use certificate to authenticate the ISE Admin Portal and DataConnect

### Deployment Nodes

<input type="checkbox"/>	Hostname	Personas	Role(s)	Services	Restart Time
<input checked="" type="checkbox"/>	asc-ise33-1037	Administration, Monit...	SECONDARY	SESSION,PROFILER	Wed Sep 27 2023 11:00PM
<input type="checkbox"/>	ise-33-2	Administration, Monit...	PRIMARY	SESSION,PROFILER	Wed Sep 27 2023 10:00PM

确认重新启动时间

## 验证

新选项卡可用，导航到管理>系统>证书>管理员证书节点重新启动。您可以完成验证配置并在需要时进行更改。

要更改时间，请单击Set Restart Time或Restart Now。

Deployment Licensing **Certificates** Logging Maintenance Upgrade Health Checks Backup & Restore Admin Access Settings

Certificate Management  
System Certificates  
**Admin Certificate Node Rest...**  
Trusted Certificates  
OCSP Client Profile  
Certificate Signing Requests  
Certificate Periodic Check Se...

### Admin Certificate Node Restart

After you add or edit an admin usage certificate on the primary PAN, you must restart all the Cisco ISE nodes. In this window, you can schedule and monitor the status of the node restarts. If more than one node is configured for Restart Now, nodes will restart in sequence

Set Restart Time ⓘ Restart Now ⓘ All ▾

<input type="checkbox"/>	Hostname	Personas	Role(s)	Services	Restart Time	Restart Status
<input type="checkbox"/>	asc-ise33-1037	Administration, Monitorin...	SECONDARY	SESSION,PROFILER	Wed Sep 27 2023 10:00PM	Not Restarted
<input type="checkbox"/>	ise-33-2	Administration, Monitorin...	PRIMARY	SESSION,PROFILER	Wed Sep 27 2023 10:00PM	Not Restarted

验证重新启动状态

您可以在此过程中验证节点状态。下一个映像是一个节点重新加载且另一个节点正在进行中的示例：

Certificate Management  
System Certificates  
**Admin Certificate Node Rest...**  
Trusted Certificates  
OCSP Client Profile  
Certificate Signing Requests  
Certificate Periodic Check Se...

### Admin Certificate Node Restart

After you add or edit an admin usage certificate on the primary PAN, you must restart all the Cisco ISE nodes. In this window, you can schedule and monitor the status of the node restarts. If more than one node is configured for Restart Now, nodes will restart in sequence

Set Restart Time ⓘ Restart Now ⓘ All ▾

<input type="checkbox"/>	Hostname	Personas	Role(s)	Services	Restart Time	Restart Status
<input type="checkbox"/>	ise-33-2	Administration, Monitorin...	PRIMARY	SESSION,PROFIL...	Wed Sep 27 2023 10:00PM	Restart success
<input type="checkbox"/>	asc-ise33-1037	Administration, Monitorin...	SECONDARY	SESSION,PROFIL...	Wed Sep 27 2023 10:00PM	Restart in progress

PAN已重新启动

验证更改并使用报告重新加载。

要检查配置更改，请导航到操作>报告>报告>审核>更改配置审核。

Logged At	Administrator	Server	Interface	Object Type	Object Name	Event
Today	admin	Server		Object Type	Object Name	
2023-09-27 15:43:00.0...	admin	-ise-33-2	GUI	Admin Certificate Controlled Restart	asc-ise33-1037.aaame...	Changed configuration
2023-09-27 15:26:57.9...	admin	-ise-33-2	GUI	Admin Certificate Controlled Restart	asc-ise33-1037.aaame...	Added configuration
2023-09-27 15:26:57.5...	admin	-ise-33-2	GUI	CertificateBinding	BindCertificate	Added configuration
2023-09-27 14:38:01.6...	admin	-ise-33-2	GUI	Certificate Signing Request	-ise-33-2#Admin	Certificate has been exp...
2023-09-27 14:37:58.8...	admin	-ise-33-2	GUI	CertificateSigningRequest	CertificateSigningRequest	Added configuration

### 配置报告

要检查重新启动，请导航到操作>报告>报告>审核>操作审核。

Logged At	Administrator	Server	Interface	Object Type	Object Name	Event
2023-09-27 22:04:20.0...			CLI	Configuration-Changes		Added configuration
2023-09-27 22:04:20.0...			CLI	Configuration-Changes		Added configuration
2023-09-27 22:00:16.16	system	127.0.0.1	CLI	Process-Management	ISE process stopped	Application server stopped

### 重新启动报告

来自\*\*\*-ise-33-2、ise-psc.log的日志示例：

<#root>

#### Configuration applied:

```
2023-09-27 15:26:12,109 INFO [DefaultQuartzScheduler_Worker-6][[]] admin.caservice.certmgmt.scheduler.
Restart is Not configured , Hence skipping restart status check for asc-ise33-1037
2023-09-27 15:26:57,775 INFO [admin-http-pool6][[]] cpm.admin.infra.action.RestartAction --:admin::-
adminCertRestartData received --{"items":[{"hostName":"asc-ise33-1037","restartTime":"2023-09-27:10:00PM"}
{"hostName":"***-ise-33-2","restartTime":"2023-09-27:10:00PM"}]}
```

#### Restart starts:

```
2023-09-27 21:59:11,952 INFO [DefaultQuartzScheduler_Worker-6][[]] admin.caservice.certmgmt.scheduler.
Executing AdminCertControlledRestartStatusJob [AdminCertControlledRestart[id=4af7d9c4-31d9-48e0-83dc-19
noderestartconfig=2023-09-27:10:00PM,noderestartstatus=Not Restarted,details=Not Restarted,maxdate=Thu
AdminCertControlledRestart[id=38b811df-03b5-4a64-87b6-363290b6b4ce,hostname=asc-ise33-1037,noderestartc
noderestartstatus=Not Restarted,details=Not Restarted,maxdate=Thu Oct 12 2023 14:43:01 GMT-0600 (hora e
2023-09-27 21:59:12,113 INFO [DefaultQuartzScheduler_Worker-6][[]] admin.caservice.certmgmt.scheduler.
Restart configured , proceeding to trackRestartStatus for ***-ise-33-2
2023-09-27 21:59:12,113 INFO [DefaultQuartzScheduler_Worker-6][[]] admin.caservice.certmgmt.scheduler.
Restart configured , proceeding to trackRestartStatus for asc-ise33-1037
```



```
2023-09-27 22:00:00,003 INFO [DefaultQuartzScheduler_Worker-3][[]] admin.caservice.certmgmt.scheduler.
Executing AdminCertControlledRestartSchedulerJob
2023-09-27 22:00:00,022 INFO [DefaultQuartzScheduler_Worker-3][[]] admin.caservice.certmgmt.scheduler.
Executing AdminCertControlledRestartSchedulerJob [AdminCertControlledRestart[id=4af7d9c4-31d9-48e0-83dc
noderestartconfig=2023-09-27:10:00PM,noderestartstatus=Not Restarted,details=Not Restarted,maxdate=Thu
AdminCertControlledRestart[id=38b811df-03b5-4a64-87b6-363290b6b4ce,hostname=asc-ise33-1037,noderestartc
noderestartstatus=Not Restarted,details=Not Restarted,maxdate=Thu Oct 12 2023 14:43:01 GMT-0600 (hora e
2023-09-27 22:00:00,288 INFO [DefaultQuartzScheduler_Worker-3][[]] admin.caservice.certmgmt.scheduler.
Restart failed or not restarted yet , hence preparing restart for ***-ise-33-2
2023-09-27 22:00:00,288 INFO [DefaultQuartzScheduler_Worker-3][[]] admin.caservice.certmgmt.scheduler.
Configured Date is now , hence proceeding for restart , for ***-ise-33-2
2023-09-27 22:00:00,288 INFO [DefaultQuartzScheduler_Worker-3][[]] cpm.infrastructure.certmgmt.api.Admini
updateRestartStatus updating restarted status
2023-09-27 22:00:00,288 INFO [DefaultQuartzScheduler_Worker-3][[]] cpm.infrastructure.certmgmt.api.Admini
Updating the data for node: ***-ise-33-2
2023-09-27 22:00:00,313 INFO [DefaultQuartzScheduler_Worker-3][[]] admin.caservice.certmgmt.scheduler.
Restart failed or not restarted yet , hence preparing restart for asc-ise33-1037
2023-09-27 22:00:00,313 INFO [DefaultQuartzScheduler_Worker-3][[]] admin.caservice.certmgmt.scheduler.
Configured Date is now , hence proceeding for restart , for asc-ise33-1037
2023-09-27 22:00:00,324 INFO [DefaultQuartzScheduler_Worker-3][[]] admin.caservice.certmgmt.scheduler.
restartNowList : ***-ise-33-2.aaamexrub.com,asc-ise33-1037.aaamexrub.com
```

来自\*\*\*-ise-33-2 , restartutil.log的日志示例 :

```
[main] Wed Sep 27 22:00:09 EST 2023:-----
[main] Wed Sep 27 22:00:09 EST 2023:RestartUtil: BEGIN - Restart called with args apponly:1377:***-ise-
[main] Wed Sep 27 22:00:09 EST 2023:-----
[main] Wed Sep 27 22:00:14 EST 2023:RestartUtil: Restarting Local node
[main] Wed Sep 27 22:00:14 EST 2023:[/usr/bin/sudo, /opt/CSC0cpm/bin/cpmcontrol.sh, restart_appserver_e
[main] Wed Sep 27 22:27:13 EST 2023:RestartUtil: Restarted local node and waiting for it to come up...
[main] Wed Sep 27 22:37:47 EST 2023:RestartUtil: Restart success for local node .
[main] Wed Sep 27 22:37:48 EST 2023:RestartUtil: Restarting node asc-ise33-1037.aaamexrub.com
[main] Wed Sep 27 22:37:54 EST 2023:RestartUtil: statusLine>>>HTTP/1.1 200
[main] Wed Sep 27 22:37:54 EST 2023:RestartUtil: Waiting for node asc-ise33-1037.aaamexrub.com to come
[main] Wed Sep 27 22:52:43 EST 2023:RestartUtil: Restart successful on node: asc-ise33-1037.aaamexrub.c
[main] Wed Sep 27 22:52:43 EST 2023:RestartUtil: cred file deleted
[main] Wed Sep 27 22:52:43 EST 2023:-----
[main] Wed Sep 27 22:52:43 EST 2023:RestartUtil:END- Restart called with args apponly:1377:***-ise-33-
[main] Wed Sep 27 22:52:43 EST 2023:-----
[main] Wed Sep 27 23:00:10 EST 2023: Usage RestartUtil local||remote apponly|full
```

来自asc-ise33-1037 restartutil.log的日志示例 :

```
main] Wed Sep 27 19:00:10 UTC 2023: Usage RestartUtil local||remote apponly|full
[main] Thu Sep 28 04:37:14 UTC 2023:-----
[main] Thu Sep 28 04:37:14 UTC 2023:RestartUtil: BEGIN - Restart called with args apponly:1377:localhos
[main] Thu Sep 28 04:37:14 UTC 2023:-----
[main] Thu Sep 28 04:37:16 UTC 2023:RestartUtil: Restarting Local node
[main] Thu Sep 28 04:37:16 UTC 2023:[/usr/bin/sudo, /opt/CSC0cpm/bin/cpmcontrol.sh, restart_appserver_e
[main] Thu Sep 28 04:52:41 UTC 2023:RestartUtil: Restarted local node and waiting for it to come up...
```

```
[main] Thu Sep 28 04:53:12 UTC 2023:RestartUtil: Restart success for local node .
[main] Thu Sep 28 04:53:12 UTC 2023:RestartUtil: cred file deleted
[main] Thu Sep 28 04:53:12 UTC 2023:-----
[main] Thu Sep 28 04:53:12 UTC 2023:RestartUtil:END- Restart called with args apponly:1377:localhost
[main] Thu Sep 28 04:53:12 UTC 2023:-----
```

## 故障排除

要检查关于此功能的信息，您可以检查以下文件：

- ise-psc.log
- restartutil.log

要从命令行实时检查它们，可以使用以下命令：

```
show logging application restartutil.log tail
show logging application ise-psc.log tail
```

## 相关信息

- [思科技术支持和下载](#)

## 关于此翻译

思科采用人工翻译与机器翻译相结合的方式将此文档翻译成不同语言，希望全球的用户都能通过各自的语言得到支持性的内容。

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