Konfigurieren von IKEv2 VRF-kompatiblem SVTI

Inhalt

Einführung

Dieses Dokument enthält ein Konfigurationsbeispiel für die Einrichtung einer VRF-kompatiblen (Virtual Routing and Forwarding) SVTI (Static Virtual Tunnel Interfaces) zwischen zwei VPN-Peers unter Verwendung des IKEv2-Protokolls (Internet Key Exchange Version 2). Diese Konfiguration umfasst eine IVRF-Instanz, zu der das lokale Subnetz gehört, und eine Front Door VRF-Instanz (FVRF), bei der die Tunneleinrichtung erfolgt.

Voraussetzungen

Anforderungen

Cisco empfiehlt, über Kenntnisse in folgenden Bereichen zu verfügen:

- Grundkenntnisse der IOS CLI-Konfiguration
- Grundkenntnisse von IKEv2 und IPSEC

Verwendete Komponenten

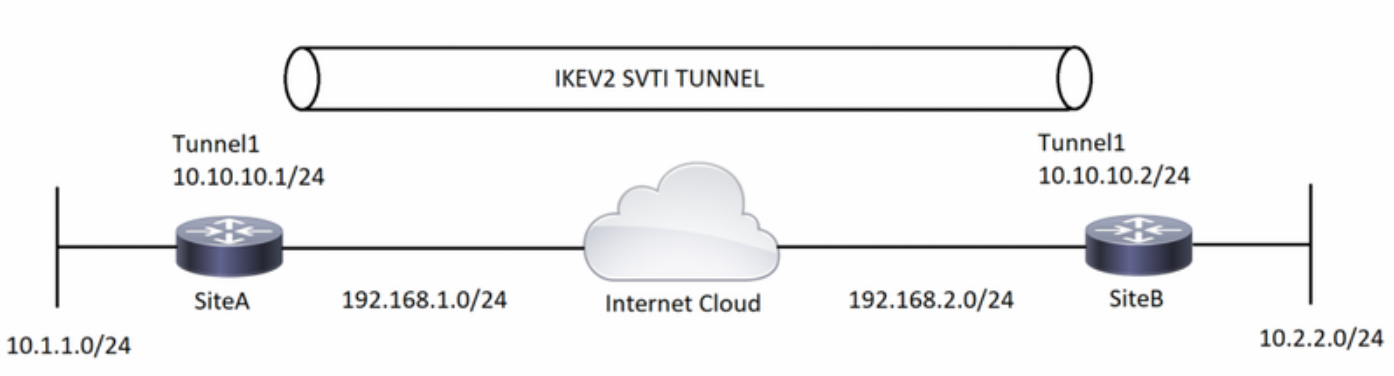
Die Informationen in diesem Dokument basieren auf einem Cisco IOS Router der Serie 2900 mit Cisco IOS® Software Release 15.7.

Die Informationen in diesem Dokument wurden von den Geräten in einer bestimmten Laborumgebung erstellt. Alle in diesem Dokument verwendeten Geräte haben mit einer leeren (Standard-)Konfiguration begonnen. Wenn Ihr Netzwerk in Produktion ist, stellen Sie sicher, dass Sie die potenziellen Auswirkungen eines Befehls verstehen.

Konfigurieren

In diesem Abschnitt erhalten Sie Informationen zum Konfigurieren der in diesem Dokument beschriebenen Funktionen.

Netzwerkdiagramm



Hintergrundinformationen

VRF-kompatible Tunnel werden verwendet, um Kundennetzwerke miteinander zu verbinden, die durch andere nicht vertrauenswürdige Kernnetzwerke oder Kernnetzwerke mit unterschiedlichen Infrastrukturen getrennt sind. Bei dieser Konfiguration können alle Quellen und Ziele eines Tunnels so konfiguriert werden, dass sie zu einer beliebigen VRF-Tabelle gehören.

Auf einer Tunnelschnittstelle wird der Befehl "vrf forward" verwendet, um die Tunnelschnittstelle in die jeweilige Routing-Tabelle aufzunehmen. Mit dem Befehl "tunnel vrf" wird der Router angewiesen, die angegebene Routing-Tabelle der VRF-Instanz für die IP-Adressen der Tunnelquelle und des Tunnels zu verwenden.

Im Beispiel für dieses Dokument entspricht die VRF-Instanz der Loopback-Schnittstelle einem VRF des LAN-Segments. Pakete, die über diese Schnittstelle eingehen, werden über diese VRF-Instanz geroutet. Pakete, die den Tunnel verlassen, werden an diese VRF-Instanz weitergeleitet.

Die im Tunnel mithilfe des Befehls "tunnel vrf" konfigurierte VRF-Instanz ist die Transport-VRF-Instanz. Es ist die VRF-Instanz, die für die gekapselte Nutzlast gilt und zum Nachschlagen der Tunnelendpunkte verwendet wird. Diese VRF-Instanz entspricht der VRF-Instanz, die der physischen Schnittstelle zugeordnet ist, über die der Tunnel Pakete sendet.

Konfiguration

Schritt 1: Definieren von VRFs. In diesem Beispiel werden zwei VRFs für LAN- und WAN-Schnittstellen als "lokal" bzw. "Internet" definiert.

SiteA :

```
! —— Defining vrf

vrf definition internet
 rd 2:2
 address-family ipv4
 exit-address-family

vrf definition local
 rd 1:1
 address-family ipv4
```

```
 exit-address-family
```

SiteB :

```
! —— Defining vrf

vrf definition internet
 rd 2:2
 address-family ipv4
 exit-address-family

vrf definition local
 rd 1:1
 address-family ipv4
 exit-address-family
```

Schritt 2: Konfigurieren Sie die Parameter, die für die Erstellung eines IKEv2-Tunnels erforderlich sind, beginnend mit der Erstellung des IKEv2-Angebots und des Keyrings. Anschließend wird das IKEv2-Profil konfiguriert, in dem der Crypto-Keyring aufgerufen wird. Um mit der Krypto-Konfiguration abzuschließen, umfasst die Konfiguration des IPSEC-Profils das IPSEC-Transformationssatz und das IKEv2-Profil.

SiteA :

```
! —— IKEv2 Proposal

crypto ikev2 proposal prop-1
 encryption aes-cbc-256
 integrity sha512
 group 5

! --- IKEv2 Policy

crypto ikev2 policy policy-1
match fvrf internet
match address local 192.168.1.1
proposal prop-1
! —— IKEv2 Keyring

crypto ikev2 keyring keyring-1
 peer ANY
  address 0.0.0.0 0.0.0.0
  pre-shared-key cisco123

! —— IKEv2 Profile

crypto ikev2 profile IKEv2-Profile-1
 match fvrf internet
 match identity remote address 0.0.0.0
 authentication remote pre-share
 authentication local pre-share
 keyring local keyring-1

! —— IPSEC Transform set

crypto ipsec transform-set transform-1 esp-aes 256 esp-sha-hmac
 mode transport

! —— IPSEC Profile
```

```
crypto ipsec profile IPSEC-Profile-1
 set transform-set transform-1
 set ikev2-profile IKEv2-Profile-1
```

SiteB :

```
! —— IKEv2 Proposal

crypto ikev2 proposal prop-1
 encryption aes-cbc-256
 integrity sha512
 group 5

! -- IKEv2 Policy

crypto ikev2 policy policy-1
match fvrf internet
match address local 192.168.2.1
proposal prop-1 ! —— IKEv2 Keyring

crypto ikev2 keyring keyring-1
 peer ANY
  address 0.0.0.0 0.0.0.0
  pre-shared-key cisco123

! —— IKEv2 Profile

crypto ikev2 profile IKEv2-Profile-1
 match fvrf internet
 match identity remote address 0.0.0.0
 authentication remote pre-share
 authentication local pre-share
 keyring local keyring-1

! —— IPSEC Transform set

crypto ipsec transform-set transform-1 esp-aes 256 esp-sha-hmac
 mode transport

! —— IPSEC Profile

crypto ipsec profile IPSEC-Profile-1
 set transform-set transform-1
 set ikev2-profile IKEv2-Profile-1
```

Schritt 3: Konfigurieren Sie die erforderlichen Schnittstellen. In diesem Beispiel ist die Loopback-Schnittstelle Teil der "lokalen" VRF-Instanz und fungiert als interessanter Datenverkehr. Die physische Schnittstelle, Teil der "Internet"-VRF, ist die mit dem ISP verbundene WAN-Schnittstelle. Über die Tunnelschnittstelle wird die mit IPSEC verschlüsselte GRE-Kapselung ausgelöst.

SiteA :

```
! —— Interface Configuration

interface Loopback1
 vrf forwarding local
 ip address 10.1.1.1 255.255.255.0
```

```
interface Tunnel1
 vrf forwarding local
 ip address 10.10.10.1 255.255.255.0
 tunnel source 192.168.1.1
 tunnel destination 192.168.2.1
 tunnel key 777
 tunnel vrf internet
 tunnel protection ipsec profile IPSEC-Profile-1

interface GigabitEthernet0/0
 vrf forwarding internet
 ip address 192.168.1.1 255.255.255.0
```

SiteB :

```
! —— Interface Configuration

interface Loopback1
 vrf forwarding local
 ip address 10.2.2.2 255.255.255.0

interface Tunnel1
 vrf forwarding local
 ip address 10.10.10.2 255.255.255.0
 tunnel source 192.168.2.1
 tunnel destination 192.168.1.1
 tunnel key 777
 tunnel vrf internet
 tunnel protection ipsec profile IPSEC-Profile-1

interface GigabitEthernet0/0
 vrf forwarding internet
 ip address 192.168.2.1 255.255.255.0
```

Schritt 4: Konfigurieren der VRF-spezifischen Routen In dieser Konfiguration wird eine Route in "Internet"-VRF als Standard-Route konfiguriert, die auf den nächsten Hop der physischen Schnittstelle (oder ISP in realen Umgebungen) verweist. Die zweite Route in der "lokalen" VRF-Instanz ist für das Remote-VPN-Subnetz vorgesehen, das auf die Tunnelschnittstelle verweist, wodurch der Datenverkehr schließlich durch die Tunnelschnittstelle geleitet wird und das VPN auslöst.

SiteA :

```
! —— VRF specific routes

ip route vrf internet 0.0.0.0 0.0.0.0 192.168.1.2
ip route vrf local 10.2.2.0 255.255.255.0 Tunnel1
```

SiteB :

```
! —— VRF specific routes

ip route vrf internet 0.0.0.0 0.0.0.0 192.168.2.2
ip route vrf local 10.1.1.0 255.255.255.0 tunnel 1
```

Überprüfen

Dieser Abschnitt enthält Informationen, mit denen Sie überprüfen können, ob Ihre Konfiguration

ordnungsgemäß funktioniert.

Der Cisco CLI Analyzer unterstützt bestimmte Anzeigebefehle. Verwenden Sie den Cisco CLI Analyzer, um eine Analyse der Ausgabe des Befehls show anzuzeigen.

SiteA :

```
SiteA#show crypto ikev2 sa
IPv4 Crypto IKEv2  SA

            Tunnel-id Local                 Remote                fvrf/ivrf            Status
1         192.168.1.1/500       192.168.2.1/500       internet/local       READY
      Encr: AES-CBC, keysize: 256, PRF: SHA512, Hash: SHA512, DH Grp:5, Auth sign: PSK, Auth
verify: PSK
      Life/Active Time: 86400/128 sec


SiteA#show crypto ipsec sa  detail

interface: Tunnel1
    Crypto map tag: Tunnel1-head-0, local addr 192.168.1.1

   protected vrf: local
   local  ident (addr/mask/prot/port): (192.168.1.1/255.255.255.255/47/0)
   remote ident (addr/mask/prot/port): (192.168.2.1/255.255.255.255/47/0)
   current_peer 192.168.2.1 port 500
     PERMIT, flags={origin_is_acl,}
    #pkts encaps: 25, #pkts encrypt: 25, #pkts digest: 25
    #pkts decaps: 25, #pkts decrypt: 25, #pkts verify: 25
    #pkts compressed: 0, #pkts decompressed: 0
    #pkts not compressed: 0, #pkts compr. failed: 0
    #pkts not decompressed: 0, #pkts decompress failed: 0
    #pkts no sa (send) 0, #pkts invalid sa (rcv) 0
    #pkts encaps failed (send) 0, #pkts decaps failed (rcv) 0
    #pkts invalid prot (recv) 0, #pkts verify failed: 0
    #pkts invalid identity (recv) 0, #pkts invalid len (rcv) 0
    #pkts replay rollover (send): 0, #pkts replay rollover (rcv) 0
    ##pkts replay failed (rcv): 0
    #pkts tagged (send): 0, #pkts untagged (rcv): 0
    #pkts not tagged (send): 0, #pkts not untagged (rcv): 0
    #pkts internal err (send): 0, #pkts internal err (recv) 0

     local crypto endpt.: 192.168.1.1, remote crypto endpt.: 192.168.2.1
     plaintext mtu 1458, path mtu 1500, ip mtu 1500, ip mtu idb GigabitEthernet0/0
     current outbound spi: 0xE0B1BF6B(3769745259)
     PFS (Y/N): N, DH group: none

     inbound esp sas:
      spi: 0xCA8E7D53(3398335827)
        transform: esp-256-aes esp-sha-hmac ,
        in use settings ={Transport, }
        conn id: 2010, flow_id: Onboard VPN:10, sibling_flags 80000000, crypto map: Tunnel1-
head-0
        sa timing: remaining key lifetime (k/sec): (4368363/3461)
        IV size: 16 bytes
        replay detection support: Y
        Status: ACTIVE(ACTIVE)

     inbound ah sas:

     inbound pcp sas:

     outbound esp sas:
```

```
      spi: 0xE0B1BF6B(3769745259)
        transform: esp-256-aes esp-sha-hmac ,
        in use settings ={Transport, }
        conn id: 2009, flow_id: Onboard VPN:9, sibling_flags 80000000, crypto map: Tunnel1-head-
0
        sa timing: remaining key lifetime (k/sec): (4368363/3461)
        IV size: 16 bytes
        replay detection support: Y
        Status: ACTIVE(ACTIVE)

     outbound ah sas:

     outbound pcp sas:

SiteA#show crypto session remote 192.168.2.1 detail
Crypto session current status

Code: C - IKE Configuration mode, D - Dead Peer Detection
K - Keepalives, N - NAT-traversal, T - cTCP encapsulation
X - IKE Extended Authentication, F - IKE Fragmentation
R - IKE Auto Reconnect, U - IKE Dynamic Route Update
S - SIP VPN

Interface: Tunnel1
Profile: IKEv2-Profile-1
Uptime: 00:02:35
Session status: UP-ACTIVE
Peer: 192.168.2.1 port 500 fvrf: internet ivrf: local
      Phase1_id: 192.168.2.1
      Desc: (none)
  Session ID: 3
  IKEv2 SA: local 192.168.1.1/500 remote 192.168.2.1/500 Active
          Capabilities:(none) connid:1 lifetime:23:57:25
  IPSEC FLOW: permit 47 host 192.168.1.1 host 192.168.2.1
        Active SAs: 2, origin: crypto map
        Inbound:  #pkts dec'ed 25 drop 0 life (KB/Sec) 4368363/3444
        Outbound: #pkts enc'ed 25 drop 0 life (KB/Sec) 4368363/3444


SiteB :

SiteB#show crypto ikev2 sa
IPv4 Crypto IKEv2  SA

           Tunnel-id Local                 Remote                fvrf/ivrf            Status
1         192.168.2.1/500       192.168.1.1/500       internet/local       READY
      Encr: AES-CBC, keysize: 256, PRF: SHA512, Hash: SHA512, DH Grp:5, Auth sign: PSK, Auth
verify: PSK
      Life/Active Time: 86400/90 sec


SiteB#show crypto ipsec sa detail

interface: Tunnel1
    Crypto map tag: Tunnel1-head-0, local addr 192.168.2.1

   protected vrf: local
   local  ident (addr/mask/prot/port): (192.168.2.1/255.255.255.255/47/0)
   remote ident (addr/mask/prot/port): (192.168.1.1/255.255.255.255/47/0)
   current_peer 192.168.1.1 port 500
     PERMIT, flags={origin_is_acl,}
    #pkts encaps: 25, #pkts encrypt: 25, #pkts digest: 25
    #pkts decaps: 25, #pkts decrypt: 25, #pkts verify: 25
    #pkts compressed: 0, #pkts decompressed: 0
```

```
    #pkts not compressed: 0, #pkts compr. failed: 0
    #pkts not decompressed: 0, #pkts decompress failed: 0
    #pkts no sa (send) 0, #pkts invalid sa (rcv) 0
    #pkts encaps failed (send) 0, #pkts decaps failed (rcv) 0
    #pkts invalid prot (recv) 0, #pkts verify failed: 0
    #pkts invalid identity (recv) 0, #pkts invalid len (rcv) 0
    #pkts replay rollover (send): 0, #pkts replay rollover (rcv) 0
    ##pkts replay failed (rcv): 0
    #pkts tagged (send): 0, #pkts untagged (rcv): 0
    #pkts not tagged (send): 0, #pkts not untagged (rcv): 0
    #pkts internal err (send): 0, #pkts internal err (recv) 0

     local crypto endpt.: 192.168.2.1, remote crypto endpt.: 192.168.1.1
     plaintext mtu 1458, path mtu 1500, ip mtu 1500, ip mtu idb GigabitEthernet0/0
     current outbound spi: 0xCA8E7D53(3398335827)
     PFS (Y/N): N, DH group: none

     inbound esp sas:
      spi: 0xE0B1BF6B(3769745259)
        transform: esp-256-aes esp-sha-hmac ,
        in use settings ={Transport, }
        conn id: 2009, flow_id: Onboard VPN:9, sibling_flags 80000000, crypto map: Tunnel1-head-
0
        sa timing: remaining key lifetime (k/sec): (4251213/3468)
        IV size: 16 bytes
        replay detection support: Y
        Status: ACTIVE(ACTIVE)

     inbound ah sas:

     inbound pcp sas:

     outbound esp sas:
      spi: 0xCA8E7D53(3398335827)
        transform: esp-256-aes esp-sha-hmac ,
        in use settings ={Transport, }
        conn id: 2010, flow_id: Onboard VPN:10, sibling_flags 80000000, crypto map: Tunnel1-
head-0
        sa timing: remaining key lifetime (k/sec): (4251213/3468)
        IV size: 16 bytes
        replay detection support: Y
        Status: ACTIVE(ACTIVE)

     outbound ah sas:

     outbound pcp sas:

SiteB#show crypto session remote 192.168.1.1 detail
Crypto session current status

Code: C - IKE Configuration mode, D - Dead Peer Detection
K - Keepalives, N - NAT-traversal, T - cTCP encapsulation
X - IKE Extended Authentication, F - IKE Fragmentation
R - IKE Auto Reconnect

Interface: Tunnel1
Profile: IKEv2-Profile-1
Uptime: 00:02:33
Session status: UP-ACTIVE
Peer: 192.168.1.1 port 500 fvrf: internet ivrf: local
      Phase1_id: 192.168.1.1
      Desc: (none)
  Session ID: 4
  IKEv2 SA: local 192.168.2.1/500 remote 192.168.1.1/500 Active
```

```
          Capabilities:(none) connid:1 lifetime:23:57:27
  IPSEC FLOW: permit 47 host 192.168.2.1 host 192.168.1.1
        Active SAs: 2, origin: crypto map
        Inbound:  #pkts dec'ed 25 drop 0 life (KB/Sec) 4251213/3447
        Outbound: #pkts enc'ed 25 drop 0 life (KB/Sec) 4251213/3447
```

Fehlerbehebung

Dieser Abschnitt enthält Informationen zur Fehlerbehebung in Ihrer Konfiguration. Ein Beispiel für eine Debugausgabe wird ebenfalls angezeigt.

Befehle zur Fehlerbehebung

Hinweis: Beachten Sie vor der Verwendung von Debugbefehlen die wichtigen Informationen zu Debug-Befehlen. Wenn der Router mehrere Tunnel konfiguriert hat, können Sie die folgende Bedingung erfüllen:

- **Debug crypto ikev2 internal**
- **Debuggen von Krypto-IKV2-Paket**

Beispielausgabe für Debugging

SiteA Debugs :

```
*Jul 16 05:30:50.731: IKEv2: Got a packet from dispatcher
*Jul 16 05:30:50.731: IKEv2: Processing an item off the pak queue
*Jul 16 05:30:50.731: IKEv2-INTERNAL:% Getting preshared key by address 192.168.2.1
*Jul 16 05:30:50.731: IKEv2-INTERNAL:Adding Proposal default to toolkit policy
*Jul 16 05:30:50.731: IKEv2-INTERNAL:(1): Choosing IKE profile IKEv2-Profile-1
*Jul 16 05:30:50.731: IKEv2-INTERNAL:New ikev2 sa request admitted
*Jul 16 05:30:50.731: IKEv2-INTERNAL:Incrementing outgoing negotiating sa count by one

*Jul 16 05:30:50.731: IKEv2-INTERNAL:(SESSION ID = 3,SA ID = 1):SM Trace-> SA:
I_SPI=AA81AF8C052B480F R_SPI=0000000000000000 (I) MsgID = 0 CurState: IDLE Event: EV_INIT_SA
*Jul 16 05:30:50.731: IKEv2-INTERNAL:(SESSION ID = 3,SA ID = 1):SM Trace-> SA:
I_SPI=AA81AF8C052B480F R_SPI=0000000000000000 (I) MsgID = 0 CurState: I_BLD_INIT Event:
EV_GET_IKE_POLICY
*Jul 16 05:30:50.731: IKEv2-INTERNAL:(SESSION ID = 3,SA ID = 1):SM Trace-> SA:
I_SPI=AA81AF8C052B480F R_SPI=0000000000000000 (I) MsgID = 0 CurState: I_BLD_INIT Event:
EV_SET_POLICY
*Jul 16 05:30:50.731: IKEv2-INTERNAL:(SESSION ID = 3,SA ID = 1):Setting configured policies
*Jul 16 05:30:50.731: IKEv2-INTERNAL:(SESSION ID = 3,SA ID = 1):SM Trace-> SA:
I_SPI=AA81AF8C052B480F R_SPI=0000000000000000 (I) MsgID = 0 CurState: I_BLD_INIT Event:
EV_CHK_AUTH4PKI
*Jul 16 05:30:50.731: IKEv2-INTERNAL:(SESSION ID = 3,SA ID = 1):SM Trace-> SA:
I_SPI=AA81AF8C052B480F R_SPI=0000000000000000 (I) MsgID = 0 CurState: I_BLD_INIT Event:
EV_GEN_DH_KEY
*Jul 16 05:30:50.791: IKEv2-INTERNAL:(SESSION ID = 3,SA ID = 1):SM Trace-> SA:
I_SPI=AA81AF8C052B480F R_SPI=0000000000000000 (I) MsgID = 0 CurState: I_BLD_INIT Event:
EV_NO_EVENT
*Jul 16 05:30:50.791: IKEv2-INTERNAL:(SESSION ID = 3,SA ID = 1):SM Trace-> SA:
I_SPI=AA81AF8C052B480F R_SPI=0000000000000000 (I) MsgID = 0 CurState: I_BLD_INIT Event:
EV_OK_RECD_DH_PUBKEY_RESP
*Jul 16 05:30:50.791: IKEv2-INTERNAL:(SESSION ID = 3,SA ID = 1):Action: Action_Null
*Jul 16 05:30:50.791: IKEv2-INTERNAL:(SESSION ID = 3,SA ID = 1):SM Trace-> SA:
I_SPI=AA81AF8C052B480F R_SPI=0000000000000000 (I) MsgID = 0 CurState: I_BLD_INIT Event:
EV_GET_CONFIG_MODE
```

```
*Jul 16 05:30:50.791: IKEv2-INTERNAL:No config data to send to toolkit:
*Jul 16 05:30:50.791: IKEv2-INTERNAL:(SESSION ID = 3,SA ID = 1):SM Trace-> SA:
I_SPI=AA81AF8C052B480F R_SPI=0000000000000000 (I) MsgID = 0 CurState: I_BLD_INIT Event:
EV_BLD_MSG
*Jul 16 05:30:50.791: IKEv2-INTERNAL:Construct Vendor Specific Payload: DELETE-REASON
*Jul 16 05:30:50.791: IKEv2-INTERNAL:Construct Vendor Specific Payload: CISCOVPN-REV-02
*Jul 16 05:30:50.791: IKEv2-INTERNAL:Sending DRU Handshake
*Jul 16 05:30:50.791: IKEv2-INTERNAL:(1): Sending custom vendor id : CISCO-DYNAMIC-ROUTE
*Jul 16 05:30:50.791: IKEv2-INTERNAL:Construct Vendor Specific Payload: (CUSTOM)
*Jul 16 05:30:50.791: IKEv2-INTERNAL:Construct Vendor Specific Payload: (CUSTOM)
*Jul 16 05:30:50.791: IKEv2-INTERNAL:Construct Notify Payload: NAT_DETECTION_SOURCE_IP
*Jul 16 05:30:50.791: IKEv2-INTERNAL:Construct Notify Payload: NAT_DETECTION_DESTINATION_IP

*Jul 16 05:30:50.795: IKEv2-PAK:(SESSION ID = 3,SA ID = 1):Next payload: SA, version: 2.0
Exchange type: IKE_SA_INIT, flags: INITIATOR Message id: 0, length: 550
Payload contents:
SA  Next payload: KE, reserved: 0x0, length: 144
  last proposal: 0x0, reserved: 0x0, length: 140
  Proposal: 1, Protocol id: IKE, SPI size: 0, #trans: 15    last transform: 0x3, reserved: 0x0:
length: 12
    type: 1, reserved: 0x0, id: AES-CBC
    last transform: 0x3, reserved: 0x0: length: 12
    type: 1, reserved: 0x0, id: AES-CBC
    last transform: 0x3, reserved: 0x0: length: 12
    type: 1, reserved: 0x0, id: AES-CBC
    last transform: 0x3, reserved: 0x0: length: 8
    type: 2, reserved: 0x0, id: SHA512
    last transform: 0x3, reserved: 0x0: length: 8
    type: 2, reserved: 0x0, id: SHA384
    last transform: 0x3, reserved: 0x0: length: 8
    type: 2, reserved: 0x0, id: SHA256
    last transform: 0x3, reserved: 0x0: length: 8
    type: 2, reserved: 0x0, id: SHA1
    last transform: 0x3, reserved: 0x0: length: 8
    type: 2, reserved: 0x0, id: MD5
    last transform: 0x3, reserved: 0x0: length: 8
    type: 3, reserved: 0x0, id: SHA512
    last transform: 0x3, reserved: 0x0: length: 8
    type: 3, reserved: 0x0, id: SHA384
    last transform: 0x3, reserved: 0x0: length: 8
    type: 3, reserved: 0x0, id: SHA256
    last transform: 0x3, reserved: 0x0: length: 8
    type: 3, reserved: 0x0, id: SHA96
    last transform: 0x3, reserved: 0x0: length: 8
    type: 3, reserved: 0x0, id: MD596
    last transform: 0x3, reserved: 0x0: length: 8
    type: 4, reserved: 0x0, id: DH_GROUP_1536_MODP/Group 5
    last transform: 0x0, reserved: 0x0: length: 8
    type: 4, reserved: 0x0, id: DH_GROUP_1024_MODP/Group 2
KE  Next payload: N, reserved: 0x0, length: 200
    DH group: 5, Reserved: 0x0
N  Next payload: VID, reserved: 0x0, length: 36
VID  Next payload: VID, reserved: 0x0, length: 23
VID  Next payload: VID, reserved: 0x0, length: 19
VID  Next payload: VID, reserved: 0x0, length: 23
VID  Next payload: NOTIFY, reserved: 0x0, length: 21
NOTIFY(NAT_DETECTION_SOURCE_IP)  Next payload: NOTIFY, reserved: 0x0, length: 28
    Security protocol id: Unknown - 0, spi size: 0, type: NAT_DETECTION_SOURCE_IP
NOTIFY(NAT_DETECTION_DESTINATION_IP)  Next payload: NONE, reserved: 0x0, length: 28
    Security protocol id: Unknown - 0, spi size: 0, type: NAT_DETECTION_DESTINATION_IP


*Jul 16 05:30:50.931: IKEv2-INTERNAL:Got a packet from dispatcher
*Jul 16 05:30:50.931: IKEv2-INTERNAL:Processing an item off the pak queue
```

```
*Jul 16 05:30:50.939: IKEv2-PAK:(SESSION ID = 3,SA ID = 1):Next payload: SA, version: 2.0
Exchange type: IKE_SA_INIT, flags: RESPONDER MSG-RESPONSE Message id: 0, length: 431
Payload contents:
SA  Next payload: KE, reserved: 0x0, length: 48
  last proposal: 0x0, reserved: 0x0, length: 44
  Proposal: 1, Protocol id: IKE, SPI size: 0, #trans: 4    last transform: 0x3, reserved: 0x0:
length: 12
    type: 1, reserved: 0x0, id: AES-CBC
    last transform: 0x3, reserved: 0x0: length: 8
    type: 2, reserved: 0x0, id: SHA512
    last transform: 0x3, reserved: 0x0: length: 8
    type: 3, reserved: 0x0, id: SHA512
    last transform: 0x0, reserved: 0x0: length: 8
    type: 4, reserved: 0x0, id: DH_GROUP_1536_MODP/Group 5
KE  Next payload: N, reserved: 0x0, length: 200
    DH group: 5, Reserved: 0x0
N  Next payload: VID, reserved: 0x0, length: 36

*Jul 16 05:30:50.939: IKEv2-INTERNAL:Parse Vendor Specific Payload: CISCO-DELETE-REASON
VID  Next payload: VID, reserved: 0x0, length: 23

*Jul 16 05:30:50.939: IKEv2-INTERNAL:Parse Vendor Specific Payload: CISCOVPN-REV VID  Next
payload: VID, reserved: 0x0, length: 19

*Jul 16 05:30:50.939: IKEv2-INTERNAL:Parse Vendor Specific Payload: (CUSTOM) VID  Next payload:
NOTIFY, reserved: 0x0, length: 21

*Jul 16 05:30:50.939: IKEv2-INTERNAL:Parse Notify Payload: NAT_DETECTION_SOURCE_IP
NOTIFY(NAT_DETECTION_SOURCE_IP)  Next payload: NOTIFY, reserved: 0x0, length: 28
    Security protocol id: Unknown - 0, spi size: 0, type: NAT_DETECTION_SOURCE_IP

*Jul 16 05:30:50.939: IKEv2-INTERNAL:Parse Notify Payload: NAT_DETECTION_DESTINATION_IP
NOTIFY(NAT_DETECTION_DESTINATION_IP)  Next payload: NONE, reserved: 0x0, length: 28
    Security protocol id: Unknown - 0, spi size: 0, type: NAT_DETECTION_DESTINATION_IP

*Jul 16 05:30:50.939: IKEv2-INTERNAL:(SESSION ID = 3,SA ID = 1):SM Trace-> SA:
I_SPI=AA81AF8C052B480F R_SPI=53457A4ACA42FD10 (I) MsgID = 0 CurState: I_WAIT_INIT Event:
EV_RECV_INIT
*Jul 16 05:30:50.939: IKEv2-INTERNAL:(SESSION ID = 3,SA ID = 1):Processing IKE_SA_INIT message
*Jul 16 05:30:50.939: IKEv2-INTERNAL:(SESSION ID = 3,SA ID = 1):SM Trace-> SA:
I_SPI=AA81AF8C052B480F R_SPI=53457A4ACA42FD10 (I) MsgID = 0 CurState: I_PROC_INIT Event:
EV_CHK4_NOTIFY
*Jul 16 05:30:50.939: IKEv2-INTERNAL:(SESSION ID = 3,SA ID = 1):SM Trace-> SA:
I_SPI=AA81AF8C052B480F R_SPI=53457A4ACA42FD10 (I) MsgID = 0 CurState: I_PROC_INIT Event:
EV_VERIFY_MSG
*Jul 16 05:30:50.939: IKEv2-INTERNAL:(SESSION ID = 3,SA ID = 1):SM Trace-> SA:
I_SPI=AA81AF8C052B480F R_SPI=53457A4ACA42FD10 (I) MsgID = 0 CurState: I_PROC_INIT Event:
EV_PROC_MSG
*Jul 16 05:30:50.939: IKEv2-INTERNAL:(SESSION ID = 3,SA ID = 1):SM Trace-> SA:
I_SPI=AA81AF8C052B480F R_SPI=53457A4ACA42FD10 (I) MsgID = 0 CurState: I_PROC_INIT Event:
EV_DETECT_NAT
*Jul 16 05:30:50.943: IKEv2-INTERNAL:(SESSION ID = 3,SA ID = 1):Process NAT discovery notify
*Jul 16 05:30:50.943: IKEv2-INTERNAL:(SESSION ID = 3,SA ID = 1):Processing nat detect src notify
*Jul 16 05:30:50.943: IKEv2-INTERNAL:(SESSION ID = 3,SA ID = 1):Remote address matched
*Jul 16 05:30:50.943: IKEv2-INTERNAL:(SESSION ID = 3,SA ID = 1):Processing nat detect dst notify
*Jul 16 05:30:50.943: IKEv2-INTERNAL:(SESSION ID = 3,SA ID = 1):Local address matched
*Jul 16 05:30:50.943: IKEv2-INTERNAL:(SESSION ID = 3,SA ID = 1):No NAT found
*Jul 16 05:30:50.943: IKEv2-INTERNAL:(SESSION ID = 3,SA ID = 1):SM Trace-> SA:
I_SPI=AA81AF8C052B480F R_SPI=53457A4ACA42FD10 (I) MsgID = 0 CurState: I_PROC_INIT Event:
EV_CHK_NAT_T
*Jul 16 05:30:50.943: IKEv2-INTERNAL:(SESSION ID = 3,SA ID = 1):SM Trace-> SA:
I_SPI=AA81AF8C052B480F R_SPI=53457A4ACA42FD10 (I) MsgID = 0 CurState: I_PROC_INIT Event:
EV_CHK_CONFIG_MODE
```

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*Jul 16 05:30:50.943: IKEv2-INTERNAL:(SESSION ID = 3,SA ID = 1):SM Trace-> SA:
I_SPI=AA81AF8C052B480F R_SPI=53457A4ACA42FD10 (I) MsgID = 0 CurState: INIT_DONE Event:
EV_GEN_DH_SECRET
*Jul 16 05:30:51.019: IKEv2-INTERNAL:(SESSION ID = 3,SA ID = 1):SM Trace-> SA:
I_SPI=AA81AF8C052B480F R_SPI=53457A4ACA42FD10 (I) MsgID = 0 CurState: INIT_DONE Event:
EV_NO_EVENT
*Jul 16 05:30:51.019: IKEv2-INTERNAL:(SESSION ID = 3,SA ID = 1):SM Trace-> SA:
I_SPI=AA81AF8C052B480F R_SPI=53457A4ACA42FD10 (I) MsgID = 0 CurState: INIT_DONE Event:
EV_OK_RECD_DH_SECRET_RESP
*Jul 16 05:30:51.019: IKEv2-INTERNAL:(SESSION ID = 3,SA ID = 1):Action: Action_Null
*Jul 16 05:30:51.019: IKEv2-INTERNAL:(SESSION ID = 3,SA ID = 1):SM Trace-> SA:
I_SPI=AA81AF8C052B480F R_SPI=53457A4ACA42FD10 (I) MsgID = 0 CurState: INIT_DONE Event:
EV_GEN_SKEYID
*Jul 16 05:30:51.019: IKEv2-INTERNAL:(SESSION ID = 3,SA ID = 1):Generate skeyid
*Jul 16 05:30:51.019: IKEv2-INTERNAL:(SESSION ID = 3,SA ID = 1):SM Trace-> SA:
I_SPI=AA81AF8C052B480F R_SPI=53457A4ACA42FD10 (I) MsgID = 0 CurState: INIT_DONE Event: EV_DONE
*Jul 16 05:30:51.019: IKEv2-INTERNAL:(SESSION ID = 3,SA ID = 1):Cisco DeleteReason Notify is
enabled
*Jul 16 05:30:51.019: IKEv2-INTERNAL:(SESSION ID = 3,SA ID = 1):SM Trace-> SA:
I_SPI=AA81AF8C052B480F R_SPI=53457A4ACA42FD10 (I) MsgID = 0 CurState: INIT_DONE Event:
EV_CHK4_ROLE
*Jul 16 05:30:51.019: IKEv2-INTERNAL:(SESSION ID = 3,SA ID = 1):SM Trace-> SA:
I_SPI=AA81AF8C052B480F R_SPI=53457A4ACA42FD10 (I) MsgID = 0 CurState: I_BLD_AUTH Event:
EV_GET_CONFIG_MODE
*Jul 16 05:30:51.019: IKEv2-INTERNAL:Sending config data to toolkit
*Jul 16 05:30:51.019: IKEv2-INTERNAL:(SESSION ID = 3,SA ID = 1):SM Trace-> SA:
I_SPI=AA81AF8C052B480F R_SPI=53457A4ACA42FD10 (I) MsgID = 0 CurState: I_BLD_AUTH Event:
EV_CHK_EAP
*Jul 16 05:30:51.019: IKEv2-INTERNAL:(SESSION ID = 3,SA ID = 1):SM Trace-> SA:
I_SPI=AA81AF8C052B480F R_SPI=53457A4ACA42FD10 (I) MsgID = 0 CurState: I_BLD_AUTH Event:
EV_GEN_AUTH
*Jul 16 05:30:51.019: IKEv2-INTERNAL:(SESSION ID = 3,SA ID = 1):SM Trace-> SA:
I_SPI=AA81AF8C052B480F R_SPI=53457A4ACA42FD10 (I) MsgID = 0 CurState: I_BLD_AUTH Event:
EV_CHK_AUTH_TYPE
*Jul 16 05:30:51.023: IKEv2-INTERNAL:(SESSION ID = 3,SA ID = 1):SM Trace-> SA:
I_SPI=AA81AF8C052B480F R_SPI=53457A4ACA42FD10 (I) MsgID = 0 CurState: I_BLD_AUTH Event:
EV_OK_AUTH_GEN
*Jul 16 05:30:51.023: IKEv2-INTERNAL:(SESSION ID = 3,SA ID = 1):SM Trace-> SA:
I_SPI=AA81AF8C052B480F R_SPI=53457A4ACA42FD10 (I) MsgID = 0 CurState: I_BLD_AUTH Event:
EV_SEND_AUTH
*Jul 16 05:30:51.023: IKEv2-INTERNAL:Construct Vendor Specific Payload: CISCO-GRANITE
*Jul 16 05:30:51.023: IKEv2-INTERNAL:Construct Notify Payload: INITIAL_CONTACT
*Jul 16 05:30:51.023: IKEv2-INTERNAL:Construct Notify Payload: USE_TRANSPORT_MODE
*Jul 16 05:30:51.023: IKEv2-INTERNAL:Construct Notify Payload: SET_WINDOW_SIZE
*Jul 16 05:30:51.023: IKEv2-INTERNAL:Construct Notify Payload: ESP_TFC_NO_SUPPORT
*Jul 16 05:30:51.023: IKEv2-INTERNAL:Construct Notify Payload: NON_FIRST_FRAGS
Payload contents:
VID  Next payload: IDi, reserved: 0x0, length: 20
IDi  Next payload: AUTH, reserved: 0x0, length: 12
    Id type: IPv4 address, Reserved: 0x0 0x0
AUTH  Next payload: CFG, reserved: 0x0, length: 72
    Auth method PSK, reserved: 0x0, reserved 0x0
CFG  Next payload: SA, reserved: 0x0, length: 304
    cfg type: CFG_REQUEST, reserved: 0x0, reserved: 0x0
*Jul 16 05:30:51.023:  SA  Next payload: TSi, reserved: 0x0, length: 44
  last proposal: 0x0, reserved: 0x0, length: 40
Proposal: 1, Protocol id: ESP, SPI size: 4, #trans: 3    last transform: 0x3, reserved: 0x0:
length: 12
    type: 1, reserved: 0x0, id: AES-CBC
    last transform: 0x3, reserved: 0x0: length: 8
    type: 3, reserved: 0x0, id: SHA96
    last transform: 0x0, reserved: 0x0: length: 8
    type: 5, reserved: 0x0, id: Don't use ESN
TSi  Next payload: TSr, reserved: 0x0, length: 24
```

```
    Num of TSs: 1, reserved 0x0, reserved 0x0
    TS type: TS_IPV4_ADDR_RANGE, proto id: 47, length: 16
    start port: 0, end port: 65535
    start addr: 192.168.1.1, end addr: 192.168.1.1
TSr  Next payload: NOTIFY, reserved: 0x0, length: 24
    Num of TSs: 1, reserved 0x0, reserved 0x0
    TS type: TS_IPV4_ADDR_RANGE, proto id: 47, length: 16
    start port: 0, end port: 65535
    start addr: 192.168.2.1, end addr: 192.168.2.1
NOTIFY(INITIAL_CONTACT)  Next payload: NOTIFY, reserved: 0x0, length: 8
    Security protocol id: Unknown - 0, spi size: 0, type: INITIAL_CONTACT
NOTIFY(USE_TRANSPORT_MODE)  Next payload: NOTIFY, reserved: 0x0, length: 8
    Security protocol id: Unknown - 0, spi size: 0, type: USE_TRANSPORT_MODE
NOTIFY(SET_WINDOW_SIZE)  Next payload: NOTIFY, reserved: 0x0, length: 12
    Security protocol id: Unknown - 0, spi size: 0, type: SET_WINDOW_SIZE
NOTIFY(ESP_TFC_NO_SUPPORT)  Next payload: NOTIFY, reserved: 0x0, length: 8
    Security protocol id: Unknown - 0, spi size: 0, type: ESP_TFC_NO_SUPPORT
NOTIFY(NON_FIRST_FRAGS)  Next payload: NONE, reserved: 0x0, length: 8
    Security protocol id: Unknown - 0, spi size: 0, type: NON_FIRST_FRAGS

*Jul 16 05:30:51.023: IKEv2-PAK:(SESSION ID = 3,SA ID = 1):Next payload: ENCR, version: 2.0
Exchange type: IKE_AUTH, flags: INITIATOR Message id: 1, length: 640
Payload contents:
ENCR  Next payload: VID, reserved: 0x0, length: 612

*Jul 16 05:30:51.023: IKEv2-INTERNAL:(SESSION ID = 3,SA ID = 1):SM Trace-> SA:
I_SPI=AA81AF8C052B480F R_SPI=53457A4ACA42FD10 (I) MsgID = 1 CurState: I_WAIT_AUTH Event:
EV_NO_EVENT

*Jul 16 05:30:51.023: IKEv2-INTERNAL:Got a packet from dispatcher
*Jul 16 05:30:51.023: IKEv2-INTERNAL:Processing an item off the pak queue

*Jul 16 05:30:51.107: IKEv2-PAK:(SESSION ID = 3,SA ID = 1):Next payload: ENCR, version: 2.0
Exchange type: IKE_AUTH, flags: RESPONDER MSG-RESPONSE Message id: 1, length: 320
Payload contents:

*Jul 16 05:30:51.111: IKEv2-INTERNAL:Parse Vendor Specific Payload: (CUSTOM) VID  Next payload:
IDr, reserved: 0x0, length: 20
IDr  Next payload: AUTH, reserved: 0x0, length: 12
    Id type: IPv4 address, Reserved: 0x0 0x0
AUTH  Next payload: SA, reserved: 0x0, length: 72
    Auth method PSK, reserved: 0x0, reserved 0x0
SA  Next payload: TSi, reserved: 0x0, length: 44
  last proposal: 0x0, reserved: 0x0, length: 40
  Proposal: 1, Protocol id: ESP, SPI size: 4, #trans: 3    last transform: 0x3, reserved: 0x0:
length: 12
    type: 1, reserved: 0x0, id: AES-CBC
    last transform: 0x3, reserved: 0x0: length: 8
    type: 3, reserved: 0x0, id: SHA96
    last transform: 0x0, reserved: 0x0: length: 8
    type: 5, reserved: 0x0, id: Don't use ESN
TSi  Next payload: TSr, reserved: 0x0, length: 24
    Num of TSs: 1, reserved 0x0, reserved 0x0
    TS type: TS_IPV4_ADDR_RANGE, proto id: 47, length: 16
    start port: 0, end port: 65535
    start addr: 192.168.1.1, end addr: 192.168.1.1
TSr  Next payload: NOTIFY, reserved: 0x0, length: 24
    Num of TSs: 1, reserved 0x0, reserved 0x0
    TS type: TS_IPV4_ADDR_RANGE, proto id: 47, length: 16
    start port: 0, end port: 65535
    start addr: 192.168.2.1, end addr: 192.168.2.1

*Jul 16 05:30:51.111: IKEv2-INTERNAL:Parse Notify Payload: USE_TRANSPORT_MODE
NOTIFY(USE_TRANSPORT_MODE)  Next payload: NOTIFY, reserved: 0x0, length: 8
```

```
    Security protocol id: Unknown - 0, spi size: 0, type: USE_TRANSPORT_MODE

*Jul 16 05:30:51.111: IKEv2-INTERNAL:Parse Notify Payload: SET_WINDOW_SIZE
NOTIFY(SET_WINDOW_SIZE)  Next payload: NOTIFY, reserved: 0x0, length: 12
    Security protocol id: Unknown - 0, spi size: 0, type: SET_WINDOW_SIZE

*Jul 16 05:30:51.111: IKEv2-INTERNAL:Parse Notify Payload: ESP_TFC_NO_SUPPORT
NOTIFY(ESP_TFC_NO_SUPPORT)  Next payload: NOTIFY, reserved: 0x0, length: 8
    Security protocol id: Unknown - 0, spi size: 0, type: ESP_TFC_NO_SUPPORT

*Jul 16 05:30:51.111: IKEv2-INTERNAL:Parse Notify Payload: NON_FIRST_FRAGS
NOTIFY(NON_FIRST_FRAGS)  Next payload: NONE, reserved: 0x0, length: 8
    Security protocol id: Unknown - 0, spi size: 0, type: NON_FIRST_FRAGS

*Jul 16 05:30:51.111: IKEv2-INTERNAL:(SESSION ID = 3,SA ID = 1):SM Trace-> SA:
I_SPI=AA81AF8C052B480F R_SPI=53457A4ACA42FD10 (I) MsgID = 1 CurState: I_WAIT_AUTH Event:
EV_RECV_AUTH
*Jul 16 05:30:51.111: IKEv2-INTERNAL:(SESSION ID = 3,SA ID = 1):Action: Action_Null
*Jul 16 05:30:51.123: IKEv2-INTERNAL:(SESSION ID = 3,SA ID = 1):SM Trace-> SA:
I_SPI=AA81AF8C052B480F R_SPI=53457A4ACA42FD10 (I) MsgID = 1 CurState: READY Event:
EV_CHK_IKE_ONLY
*Jul 16 05:30:51.123: IKEv2-INTERNAL:(SESSION ID = 3,SA ID = 1):SM Trace-> SA:
I_SPI=AA81AF8C052B480F R_SPI=53457A4ACA42FD10 (I) MsgID = 1 CurState: READY Event: EV_I_OK
*Jul 16 05:30:52.011: SM Trace-> SA: I_SPI=34CDD54C620910B0 R_SPI=F1A0F4AB68B75F00 (R) MsgID = 1
CurState: AUTH_DONE Event: EV_CHK4_ROLE
*Jul 16 05:30:52.027: IKEv2-INTERNAL:(SESSION ID = 3,SA ID = 1):SM Trace-> SA:
I_SPI=34CDD54C620910B0 R_SPI=F1A0F4AB68B75F00 (R) MsgID = 1 CurState: READY Event: EV_R_OK
*Jul 16 05:30:52.027: IKEv2-INTERNAL:(SESSION ID = 3,SA ID = 1):SM Trace-> SA:
I_SPI=34CDD54C620910B0 R_SPI=F1A0F4AB68B75F00 (R) MsgID = 1 CurState: READY Event: EV_NO_E
*Jul 16 05:30:52.027: IKEv2-INTERNAL:(SESSION ID = 3,SA ID = 1):SM Trace-> SA:
I_SPI=34CDD54C620910B0 R_SPI=F1A0F4AB68B75F00 (R) MsgID = 1 CurState:I_PROC_AUTH: EV_VERIFY_AUTH
*Jul 16 05:30:52.027: IKEv2-INTERNAL:(SESSION ID = 3,SA ID = 1):SM Trace-> SA:
I_SPI=34CDD54C620910B0 R_SPI=F1A0F4AB68B75F00 (R) MsgID = 1 CurState:I_PROC_AUTH
EVENT:EV_NOTIFY_AUTH_DONE
*Jul 16 05:30:52.027: IKEv2-INTERNAL:(SESSION ID = 3,SA ID = 1):SM Trace-> SA:
I_SPI=34CDD54C620910B0 R_SPI=F1A0F4AB68B75F00 (R) MsgID = 1 CurState:AUTH_DONE Event
EV_CHK4_ROLE

*Jul 16 05:30:52.027: IKEv2-INTERNAL:(SESSION ID = 3,SA ID = 1):SM Trace-> SA:
I_SPI=34CDD54C620910B0 R_SPI=F1A0F4AB68B75F00 (R) MsgID = 1 CurState: READYEvent:
EV_CHK_IKE_ONLY
*Jul 16 05:30:52.027: IKEv2-INTERNAL:(SESSION ID = 3,SA ID = 1):SM Trace-> SA:
I_SPI=34CDD54C620910B0 R_SPI=F1A0F4AB68B75F00 (R) MsgID = 1 CurState: READYEvent: EV_I_OK
```

SiteB Debugs:

```
*Jul 16 06:01:45.231: IKEv2-INTERNAL:Got a packet from dispatcher
*Jul 16 06:01:45.231: IKEv2-INTERNAL:Processing an item off the pak queue

*Jul 16 06:01:45.231: IKEv2-INTERNAL:New ikev2 sa request admitted
*Jul 16 06:01:45.231: IKEv2-INTERNAL:Incrementing incoming negotiating sa count by one

*Jul 16 06:01:45.231: IKEv2-PAK:Next payload: SA, version: 2.0 Exchange type: IKE_SA_INIT,
flags: INITIATOR Message id: 0, length: 550
Payload contents:
SA  Next payload: KE, reserved: 0x0, length: 144
  last proposal: 0x0, reserved: 0x0, length: 140
  Proposal: 1, Protocol id: IKE, SPI size: 0, #trans: 15    last transform: 0x3, reserved: 0x0:
length: 12
    type: 1, reserved: 0x0, id: AES-CBC
    last transform: 0x3, reserved: 0x0: length: 12
    type: 1, reserved: 0x0, id: AES-CBC
    last transform: 0x3, reserved: 0x0: length: 8
```

```
    type: 2, reserved: 0x0, id: SHA1
    last transform: 0x3, reserved: 0x0: length: 12
    type: 1, reserved: 0x0, id: AES-CBC
    last transform: 0x3, reserved: 0x0: l    last transform: 0x3, reserved: 0x0: length: 8
    type: 2, reserved: 0x0, id: MD5
    last transform: 0x3, reserved: 0x0: length: 8
    type: 3, reserved: 0x0, id: SHA512
    last transform: 0x3, reserved: 0x0: length: 8
    type: 3, reserved: 0x0, id: SHA384
    last transform: 0x3, reserved: 0x0: length: 8
    type: 3, reserved: 0x0, id: SHA256
    last transform: 0x3, reserved: 0x0: length: 8
    type: 3, reserved: 0x0, id: SHA96
    last transform: 0x3, reserved: 0x0: length: 8
    type: 3, reserved: 0x0, id: MD596
    last transform: 0x3, reserved: 0x0: length: 8
    type: 4, reserved: 0x0, id: DH_GROUP_1536_MODP/Group 5
    type: 2, reserved: 0x0, id: SHA512
    last trans0x0, length: 23
KE  Next payload: N, reserved: 0x0, length: 200
    DH group: 5, Reserved: 0x0
N  Next payload: VID, reserved: 0x0, length: 36

*Jul 16 06:01:45.231: IKEv2-INTERNAL:Parse Vendor Specific Payload: CISCOVPN-REV VID  Next
payload: VID, reserved: 0x0, length: 19
*Jul 16 06:01:45.231: IKEv2-INTERNAL:Parse Vendor Specific Payload: (CUSTOM) VID  Next payload:
VID, reserved: 0x0, length: 23
*Jul 16 06:01:45.231: IKEv2-INTERNAL:form: 0x3, reserved: 0x0: length: 8

*Jul 16 06:01:45.231: IKEv2-INTERNAL:Parse Vendor Specific Payload: CISCO-DELETE-REASON
VID  Next payload: VID, reserved:

*Jul 16 06:01:45.231: IKEv2-INTERNAL:Parse Notify Payload: NAT_DETECTION_SOURCE_IP
NOTIFY(NAT_DETECTION_SOURCE_IP)  Next payload: NOTIFY, reserved: 0x0, length: 28
    Security protocol id: Unknown - 0, spi size: 0, type: NAT_DETECTION_SOURCE_IP

*Jul 16 06:01:45.231: IKEv2-INTERNAL:Parse Notify Payload: NAT_DETECTION_DESTINATION_IP
NOTIFY(NAT_DETECTION_DESTINATION_IP)  Next payload: NONE, reserved: 0x0, length: 28
    Security protocol id: Unknown - 0, spi size: 0, type: NAT_DETECTION_DESTINATION_IP

*Jul 16 06:01:45.231: IKEv2-INTERNAL:(SESSION ID = 4,SA ID = 1):SM Trace-> SA:
I_SPI=AA81AF8C052B480F R_SPI=53457A4ACA42FD10 (R) MsgID = 0 CurState: IDLE Event: EV_RECV_INIT
*Jul 16 06:01:45.231: IKEv2-INTERNAL:(SESSION ID = 4,SA ID = 1):SM Trace-> SA:
I_SPI=AA81AF8C052B480F R_SPI=53457A4ACA42FD10 (R) MsgID = 0 CurState: R_INIT Event:
EV_VERIFY_MSG
*Jul 16 06:01:45.231: IKEv2-INTERNAL:(SESSION ID = 4,SA ID = 1):SM Trace-> SA:
I_SPI=AA81AF8C052B480F R_SPI=53457A4ACA42FD10 (R) MsgID = 0 CurState: R_INIT Event: EV_INSERT_SA
*Jul 16 06:01:45.231: IKEv2-INTERNAL:(SESSION ID = 4,SA ID = 1):SM Trace-> SA:
I_SPI=AA81AF8C052B480F R_SPI=53457A4ACA42FD10 (R) MsgID = 0 CurState: R_INIT Event:
EV_GET_IKE_POLICY
*Jul 16 06:01:45.231: IKEv2-INTERNAL:Adding Proposal default to toolkit policy
*Jul 16 06:01:45.231: IKEv2-INTERNAL:(SESSION ID = 4,SA ID = 1):SM Trace-> SA:
I_SPI=AA81AF8C052B480F R_SPI=53457A4ACA42FD10 (R) MsgID = 0 CurState: R_INIT Event: EV_PROC_MSG
*Jul 16 06:01:45.231: IKEv2-INTERNAL:(SESSION ID = 4,SA ID = 1):SM Trace-> SA:
I_SPI=AA81AF8C052B480F R_SPI=53457A4ACA42FD10 (R) MsgID = 0 CurState: R_INIT Event:
EV_DETECT_NAT
*Jul 16 06:01:45.231: IKEv2-INTERNAL:(SESSION ID = 4,SA ID = 1):Process NAT discovery notify
*Jul 16 06:01:45.231: IKEv2-INTERNAL:(SESSION ID = 4,SA ID = 1):Processing nat detect src notify
*Jul 16 06:01:45.231: IKEv2-INTERNAL:(SESSION ID = 4,SA ID = 1):Remote address matched
*Jul 16 06:01:45.231: IKEv2-INTERNAL:(SESSION ID = 4,SA ID = 1):Processing nat detect dst notify
*Jul 16 06:01:45.231: IKEv2-INTERNAL:(SESSION ID = 4,SA ID = 1):Local address matched
*Jul 16 06:01:45.231: IKEv2-INTERNAL:(SESSION ID = 4,SA ID = 1):No NAT found
*Jul 16 06:01:45.235: IKEv2-INTERNAL:(SESSION ID = 4,SA ID = 1):SM Trace-> SA:
I_SPI=AA81AF8C052B480F R_SPI=53457A4ACA42FD10 (R) MsgID = 0 CurState: R_INIT Event:
```

```
EV_CHK_CONFIG_MODE
*Jul 16 06:01:45.235: IKEv2-INTERNAL:(SESSION ID = 4,SA ID = 1):SM Trace-> SA:
I_SPI=AA81AF8C052B480F R_SPI=53457A4ACA42FD10 (R) MsgID = 0 CurState: R_BLD_INIT Event:
EV_SET_POLICY
*Jul 16 06:01:45.235: IKEv2-INTERNAL:(SESSION ID = 4,SA ID = 1):Setting configured policies
*Jul 16 06:01:45.235: IKEv2-INTERNAL:(SESSION ID = 4,SA ID = 1):SM Trace-> SA:
I_SPI=AA81AF8C052B480F R_SPI=53457A4ACA42FD10 (R) MsgID = 0 CurState: R_BLD_INIT Event:
EV_CHK_AUTH4PKI
*Jul 16 06:01:45.235: IKEv2-INTERNAL:(SESSION ID = 4,SA ID = 1):SM Trace-> SA:
I_SPI=AA81AF8C052B480F R_SPI53457A4ACA42FD10 (R) MsgID = 0 CurState: R_BLD_INIT Event:
EV_GEN_DH_KEY
*Jul 16 06:01:45.295: IKEv2-INTERNAL:(SESSION ID = 4,SA ID = 1):SM Trace-> SA:
I_SPI=AA81AF8C052B480F R_SPI=53457A4ACA42FD10 (R) MsgID = 0 CurState: R_BLD_INIT Event:
EV_NO_EVENT
*Jul 16 06:01:45.295: IKEv2-INTERNAL:(SESSION ID = 4,SA ID = 1):SM Trace-> SA:
I_SPI=AA81AF8C052B480F R_SPI=53457A4ACA42FD10 (R) MsgID = 0 CurState: R_BLD_INIT Event:
EV_OK_RECD_DH_PUBKEY_RESP
*Jul 16 06:01:45.295: IKEv2-INTERNAL:(SESSION ID = 4,SA ID = 1):Action: Action_Null
*Jul 16 06:01:45.295: IKEv2-INTERNAL:(SESSION ID = 4,SA ID = 1):SM Trace-> SA:
I_SPI=AA81AF8C052B480F R_SPI=53457A4ACA42FD10 (R) MsgID = 0 CurState: R_BLD_INIT Event:
EV_GEN_DH_SECRET
*Jul 16 06:01:45.371: IKEv2-INTERNAL:(SESSION ID = 4,SA ID = 1):SM Trace-> SA:
I_SPI=AA81AF8C052B480F R_SPI=53457A4ACA42FD10 (R) MsgID = 0 CurState: R_BLD_INIT Event:
EV_NO_EVENT
*Jul 16 06:01:45.371: IKEv2-INTERNAL:(SESSION ID = 4,SA ID = 1):SM Trace-> SA:
I_SPI=AA81AF8C052B480F R_SPI=53457A4ACA42FD10 (R) MsgID = 0 CurState: R_BLD_INIT Event:
EV_OK_RECD_DH_SECRET_RESP
*Jul 16 06:01:45.371: IKEv2-INTERNAL:(SESSION ID = 4,SA ID = 1):Action: Action_Null
*Jul 16 06:01:45.371: IKEv2-INTERNAL:(SESSION ID = 4,SA ID = 1):SM Trace-> SA:
I_SPI=AA81AF8C052B480F R_SPI=53457A4ACA42FD10 (R) MsgID = 0 CurState: R_BLD_INIT Event:
EV_GEN_SKEYID
*Jul 16 06:01:45.371: IKEv2-INTERNAL:(SESSION ID = 4,SA ID = 1):Generate skeyid
*Jul 16 06:01:45.371: IKEv2-INTERNAL:(SESSION ID = 4,SA ID = 1):SM Trace-> SA:
I_SPI=AA81AF8C052B480F R_SPI=53457A4ACA42FD10 (R) MsgID = 0 CurState: R_BLD_INIT Event:
EV_GET_CONFIG_MODE
*Jul 16 06:01:45.371: IKEv2-INTERNAL:No config data to send to toolkit:
*Jul 16 06:01:45.371: IKEv2-INTERNAL:(SESSION ID = 4,SA ID = 1):SM Trace-> SA:
I_SPI=AA81AF8C052B480F R_SPI=53457A4ACA42FD10 (R) MsgID = 0 CurState: R_BLD_INIT Event:
EV_BLD_MSG
*Jul 16 06:01:45.371: IKEv2-INTERNAL:Construct Vendor Specific Payload: DELETE-REASON
*Jul 16 06:01:45.371: IKEv2-INTERNAL:Construct Vendor Specific Payload: CISCOVPN-REV-02
*Jul 16 06:01:45.371: IKEv2-INTERNAL:Construct Vendor Specific Payload: (CUSTOM)
*Jul 16 06:01:45.371: IKEv2-INTERNAL:Construct Notify Payload: NAT_DETECTION_SOURCE_IP
*Jul 16 06:01:45.371: IKEv2-INTERNAL:Construct Notify Payload: NAT_DETECTION_DESTINATION_IP

*Jul 16 06:01:45.371: IKEv2-PAK:(SESSION ID = 4,SA ID = 1):Next payload: SA, version: 2.0
Exchange type: IKE_SA_INIT, flags: RESPONDER MSG-RESPONSE Message id: 0, length: 431
Payload contents:
SA  Next payload: KE, reserved: 0x0, length: 48
  last proposal: 0x0, reserved: 0x0, length: 44
  Proposal: 1, Protocol id: IKE, SPI size: 0, #trans: 4    last transform: 0x3, reserved: 0x0:
length: 12
    type: 1, reserved: 0x0, id: AES-CBC
    last transform: 0x3, reserved: 0x0: length: 8
    type: 2, reserved: 0x0, id: SHA512
    last transform: 0x3, reserved: 0x0: length: 8
    type: 3, reserved: 0x0, id: SHA512
    last transform: 0x0, reserved: 0x0: length: 8
    type: 4, reserved: 0x0, id: DH_GROUP_1536_MODP/Group 5
KE  Next payload: N, reserved: 0x0, length: 200
    DH group: 5, Reserved: 0x0
N  Next payload: VID, reserved: 0x0, length: 36
VID  Next payload: VID, reserved: 0x0, length: 23
VID  Next payload: VID, reserved: 0x0, length: 19
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VID  Next payload: NOTIFY, reserved: 0x0, length: 21
NOTIFY(NAT_DETECTION_SOURCE_IP)  Next payload: NOTIFY, reserved: 0x0, length: 28
    Security protocol id: Unknown - 0, spi size: 0, type: NAT_DETECTION_SOURCE_IP
NOTIFY(NAT_DETECTION_DESTINATION_IP)  Next payload: NONE, reserved: 0x0, length: 28
    Security protocol id: Unknown - 0, spi size: 0, type: NAT_DETECTION_DESTINATION_IP

*Jul 16 06:01:45.375: IKEv2-INTERNAL:(SESSION ID = 4,SA ID = 1):SM Trace-> SA:
I_SPI=AA81AF8C052B480F R_SPI=53457A4ACA42FD10 (R) MsgID = 0 CurState: INIT_DONE Event: EV_DONE
*Jul 16 06:01:45.375: IKEv2-INTERNAL:(SESSION ID = 4,SA ID = 1):Cisco DeleteReason Notify is
enabled
*Jul 16 06:01:45.375: IKEv2-INTERNAL:(SESSION ID = 4,SA ID = 1):SM Trace-> SA:
I_SPI=AA81AF8C052B480F R_SPI=53457A4ACA42FD10 (R) MsgID = 0 CurState: INIT_DONE Event:
EV_CHK4_ROLE
*Jul 16 06:01:45.375: IKEv2-INTERNAL:(SESSION ID = 4,SA ID = 1):SM Trace-> SA:
I_SPI=AA81AF8C052B480F R_SPI=53457A4ACA42FD10 (R) MsgID = 0 CurState: INIT_DONE Event:
EV_START_TMR
*Jul 16 06:01:45.375: IKEv2-INTERNAL:(SESSION ID = 4,SA ID = 1):SM Trace-> SA:
I_SPI=AA81AF8C052B480F R_SPI=53457A4ACA42FD10 (R) MsgID = 0 CurState: R_WAIT_AUTH Event:
EV_NO_EVENT
*Jul 16 06:01:45.375: IKEv2-INTERNAL:(SESSION ID = 4,SA ID = 1):New ikev2 sa request admitted
*Jul 16 06:01:45.375: IKEv2-INTERNAL:(SESSION ID = 4,SA ID = 1):Incrementing outgoing
negotiating sa count by one

*Jul 16 06:01:45.390: IKEv2-INTERNAL:Got a packet from dispatcher
*Jul 16 06:01:45.390: IKEv2-INTERNAL:Processing an item off the pak queue

*Jul 16 06:01:45.375: IKEv2-INTERNAL:(SESSION ID = 4,SA ID = 1):Next payload: ENCR, version: 2.0
Exchange type: IKE_AUTH, flags: INITIATOR Message id: 1, length: 556
Payload contents:
*Jul 16 06:01:45.375: IKEv2-INTERNAL:Parse Vendor Specific Payload: (CUSTOM) VID  Next payload:
IDi, reserved: 0x0, length: 20
Payload contents:
IDi  Next payload: AUTH, reserved: 0x0, length: 12
    Id type: IPv4 address, Reserved: 0x0 0x0
AUTH  Next payload: CFG, reserved: 0x0, length: 72
    Auth method PSK, reserved: 0x0, reserved 0x0
CFG  Next payload: SA, reserved: 0x0, length: 304
    cfg type: CFG_REQUEST, reserved: 0x0, reserved: 0x0
 SA  Next payload: TSi, reserved: 0x0, length: 44
  last proposal: 0x0, reserved: 0x0, length: 40
Proposal: 1, Protocol id: ESP, SPI size: 4, #trans: 3    last transform: 0x3, reserved: 0x0:
length: 12
    type: 1, reserved: 0x0, id: AES-CBC
    last transform: 0x3, reserved: 0x0: length: 8
    type: 3, reserved: 0x0, id: SHA96
    last transform: 0x0, reserved: 0x0: length: 8
    type: 5, reserved: 0x0, id: Don't use ESN
TSi  Next payload: TSr, reserved: 0x0, length: 24
    Num of TSs: 1, reserved 0x0, reserved 0x0
    TS type: TS_IPV4_ADDR_RANGE, proto id: 47, length: 16
    start port: 0, end port: 65535
    start addr: 192.168.1.1, end addr: 192.168.1.1
TSr  Next payload: NOTIFY, reserved: 0x0, length: 24
    Num of TSs: 1, reserved 0x0, reserved 0x0
    TS type: TS_IPV4_ADDR_RANGE, proto id: 47, length: 16
    start port: 0, end port: 65535
    start addr: 192.168.2.1, end addr: 192.168.2.1

*Jul 16 06:01:45.463: IKEv2-INTERNAL:(SESSION ID = 4,SA ID = 1):SM Trace-> SA:
I_SPI=AA81AF8C052B480F R_SPI=53457A4ACA42FD10 (R) MsgID = 1 CurState: R_WAIT_AUTH Event:
EV_RECV_AUTH
*Jul 16 06:01:45.463: IKEv2-INTERNAL:(SESSION ID = 4,SA ID = 1):SM Trace-> SA:
I_SPI=AA81AF8C052B480F R_SPI=53457A4ACA42FD10 (R) MsgID = 1 CurState: R_WAIT_AUTH Event:
EV_CHK_NAT_T
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*Jul 16 06:01:45.463: IKEv2-INTERNAL:(SESSION ID = 4,SA ID = 1):SM Trace-> SA:
I_SPI=AA81AF8C052B480F R_SPI=53457A4ACA42FD10 (R) MsgID = 1 CurState: R_WAIT_AUTH Event:
EV_PROC_ID
*Jul 16 06:01:45.463: IKEv2-INTERNAL:(SESSION ID = 4,SA ID = 1):Received valid parameteres in
process id
*Jul 16 06:01:45.463: IKEv2-INTERNAL:(SESSION ID = 4,SA ID = 1):SM Trace-> SA:
I_SPI=AA81AF8C052B480F R_SPI=53457A4ACA42FD10 (R) MsgID = 1 CurState: R_WAIT_AUTH Event:
EV_CHK_IF_PEER_CERT_NEEDS_TO_BE_FETCHED_FOR_PROF_SEL
*Jul 16 06:01:45.463: IKEv2-INTERNAL:(SESSION ID = 4,SA ID = 1):SM Trace-> SA:
I_SPI=AA81AF8C052B480F R_SPI=53457A4ACA42FD10 (R) MsgID = 1 CurState: R_WAIT_AUTH Event:
EV_GET_POLICY_BY_PEERID
*Jul 16 06:01:45.463: IKEv2-INTERNAL:(SESSION ID = 4,SA ID = 1):SM Trace-> SA:
I_SPI=AA81AF8C052B480F R_SPI=53457A4ACA42FD10 (R) MsgID = 1 CurState: R_WAIT_AUTH Event:
EV_SET_POLICY
*Jul 16 06:01:45.463: IKEv2-INTERNAL:(SESSION ID = 4,SA ID = 1):Setting configured policies
*Jul 16 06:01:45.463: IKEv2-INTERNAL:(SESSION ID = 4,SA ID = 1):SM Trace-> SA:
I_SPI=AA81AF8C052B480F R_SPI=53457A4ACA42FD10 (R) MsgID = 1 CurState: R_WAIT_AUTH Event:
EV_VERIFY_POLICY_BY_PEERID
*Jul 16 06:01:45.463: IKEv2-INTERNAL:(SESSION ID = 4,SA ID = 1):SM Trace-> SA:
I_SPI=AA81AF8C052B480F R_SPI=53457A4ACA42FD10 (R) MsgID = 1 CurState: R_WAIT_AUTH Event:
EV_CHK_AUTH4EAP
*Jul 16 06:01:45.463: IKEv2-INTERNAL:(SESSION ID = 4,SA ID = 1):SM Trace-> SA:
I_SPI=AA81AF8C052B480F R_SPI=53457A4ACA42FD10 (R) MsgID = 1 CurState: R_WAIT_AUTH Event:
EV_CHK_POLREQEAP
*Jul 16 06:01:45.463: IKEv2-INTERNAL:(SESSION ID = 4,SA ID = 1):SM Trace-> SA:
I_SPI=AA81AF8C052B480F R_SPI=53457A4ACA42FD10 (R) MsgID = 1 CurState: R_VERIFY_AUTH Event:
EV_CHK_AUTH_TYPE
*Jul 16 06:01:45.463: IKEv2-INTERNAL:(SESSION ID = 4,SA ID = 1):SM Trace-> SA:
I_SPI=AA81AF8C052B480F R_SPI=53457A4ACA42FD10 (R) MsgID = 1 CurState: R_VERIFY_AUTH Event:
EV_GET_PRESHR_KEY
*Jul 16 06:01:45.463: IKEv2-INTERNAL:(SESSION ID = 4,SA ID = 1):SM Trace-> SA:
I_SPI=AA81AF8C052B480F R_SPI=53457A4ACA42FD10 (R) MsgID = 1 CurState: R_VERIFY_AUTH Event:
EV_VERIFY_AUTH
*Jul 16 06:01:45.467: IKEv2-INTERNAL:(SESSION ID = 4,SA ID = 1):SM Trace-> SA:
I_SPI=AA81AF8C052B480F R_SPI=53457A4ACA42FD10 (R) MsgID = 1 CurState: R_VERIFY_AUTH Event:
EV_CHK4_IC
*Jul 16 06:01:45.467: IKEv2-INTERNAL:(SESSION ID = 4,SA ID = 1):SM Trace->SA:
I_SPI=AA81AF8C052B480F R_SPI=53457A4ACA42FD10 (R) MsgID = 1 CurState: R_VERIFY_AUTH Event:
EV_CHK_REDIRECT
*Jul 16 06:01:45.467: IKEv2-INTERNAL:(SESSION ID = 4,SA ID = 1):Redirect check is not needed,
skipping it
*Jul 16 06:01:45.467: IKEv2-INTERNAL:(SESSION ID = 4,SA ID = 1):SM Trace-> SA:
I_SPI=AA81AF8C052B480F R_SPI=53457A4ACA42FD10 (R) MsgID = 1 CurState: R_VERIFY_AUTH Event:
EV_NOTIFY_AUTH_DONE
*Jul 16 06:01:45.467: IKEv2-INTERNAL:AAA group authorization is not configured
*Jul 16 06:01:45.467: IKEv2-INTERNAL:AAA user authorization is not configured
*Jul 16 06:01:45.467: IKEv2-INTERNAL:(SESSION ID = 4,SA ID = 1):SM Trace-> SA:
I_SPI=AA81AF8C052B480F R_SPI=53457A4ACA42FD10 (R) MsgID = 1 CurState: R_VERIFY_AUTH Event:
EV_CHK_CONFIG_MODE
*Jul 16 06:01:45.467: IKEv2-INTERNAL:(SESSION ID = 4,SA ID = 1):SM Trace-> SA:
I_SPI=AA81AF8C052B480F R_SPI=53457A4ACA42FD10 (R) MsgID = 1 CurState: R_VERIFY_AUTH Event:
EV_SET_RECD_CONFIG_MODE
*Jul 16 06:01:45.467: IKEv2-INTERNAL:Received config data from toolkit:
*Jul 16 06:01:45.467: IKEv2-INTERNAL:(SESSION ID = 4,SA ID = 1):SM Trace-> SA:
I_SPI=AA81AF8C052B480F R_SPI=53457A4ACA42FD10 (R) MsgID = 1 CurState: R_VERIFY_AUTH Event:
EV_CHK_GKM
*Jul 16 06:01:45.467: IKEv2-INTERNAL:(SESSION ID = 4,SA ID = 1):SM Trace-> SA:
I_SPI=AA81AF8C052B480F R_SPI=53457A4ACA42FD10 (R) MsgID = 1 CurState: R_VERIFY_AUTH Event:
EV_CHK_DIKE
*Jul 16 06:01:45.467: IKEv2-INTERNAL:(SESSION ID = 4,SA ID = 1):SM Trace-> SA:
I_SPI=AA81AF8C052B480F R_SPI=53457A4ACA42FD10 (R) MsgID = 1 CurState: R_VERIFY_AUTH Event:
EV_PROC_SA_TS
*Jul 16 06:01:45.467: IKEv2-INTERNAL:(SESSION ID = 4,SA ID = 1):SM Trace-> SA:
I_SPI=AA81AF8C052B480F R_SPI=53457A4ACA42FD10 (R) MsgID = 1 CurState: R_VERIFY_AUTH Event:
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EV_NO_EVENT
*Jul 16 06:01:45.467: IPSEC(ipsec_get_crypto_session_id): Invalid Payload Id
*Jul 16 06:01:45.467: IKEv2-INTERNAL:IPSEC accepted group 0
*Jul 16 06:01:45.467: IKEv2-INTERNAL:(SESSION ID = 4,SA ID = 1):SM Trace-> SA:
I_SPI=AA81AF8C052B480F R_SPI=53457A4ACA42FD10 (R) MsgID = 1 CurState: R_VERIFY_AUTH Event:
EV_POLICY_NEGOTIATED
*Jul 16 06:01:45.467: IKEv2-INTERNAL:(SESSION ID = 4,SA ID = 1):Action: Action_Null
*Jul 16 06:01:45.467: IKEv2-INTERNAL:(SESSION ID = 4,SA ID = 1):SM Trace-> SA:
I_SPI=AA81AF8C052B480F R_SPI=53457A4ACA42FD10 (R) MsgID = 1 CurState: R_VERIFY_AUTH Event:
EV_GET_CONFIG_MODE
*Jul 16 06:01:45.471: IKEv2-INTERNAL:(SESSION ID = 4,SA ID = 1):SM Trace-> SA:
I_SPI=AA81AF8C052B480F R_SPI=53457A4ACA42FD10 (R) MsgID = 1 CurState: R_BLD_AUTH Event:
EV_MY_AUTH_METHOD
*Jul 16 06:01:45.471: IKEv2-INTERNAL:(SESSION ID = 4,SA ID = 1):SM Trace-> SA:
I_SPI=AA81AF8C052B480F R_SPI=53457A4ACA42FD10 (R) MsgID = 1 CurState: R_BLD_AUTH Event:
EV_GET_PRESHR_KEY
*Jul 16 06:01:45.471: IKEv2-INTERNAL:(SESSION ID = 4,SA ID = 1):SM Trace-> SA:
I_SPI=AA81AF8C052B480F R_SPI=53457A4ACA42FD10 (R) MsgID = 1 CurState: R_BLD_AUTH Event:
EV_GEN_AUTH
*Jul 16 06:01:45.471: IKEv2-INTERNAL:(SESSION ID = 4,SA ID = 1):SM Trace-> SA:
I_SPI=AA81AF8C052B480F R_SPI=53457A4ACA42FD10 (R) MsgID = 1 CurState: R_BLD_AUTH Event:
EV_CHK4_SIGN
*Jul 16 06:01:45.471: IKEv2-INTERNAL:(SESSION ID = 4,SA ID = 1):SM Trace-> SA:
I_SPI=AA81AF8C052B480F R_SPI=53457A4ACA42FD10 (R) MsgID = 1 CurState: R_BLD_AUTH Event:
EV_OK_AUTH_GEN
*Jul 16 06:01:45.471: IKEv2-INTERNAL:(SESSION ID = 4,SA ID = 1):SM Trace-> SA:
I_SPI=AA81AF8C052B480F R_SPI=53457A4ACA42FD10 (R) MsgID = 1 CurState: R_BLD_AUTH Event:
EV_SEND_AUTH
*Jul 16 06:01:45.471: IKEv2-INTERNAL:Construct Vendor Specific Payload: CISCO-GRANITE
*Jul 16 06:01:45.471: IKEv2-INTERNAL:Construct Notify Payload: USE_TRANSPORT_MODE
*Jul 16 06:01:45.471: IKEv2-INTERNAL:Construct Notify Payload: SET_WINDOW_SIZE
*Jul 16 06:01:45.471: IKEv2-INTERNAL:Construct Notify Payload: ESP_TFC_NO_SUPPORT
*Jul 16 06:01:45.471: IKEv2-INTERNAL:Construct Notify Payload: NON_FIRST_FRAGS

*Jul 16 06:01:45.471: IKEv2-PAK:(SESSION ID = 4,SA ID = 1):Next payload: ENCR, version: 2.0
Exchange type: IKE_AUTH, flags: RESPONDER MSG-RESPONSE Message id: 1, length: 320
Payload contents:
VID  Next payload: IDr, reserved: 0x0, length: 20
IDr  Next payload: AUTH, reserved: 0x0, length: 12
    Id type: IPv4 address, Reserved: 0x0 0x0
AUTH  Next payload: SA, reserved: 0x0, length: 72
    Auth method PSK, reserved: 0x0, reserved 0x0
SA  Next payload: TSi, reserved: 0x0, length: 44
  last proposal: 0x0, reserved: 0x0, length: 40
  Proposal: 1, Protocol id: ESP, SPI size: 4, #trans: 3    last transform: 0x3, reserved: 0x0:
length: 12
    type: 1, reserved: 0x0, id: AES-CBC
    last transform: 0x3, reserved: 0x0: length: 8
    type: 3, reserved: 0x0, id: SHA96
    last transform: 0x0, reserved: 0x0: length: 8
    type: 5, reserved: 0x0, id: Don't use ESN
TSi  Next payload: TSr, reserved: 0x0, length: 24
    Num of TSs: 1, reserved 0x0, reserved 0x0
    TS type: TS_IPV4_ADDR_RANGE, proto id: 47, length: 16
    start port: 0, end port: 65535
    start addr: 192.168.1.1, end addr: 192.168.1.1
TSr  Next payload: NOTIFY, reserved: 0x0, length: 24
    Num of TSs: 1, reserved 0x0, reserved 0x0
    TS type: TS_IPV4_ADDR_RANGE, proto id: 47, length: 16
    start port: 0, end port: 65535
    start addr: 192.168.2.1, end addr: 192.168.2.1
NOTIFY(USE_TRANSPORT_MODE)  Next payload: NOTIFY, reserved: 0x0, length: 8
    Security protocol id: Unknown - 0, spi size: 0, type: USE_TRANSPORT_MODE
NOTIFY(SET_WINDOW_SIZE)  Next payload: NOTIFY, reserved: 0x0, length: 12
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    Security protocol id: Unknown - 0, spi size: 0, type: SET_WINDOW_SIZE
NOTIFY(ESP_TFC_NO_SUPPORT)  Next payload: NOTIFY, reserved: 0x0, length: 8
    Security protocol id: Unknown - 0, spi size: 0, type: ESP_TFC_NO_SUPPORT
NOTIFY(NON_FIRST_FRAGS)  Next payload: NONE, reserved: 0x0, length: 8
    Security protocol id: Unknown - 0, spi size: 0, type: NON_FIRST_FRAGS

ENCR  Next payload: VID, reserved: 0x0, length: 292
*Jul 16 06:01:45.479: IKEv2-INTERNAL:(SESSION ID = 4,SA ID = 1):SM Trace-> SA:
I_SPI=AA81AF8C052B480F R_SPI=53457A4ACA42FD10 (R) MsgID = 1 CurState: AUTH_DONE Event:
EV_CHECK_DUPE
*Jul 16 06:01:45.479: IKEv2-INTERNAL:(SESSION ID = 4,SA ID = 1):SM Trace-> SA:
I_SPI=AA81AF8C052B480F R_SPI=53457A4ACA42FD10 (R) MsgID = 1 CurState: AUTH_DONE Event:
EV_CHK4_ROLE
*Jul 16 06:01:45.479: IKEv2-INTERNAL:(SESSION ID = 4,SA ID = 1):SM Trace-> SA:
I_SPI=AA81AF8C052B480F R_SPI=53457A4ACA42FD10 (R) MsgID = 1 CurState: READY Event: EV_R_OK
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Referenzen

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