

配置IKEv2 VRF感知SVTI

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簡介

本文提供使用網際網路金鑰交換版本2(IKEv2)通訊協定的兩個虛擬私人網路(VPN)對等點之間設定虛擬路由和轉送(VRF)感知靜態虛擬通道介面(SVTI)的組態範例。此設定包括本地子網所屬的IVRF和發生隧道建立的前門VRF(FVRF)。

必要條件

需求

思科建議您瞭解以下主題：

- IOS CLI配置基礎知識
- IKEv2和IPSEC的基礎知識

採用元件

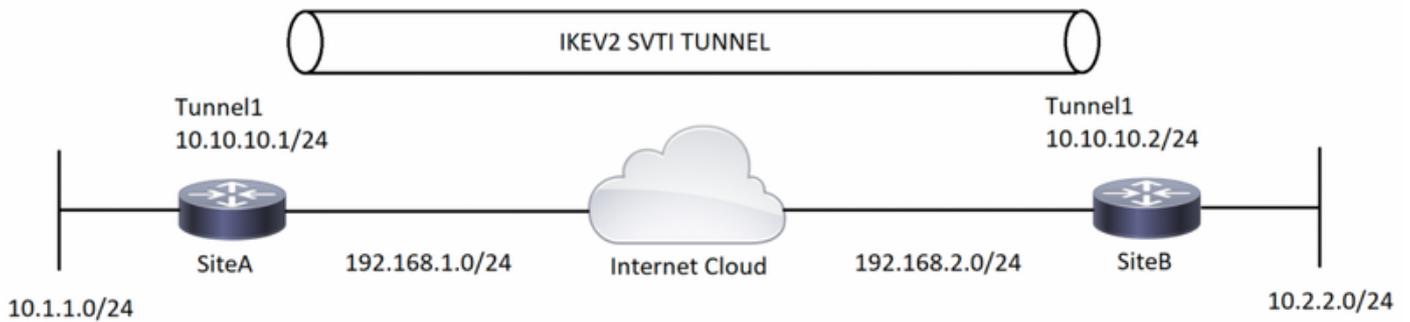
本檔案中的資訊是根據採用Cisco IOS®軟體版本15.7的Cisco IOS 2900系列路由器。

本文中的資訊是根據特定實驗室環境內的裝置所建立。文中使用到的所有裝置皆從已清除（預設）的組態來啟動。如果您的網路正在生產中，請確保您已瞭解任何指令可能造成的影響。

設定

本節提供用於設定本文件中所述功能的資訊。

網路圖表



背景資訊

VRF感知隧道用於連線由其他不可信核心網路分隔的客戶網路，或具有不同基礎架構的核心網路。通過此設定，可以將隧道的任何源和目標配置為屬於任何VRF表。

在通道介面上，「vrf forwarding」指令用於將該通道介面放在特定路由表中。使用「tunnel vrf」命令，路由器被指示對隧道源和目標IP地址使用指定的VRF路由表。

在本檔案的示例中，環回介面VRF與LAN網段VRF類似。通過此介面進入的資料包將使用此VRF進行路由。將離開隧道的資料包轉發到此VRF。

使用「tunnel vrf」命令在隧道上配置的VRF是傳輸VRF。是應用於封裝負載的VRF，用於查詢隧道端點。此VRF與通道傳送封包的實體介面關聯的VRF相同。

組態

步驟1.定義VRF。在本示例中，為LAN和WAN介面定義了分別名為「local」和「internet」的兩個VRF。

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
```

步驟2.配置啟動IKEv2隧道所需的引數，從建立IKEv2建議和金鑰環開始。然後，配置IKEv2配置檔案，其中呼叫了加密金鑰環，並且要以加密配置結尾，配置IPSEC配置檔案包括IPSEC轉換集和IKEv2配置檔案。

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 fvrfl 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 fvrfl 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

```

步驟3.配置必要的介面。在本示例中，環回介面是「本地」VRF的一部分，充當相關流量。物理介面是「網際網路」VRF的一部分，是連線到ISP的WAN介面。通道介面會觸發使用IPSEC加密的GRE封裝。

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 Tunnell
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
```

第4步：配置VRF特定路由。在此設定中，「網際網路」VRF中的路由被配置為指向物理介面（或在實際環境中的ISP）下一跳的預設路由。「本地」VRF中的第二條路由用於指向隧道介面的遠端VPN子網，該隧道介面最終使流量通過隧道介面並觸發VPN。

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 Tunnell
```

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
```

驗證

本節提供的資訊可用於確認您的組態是否正常運作。

[Cisco CLI Analyzer](#)支援某些show指令。使用 Cisco CLI Analyzer 檢視 show 指令輸出的分析。

SiteA :

```
SiteA#show crypto ikev2 sa
```

```
IPv4 Crypto IKEv2 SA
```

	Tunnel-id	Local	Remote	fvrif/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: Tunnell
```

```
  Crypto map tag: Tunnell-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 (rcv) 0, #pkts verify failed: 0
#pkts invalid identity (rcv) 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 (rcv) 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: Tunnell-

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: Tunnell-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: Tunnell

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: Tunnell
Crypto map tag: Tunnell-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 (rcv) 0, #pkts verify failed: 0
#pkts invalid identity (rcv) 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 (rcv) 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: Tunnell-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: Tunnell-
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: Tunnell
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
```

疑難排解

本節提供的資訊可用於對組態進行疑難排解。還顯示了調試輸出示例。

疑難排解指令

附註：使用 debug 指令之前，請先參閱有關 Debug 指令的重要資訊。如果路由器上配置了多個隧道，則可以使用以下條件：

- Debug crypto ikev2 internal
- Debug crypto ikev2 packet

調試輸出示例

```
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_REC'D_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

*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_REC'D_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: 1 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_SPI=53457A4ACA42FD10 (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_REC'D_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_REC'D_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
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
*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:
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

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*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
    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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參考資料

<https://community.cisco.com/t5/security-documents/vrf-aware-ipsec-cheat-sheet/ta-p/3109449>
https://www.cisco.com/c/en/us/td/docs/ios/sec_secure_connectivity/configuration/guide/convert/sec_ike_for_ipsec_vpns_15_1_book/sec_vrf_aware_ipsec.html
https://www.cisco.com/c/en/us/td/docs/ios/sec_secure_connectivity/configuration/guide/convert/sec_ike_for_ipsec_vpns_15_1_book/sec_cfg_ikev2.html
[https://www.cisco.com/en/US/docs/ios-xml/ios/sec_conn_ikevpn/configuration/15-1mt/Configuring Internet Key Exchange Version 2.html](https://www.cisco.com/en/US/docs/ios-xml/ios/sec_conn_ikevpn/configuration/15-1mt/Configuring%20Internet%20Key%20Exchange%20Version%202.html)