

配置IKEv2 VRF感知SVTI

目录

[简介](#)
[先决条件](#)
[要求](#)
[使用的组件](#)
[配置](#)
[网络图](#)
[背景信息](#)
[配置](#)
[验证](#)
[故障排除](#)
[故障排除命令](#)
[调试输出示例](#)
[参考](#)

简介

本文档提供一个配置示例，用于使用互联网密钥交换版本2(IKEv2)协议在两个虚拟专用网络(VPN)对等体之间设置虚拟路由和转发(VRF)感知静态虚拟隧道接口(SVTI)。此设置包括本地子网所属的IVRF和发生隧道建立的前门VRF(FVRF)。

先决条件

要求

Cisco 建议您了解以下主题：

- IOS CLI配置的基本知识
- IKEv2和IPSEC的基本知识

使用的组件

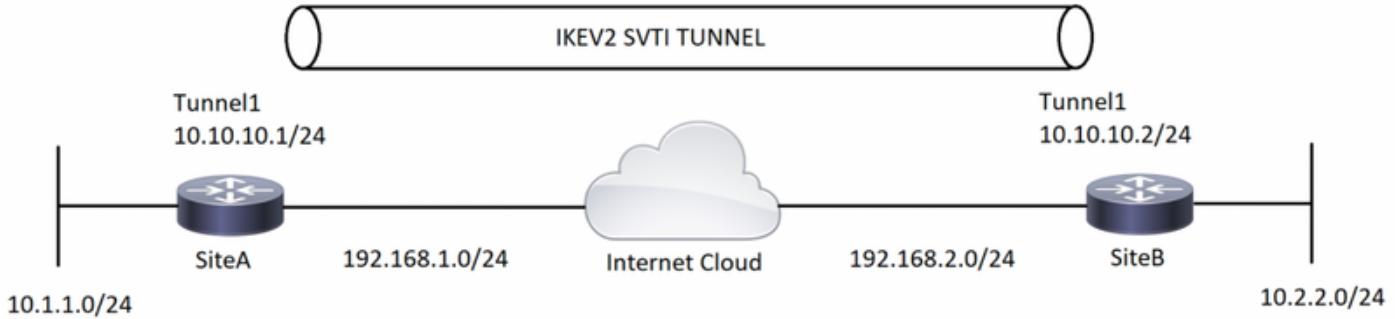
本文档中的信息基于Cisco IOS 2900系列路由器，该路由器采用Cisco IOS®软件版本15.7。

本文档中的信息都是基于特定实验室环境中的设备编写的。本文档中使用的所有设备最初均采用原始(默认)配置。如果您的网络正在生产，请确保您了解任何命令的潜在影响。

配置

本部分提供有关如何配置本文档所述功能的信息。

网络图



背景信息

VRF感知隧道用于连接由其他不受信任的核心网络或具有不同基础设施的核心网络分隔的客户网络。通过此设置，可以将隧道的任何源和目标配置为属于任何VRF表。

在隧道接口上，使用“vrf forwarding”命令将隧道接口放入该特定路由表中。使用“tunnel vrf”命令，会指示路由器将指定VRF的路由表用于隧道源和目标IP地址。

在本文档所用的示例中，环回接口VRF类似于LAN网段VRF。通过此接口进入的数据包使用此VRF进行路由。离开隧道的数据包将转发到此VRF。

在隧道上使用“tunnel vrf”命令配置的VRF是传输VRF。VRF适用于封装的负载，用于查找隧道终端。此VRF与与隧道发送数据包所通过的物理接口关联的VRF相同。

配置

步骤1. 定义VRF。 在本示例中，两个VRF分别定义为LAN和WAN接口的“本地”和“互联网”。

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
```

步骤2.从创建IKEv2提议和密钥环开始，配置启动IKEv2隧道所需的参数。然后，在调用加密密钥环的位置配置IKEv2配置文件，并以加密配置结束，配置IPSEC配置文件包括IPSEC转换集和IKEv2配置文件。

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

```

步骤3.配置必要的接口。在本例中，环回接口是“本地”VRF的一部分，充当相关流量。物理接口是“互联网”VRF的一部分，是连接到ISP的WAN接口。隧道接口将触发使用IPSEC加密的GRE封装。

```

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

```

步骤 4：配置VRF特定路由。在此设置中，“internet”VRF中的路由配置为指向物理接口（或实际环境中的ISP）下一跳的默认路由。“本地”VRF中的第二条路由用于指向隧道接口的远程VPN子网，该隧道接口最终使流量通过隧道接口并触发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 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

```

验证

本部分所提供的信息可用于确认您的配置是否正常工作。

思科[CLI分析器](#)支持某些show命令。要查看对 show 命令输出的分析，请使用思科 CLI 分析器。

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, keysiz: 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 (recv) 0
#pkts encaps failed (send) 0, #pkts decaps failed (recv) 0
#pkts invalid prot (recv) 0, #pkts verify failed: 0
#pkts invalid identity (recv) 0, #pkts invalid len (recv) 0
#pkts replay rollover (send): 0, #pkts replay rollover (recv) 0
##pkts replay failed (recv): 0
#pkts tagged (send): 0, #pkts untagged (recv): 0
#pkts not tagged (send): 0, #pkts not untagged (recv): 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: 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	fvrif/ivrf	Status
1		192.168.2.1/500	192.168.1.1/500	internet/local	READY
				Enrc: AES-CBC, keysiz: 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: Tunnell1

Crypto map tag: Tunnell1-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: Tunnell1-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

```

故障排除

本部分提供的信息可用于对配置进行故障排除。此外本部分还提供了 debug 输出示例。

故障排除命令

注意：在使用debug 命令之前，请参阅有关debug命令的重要信息。如果路由器上配置了多个隧道，则可以使用以下条件：

- **debug crypto ikev2 internal**
- 调试crypto ikev2数据包

调试输出示例

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_RECV_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_RECV_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_SKYID

*Jul 16 05:30:51.019: IKEv2-INTERNAL:(SESSION ID = 3,SA ID = 1):**Generate skyid**

*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: **READY**Event:
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

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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'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'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_SKYID
*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:

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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

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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

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*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_RECV_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  
*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
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*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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参考

<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_cfg_ikev2.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