

# Configuration de SVTI compatible VRF IKEv2

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## Introduction

Ce document fournit un exemple de configuration pour configurer une interface SVTI (Static Virtual Tunnel Interfaces) de routage et transfert virtuels (VRF) prenant en charge le routage et transfert virtuels (VRF) entre deux homologues de réseau privé virtuel (VPN) utilisant le protocole IKEv2 (Internet Key Exchange version 2). Cette configuration inclut un IVRF dont le sous-réseau local fait partie et un VRF de porte avant (FVRF) où se produit l'établissement du tunnel.

## Conditions préalables

### Conditions requises

Cisco vous recommande de prendre connaissance des rubriques suivantes :

- Connaissance de base de la configuration de l'interface de ligne de commande IOS
- Connaissances fondamentales d'IKEv2 et d'IPSEC

### Components Used

Les informations de ce document sont basées sur un routeur de la gamme Cisco IOS 2900 avec le logiciel Cisco IOS® Version 15.7.

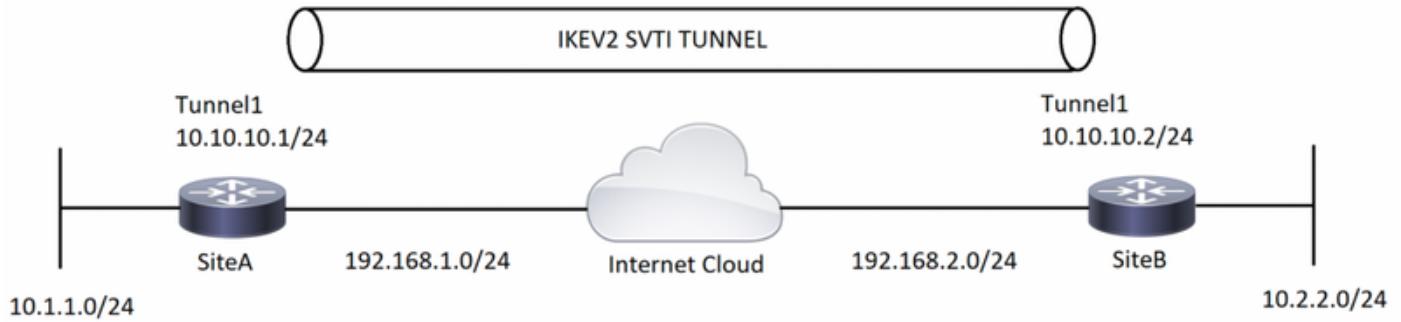
The information in this document was created from the devices in a specific lab environment. All of the devices used in this document started with a cleared (default) configuration. Si votre réseau est en production, assurez-vous de bien comprendre l'impact potentiel de toute commande.

## Configuration

Cette section vous fournit des informations pour configurer les fonctionnalités décrites dans ce

document.

## Diagramme du réseau



## Informations générales

Les tunnels compatibles VRF sont utilisés pour connecter des réseaux clients séparés par d'autres réseaux principaux non fiables ou des réseaux principaux avec différentes infrastructures. Avec cette configuration, toute source et destination d'un tunnel peut être configurée pour appartenir à n'importe quelle table VRF.

Sur une interface de tunnel, " commande vrf forwarding " est utilisée pour placer l'interface de tunnel dans cette table de routage particulière. Avec la commande " tunnel vrf ", le routeur est invité à utiliser la table de routage du VRF spécifié pour les adresses IP source et de destination du tunnel.

Dans l'exemple utilisé pour ce document, le VRF de l'interface de bouclage est comme un VRF de segment de réseau local. Les paquets entrant via cette interface sont routés à l'aide de ce VRF. Les paquets quittant le tunnel sont transférés à ce VRF.

Le VRF configuré sur le tunnel à l'aide de la commande " tunnel vrf " est le VRF de transport. C'est le VRF qui s'applique à la charge utile encapsulée et qui est utilisé pour rechercher les points d'extrémité du tunnel. Ce VRF est identique au VRF associé à l'interface physique sur laquelle le tunnel envoie des paquets.

## Configuration

Étape 1. Définissez les VRF. Dans cet exemple, deux VRF sont définis respectivement nommés « local » et « Internet » pour les interfaces LAN et WAN.

**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
```

Étape 2. Configurez les paramètres nécessaires pour activer un tunnel IKEv2, en commençant par la création de la proposition IKEv2 et de la sonnerie de touches. Ensuite, le profil IKEv2 est configuré là où la clé de chiffrement est appelée et pour conclure avec la configuration de chiffrement, configurez le profil IPSEC inclut le jeu de transformation IPSEC et le profil IKEv2.

**SiteA :**

**! — IKEv2 Proposal**

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

**! --- IKEv2 Policy**

```
crypto ikev2 policy policy-1
match fvrif 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 fvrif 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

```

**Étape 3. Configurez les interfaces nécessaires.** Dans cet exemple, l'interface de bouclage fait partie de "VRF" local et agit en tant que trafic intéressant. L'interface physique, qui fait partie de "Internet" VRF, est l'interface WAN connectée au FAI. L'interface de tunnel doit déclencher l'encapsulation GRE chiffrée avec IPSEC.

```

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
```

Étape 4 : Configurez les routes spécifiques VRF. Dans cette configuration, une route dans “ VRF ” Internet est configurée comme route par défaut pointant vers le tronçon suivant de l'interface physique (ou ISP dans des environnements réels). La deuxième route dans “ VRF ” local est pour le sous-réseau VPN distant qui pointe vers l'interface de tunnel, ce qui finit par faire passer le trafic par l'interface de tunnel et déclencher le 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
```

## **Vérification**

Cette section présente des informations que vous pouvez utiliser pour vous assurer que votre configuration fonctionne correctement.

L'[analyseur CLI de Cisco](#) prend en charge certaines commandes show. Utilisez Cisco CLI Analyzer pour voir une analyse de la sortie d'une commande show.

#### **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: Tunnell1
Crypto map tag: Tunnell1-head-0, local addr 192.168.1.1

protected vrf: local
local ident (addr/mask/prot/port): (192.168.1.1/255.255.255.255/47/0)
remote ident (addr/mask/prot/port): (192.168.2.1/255.255.255.255/47/0)
current_peer 192.168.2.1 port 500
    PERMIT, flags={origin_is_acl,}
#pkts encaps: 25, #pkts encrypt: 25, #pkts digest: 25
#pkts decaps: 25, #pkts decrypt: 25, #pkts verify: 25
    #pkts compressed: 0, #pkts decompressed: 0
    #pkts not compressed: 0, #pkts compr. failed: 0
    #pkts not decompressed: 0, #pkts decompress failed: 0
    #pkts no sa (send) 0, #pkts invalid sa (rcv) 0
    #pkts encaps failed (send) 0, #pkts decaps failed (rcv) 0
    #pkts invalid prot (recv) 0, #pkts verify failed: 0
    #pkts invalid identity (recv) 0, #pkts invalid len (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: Tunnell1-
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: Tunnell1-head-
0
sa timing: remaining key lifetime (k/sec): (4368363/3461)
IV size: 16 bytes

```

```
replay detection support: Y
Status: ACTIVE(ACTIVE)
```

```
outbound ah sas:
```

```
outbound pcp sas:
```

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

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

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

```
SiteB :
```

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

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

```
SiteB#show crypto ipsec sa detail
```

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

protected vrf: local
local ident (addr/mask/prot/port): (192.168.2.1/255.255.255.255/47/0)
remote ident (addr/mask/prot/port): (192.168.1.1/255.255.255.255/47/0)
current_peer 192.168.1.1 port 500
    PERMIT, flags={origin_is_acl,}
#pkts encaps: 25, #pkts encrypt: 25, #pkts digest: 25
#pkts decaps: 25, #pkts decrypt: 25, #pkts verify: 25
    #pkts compressed: 0, #pkts decompressed: 0
    #pkts not compressed: 0, #pkts compr. failed: 0
    #pkts not decompressed: 0, #pkts decompress failed: 0
    #pkts no sa (send) 0, #pkts invalid sa (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.: 192.168.2.1, remote crypto endpt.: 192.168.1.1
plaintext mtu 1458, path mtu 1500, ip mtu 1500, ip mtu idb GigabitEthernet0/0
current outbound spi: 0xCA8E7D53(3398335827)
PFS (Y/N): N, DH group: none

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

inbound ah sas:

inbound pcp sas:

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

outbound ah sas:

outbound pcp sas:

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

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

Interface: Tunnel1
Profile: IKEv2-Profile-1
Uptime: 00:02:33
Session status: UP-ACTIVE
Peer: 192.168.1.1 port 500 fvrf: internet ivrf: local
    Phase1_id: 192.168.1.1
    Desc: (none)
Session ID: 4
IKEv2 SA: local 192.168.2.1/500 remote 192.168.1.1/500 Active
    Capabilities:(none) connid:1 lifetime:23:57:27
IPSEC FLOW: permit 47 host 192.168.2.1 host 192.168.1.1
    Active SAs: 2, origin: crypto map
    Inbound: #pkts dec'ed 25 drop 0 life (KB/Sec) 4251213/3447
    Outbound: #pkts enc'ed 25 drop 0 life (KB/Sec) 4251213/3447

```

# Dépannage

Cette section fournit des informations que vous pouvez utiliser pour dépanner votre configuration. L'exemple de sortie Debug est également affiché.

## Dépannage des commandes

Remarque : Consulter les renseignements importants sur les commandes de débogage avant d'utiliser les commandes de débogage. Si plusieurs tunnels sont configurés sur le routeur, vous pouvez utiliser la condition suivante :

- **Debug crypto ikev2 internal**
- **Debug crypto ikev2 packet**

## Exemple de sortie de débogage

**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'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:
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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 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

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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

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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: 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:**

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*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
```

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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:

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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\_RECV\_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\_RECV\_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:

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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:

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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

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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_GET_CONFIG_MODE
*Jul 16 06:01:45.471: IKEv2-INTERNAL:(SESSION ID = 4,SA ID = 1):SM Trace-> SA:
I_SPI=AA81AF8C052B480F R_SPI=53457A4ACA42FD10 (R) MsgID = 1 CurState: R_BLD_AUTH Event:
EV_MY_AUTH_METHOD
*Jul 16 06:01:45.471: IKEv2-INTERNAL:(SESSION ID = 4,SA ID = 1):SM Trace-> SA:
I_SPI=AA81AF8C052B480F R_SPI=53457A4ACA42FD10 (R) MsgID = 1 CurState: R_BLD_AUTH Event:
EV_GET_PRESHR_KEY
*Jul 16 06:01:45.471: IKEv2-INTERNAL:(SESSION ID = 4,SA ID = 1):SM Trace-> SA:
I_SPI=AA81AF8C052B480F R_SPI=53457A4ACA42FD10 (R) MsgID = 1 CurState: R_BLD_AUTH Event:
EV_GEN_AUTH
*Jul 16 06:01:45.471: IKEv2-INTERNAL:(SESSION ID = 4,SA ID = 1):SM Trace-> SA:
I_SPI=AA81AF8C052B480F R_SPI=53457A4ACA42FD10 (R) MsgID = 1 CurState: R_BLD_AUTH Event:
EV_CHK4_SIGN
*Jul 16 06:01:45.471: IKEv2-INTERNAL:(SESSION ID = 4,SA ID = 1):SM Trace-> SA:
I_SPI=AA81AF8C052B480F R_SPI=53457A4ACA42FD10 (R) MsgID = 1 CurState: R_BLD_AUTH Event:
EV_OK_AUTH_GEN
*Jul 16 06:01:45.471: IKEv2-INTERNAL:(SESSION ID = 4,SA ID = 1):SM Trace-> SA:
I_SPI=AA81AF8C052B480F R_SPI=53457A4ACA42FD10 (R) MsgID = 1 CurState: R_BLD_AUTH Event:
EV_SEND_AUTH
*Jul 16 06:01:45.471: IKEv2-INTERNAL:Construct Vendor Specific Payload: CISCO-GRANITE
*Jul 16 06:01:45.471: IKEv2-INTERNAL:Construct Notify Payload: USE_TRANSPORT_MODE
*Jul 16 06:01:45.471: IKEv2-INTERNAL:Construct Notify Payload: SET_WINDOW_SIZE
*Jul 16 06:01:45.471: IKEv2-INTERNAL:Construct Notify Payload: ESP_TFC_NO_SUPPORT
*Jul 16 06:01:45.471: IKEv2-INTERNAL:Construct Notify Payload: NON_FIRST_FRAGS

*Jul 16 06:01:45.471: IKEv2-PAK:(SESSION ID = 4,SA ID = 1):Next payload: ENCR, version: 2.0
Exchange type: IKE_AUTH, flags: RESPONDER MSG-RESPONSE Message id: 1, length: 320
Payload contents:
VID Next payload: IDr, reserved: 0x0, length: 20
IDr Next payload: AUTH, reserved: 0x0, length: 12
    Id type: IPv4 address, Reserved: 0x0 0x0
AUTH Next payload: SA, reserved: 0x0, length: 72
    Auth method PSK, reserved: 0x0, reserved 0x0
SA Next payload: TSi, reserved: 0x0, length: 44
    last proposal: 0x0, reserved: 0x0, length: 40
    Proposal: 1, Protocol id: ESP, SPI size: 4, #trans: 3      last transform: 0x3, reserved: 0x0:
length: 12
    type: 1, reserved: 0x0, id: AES-CBC
    last transform: 0x3, reserved: 0x0: length: 8
    type: 3, reserved: 0x0, id: SHA96
    last transform: 0x0, reserved: 0x0: length: 8
    type: 5, reserved: 0x0, id: Don't use ESN
TSi Next payload: TSr, reserved: 0x0, length: 24
    Num of TSs: 1, reserved 0x0, reserved 0x0
    TS type: TS_IPV4_ADDR_RANGE, proto id: 47, length: 16
    start port: 0, end port: 65535
    start addr: 192.168.1.1, end addr: 192.168.1.1
TSr Next payload: NOTIFY, reserved: 0x0, length: 24
    Num of TSs: 1, reserved 0x0, reserved 0x0
    TS type: TS_IPV4_ADDR_RANGE, proto id: 47, length: 16
    start port: 0, end port: 65535
    start addr: 192.168.2.1, end addr: 192.168.2.1
NOTIFY(USE_TRANSPORT_MODE) Next payload: NOTIFY, reserved: 0x0, length: 8
    Security protocol id: Unknown - 0, spi size: 0, type: USE_TRANSPORT_MODE
NOTIFY(SET_WINDOW_SIZE) Next payload: NOTIFY, reserved: 0x0, length: 12
    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

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*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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## Références

- <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/secc\\_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/secc_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/secc\\_ike\\_for\\_ipsec\\_vpns\\_15\\_1\\_book/sec\\_cfg\\_ikev2.html](https://www.cisco.com/c/en/us/td/docs/ios/sec_secure_connectivity/configuration/guide/convert/secc_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_Internet_Key_Exchange_Version_2.html)