Het configureren van GRE via IPSec tussen een Cisco IOS router en een VPN 5000 Concentrator die statische routing gebruikt

Inhoud

Inleiding

Dit document beschrijft hoe u generieke routing encapsulation (GRE) via IPSec kunt configureren tussen een Cisco VPN 5000 Series Concentrator en een Cisco-router die Cisco IOS®-software uitvoert. De GRE-over-IPSec optie wordt geïntroduceerd in de VPN 5000 Concentrator 6.0(19) softwarerelease.

In dit voorbeeld, wordt het statische routeren gebruikt om pakketten over de tunnel te leiden.

Voorwaarden

Vereisten

Er zijn geen specifieke vereisten van toepassing op dit document.

Gebruikte componenten

De informatie in dit document is gebaseerd op de volgende software- en hardware-versies:

- Cisco IOS-softwarerelease 12.2(3)S

- Cisco VPN 5000 Concentrator-softwareversie 6.0(19)

De informatie in dit document is gebaseerd op de apparaten in een specifieke laboratoriumomgeving. Alle apparaten die in dit document worden beschreven, hadden een opgeschoonde (standaard)configuratie. Als uw netwerk live is, moet u de potentiële impact van elke opdracht begrijpen.

Conventies

Raadpleeg Cisco Technical Tips Conventions (Conventies voor technische tips van Cisco) voor meer informatie over documentconventies.

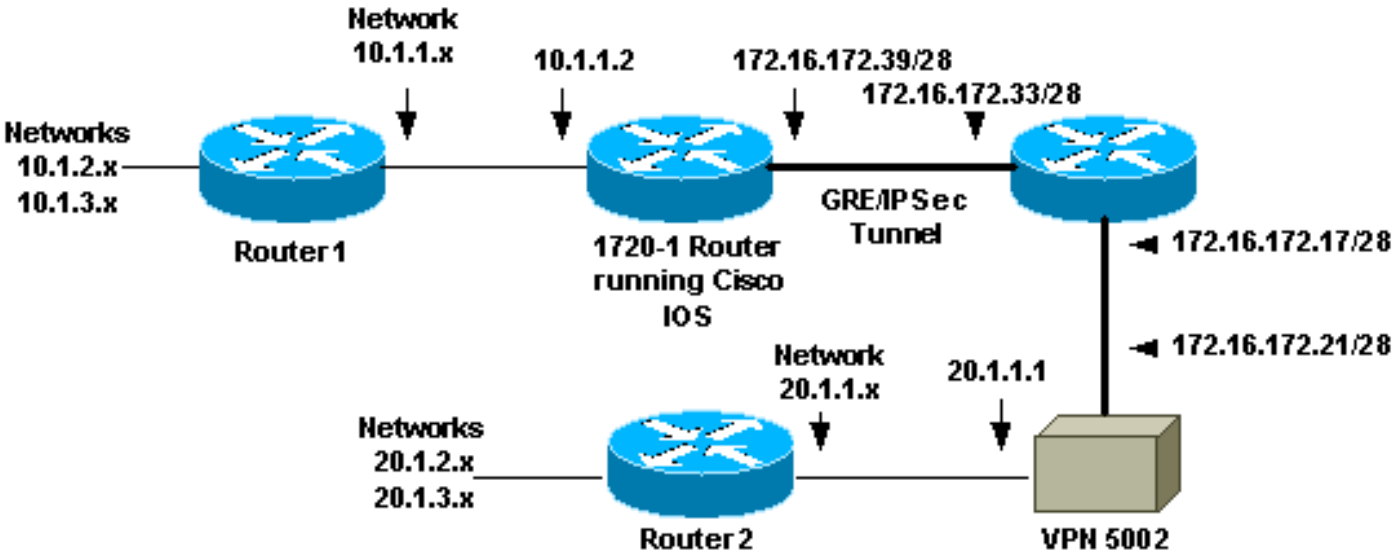
Configureren

Deze sectie bevat informatie over het configureren van de functies die in dit document worden beschreven.

N.B.: Als u aanvullende informatie wilt vinden over de opdrachten in dit document, gebruikt u het Opdrachtplanningprogramma (alleen geregistreerd klanten).

Netwerkdiagram

Dit document gebruikt de netwerkinstellingen die in dit diagram worden weergegeven.



GRE over IPSec wordt geconfigureerd tussen de 1720-1 router die Cisco IOS-software draait en de VPN 5002 Concentrator. Achter de router en de VPN Concentrator, zijn er meerdere netwerken die door Open kortste Pad Eerst (OSPF) worden geadverteerd. OSPF-voert binnen de GRE-tunnel tussen de router en de VPN-centrator uit.

- Deze netwerken liggen achter de router 1720-1.10.1.1.0/2410.1.2.0/2410.1.3.0/24
- Deze netwerken liggen achter de VPN 5002 Concentrator.20.1.1.0/2420.1.2.0/2420.1.3.0/24

Configuraties

Dit document gebruikt deze configuraties.

- 1720-1 router
- VPN 5002-concentratie

Opmerking: Met Cisco IOS-softwarereleases 12.2(13)T en hoger (hoger genummerde T-treincodes 12.3 en hoger) moet u de geconfigureerde IPSec-encryptie alleen op de fysieke interface toepassen. U hoeft de crypto-kaart niet langer toe te passen op de GRE-tunnelinterface. Het hebben van de crypto kaart op de fysieke en de tunnelinterfaces wanneer u Cisco IOS-softwarereleases 12.2.2(13)T gebruikt en moet later nog werken, maar Cisco Systems raadt aan om de crypto-kaart alleen op de fysieke interface toe te passen.

1720-1 router

```
Current configuration : 1305 bytes
!
version 12.2
service timestamps debug uptime
service timestamps log uptime
no service password-encryption
!
hostname 1720-1
!
no logging buffered
no logging monitor
enable secret 5 $1$vIzI$RqD0LqlqbSFCCjVELFLfH/
!
memory-size iomem 15
ip subnet-zero
no ip domain-lookup
!
ip audit notify log
ip audit po max-events 100
ip ssh time-out 120
ip ssh authentication-retries 3
!
crypto isakmp policy 1
 hash md5
 authentication pre-share
crypto isakmp key cisco123 address 172.16.172.21
!
!
crypto ipsec transform-set myset esp-des esp-md5-hmac
 mode transport
!
crypto map vpn 10 ipsec-isakmp
 set peer 172.16.172.21
 set transform-set myset
 match address 102
!
cns event-service server
!
!
!
interface Tunnel0
 ip address 50.1.1.1 255.255.255.252
 tunnel source FastEthernet0
 tunnel destination 172.16.172.21
 crypto map vpn
!
interface FastEthernet0
 ip address 172.16.172.39 255.255.255.240
 speed auto
```

```
 crypto map vpn
!
interface Serial0
 ip address 10.1.1.2 255.255.255.0
 encapsulation ppp
!
ip classless
ip route 0.0.0.0 0.0.0.0 172.16.172.33
ip route 10.1.0.0 255.255.0.0 10.1.1.1
ip route 20.1.0.0 255.255.0.0 Tunnel0
no ip http server
!
access-list 102 permit gre host 172.16.172.39 host
172.16.172.21
!
line con 0
line aux 0
line vty 0 4
 password cisco
 login
!
no scheduler allocate
end
```

VPN 5002-concentratie

```
[ General ]
VPNGateway              = 172.16.172.17
EthernetAddress         = 00:05:32:3e:90:40
DeviceType              = VPN 5002/8 Concentrator
ConfiguredOn            = Timeserver not configured
ConfiguredFrom          = Command Line, from Console

[ IKE Policy ]
Protection              = SHA_DES_G1
Protection              = MD5_DES_G2
Protection              = MD5_DES_G1

[ Tunnel Partner VPN 1 ]
KeyLifeSecs             = 3500
KeepaliveInterval       = 120
TunnelType              = GREinIPSec
InactivityTimeout       = 120
Transform               = ESP(MD5,DES)
BindTo                  = "Ethernet 1:0"
SharedKey               = "cisco123"
Certificates            = Off
Mode                    = Main
KeyManage               = Reliable
Partner                 = 172.16.172.39

[ IP VPN 1 ]
HelloInterval           = 10
SubnetMask              = 255.255.255.252
IPAddress               = 50.1.1.2
DirectedBroadcast       = Off
Numbered                = On
Mode                    = Routed

[ IP Ethernet 1:0 ]
Mode                    = Routed
SubnetMask              = 255.255.255.240
IPBroadcast             = 172.16.172.32
```

```
IPAddress                  = 172.16.172.21

[ IP Ethernet 0:0 ]
Mode                       = Routed
IPBroadcast                = 20.1.1.255
SubnetMask                 = 255.255.255.0
IPAddress                  = 20.1.1.1

[ Logging ]
Level                      = Debug
LogToAuxPort               = On
Enabled                    = On

[ Ethernet Interface Ethernet 0:0 ]
DUPLEX                     = half
SPEED                      = 10meg


[ IP Static ]
0.0.0.0 0.0.0.0 20.1.1.5 1
10.1.1.0 255.255.255.0 VPN 1 1
10.1.2.0 255.255.255.0 VPN 1 1
10.1.3.0 255.255.255.0 VPN 1 1

Configuration size is 1696 out of 65500 bytes.
```

Verifiëren

Deze sectie verschaft informatie die u kunt gebruiken om te bevestigen dat uw configuratie correct werkt.

Bepaalde opdrachten met **show worden ondersteund door de tool** Output Interpreter (alleen voor geregistreerde klanten). Hiermee kunt u een analyse van de output van opdrachten met **show genereren.**

- Deze opdrachten kunnen op de Cisco IOS-router worden uitgevoerd.**toon crypto isakmp sa**-toont alle huidige veiligheidsassociaties van Internet Security Association en Key Management Protocol (ISAKMP) (SAs).**toon crypto ipsec sa**-Toont alle huidige IPSec SAs.**tonen crypto motorverbinding actief**-Toont pakketencryptie/decryptie teller voor elke IPSec SAs.
- U kunt deze opdrachten uitvoeren op de VPN 5002-centrator.**Laat de systeemlogbuffer** zien - toont basisinformatie over syslig.**VPN-**sporenstop - toont gedetailleerde informatie over VPN-processen.

Problemen oplossen

Deze sectie bevat informatie waarmee u problemen met de configuratie kunt oplossen.

Opdrachten voor troubleshooting

Opmerking: Voordat u **debug-**opdrachten afgeeft, raadpleegt u Belangrijke informatie over debug-opdrachten.

U kunt deze opdrachten op de Cisco IOS-router uitvoeren.

- **debug crypto isakmp**-toont gedetailleerde informatie over de fase I (Main Mode) van Internet Key Exchange (IKE)-onderhandeling.
- **debug crypto ipsec**-toont gedetailleerde informatie over IKE fase II (Quick Mode) onderhandeling.
- **debug van crypto motor** — Debugs pakketencryptie/decryptie en Diffie-Hellman (DH) proces.

Voorbeeld van output van foutopsporing

Monster debug uitvoer voor de router en VPN Concentrator wordt hier weergegeven.

- Cisco IOS-router
- VPN 5002-concentratie

Debugs in Cisco IOS-router

Uitvoer van **debug crypto isakmp** en **debug van crypto ipsec** opdrachten op de router wordt hier weergegeven.

```
5d20h: ISAKMP (0:0): received packet from 172.16.172.21 (N) NEW SA
5d20h: ISAKMP: local port 500, remote port 500
5d20h: ISAKMP (0:81): processing SA payload. message ID = 0
5d20h: ISAKMP (0:81): found peer pre-shared key matching 172.16.172.21
5d20h: ISAKMP (0:81): Checking ISAKMP transform 1 against priority 1 policy
5d20h: ISAKMP:      encryption DES-CBC
5d20h: ISAKMP:      hash SHA
5d20h: ISAKMP:      auth pre-share
5d20h: ISAKMP:      default group 1
5d20h: ISAKMP (0:81): atts are not acceptable. Next payload is 3
5d20h: ISAKMP (0:81): Checking ISAKMP transform 2 against priority 1 policy
5d20h: ISAKMP:      encryption DES-CBC
5d20h: ISAKMP:      hash MD5
5d20h: ISAKMP:      auth pre-share
5d20h: ISAKMP:      default group 2
5d20h: ISAKMP (0:81): atts are not acceptable. Next payload is 3
5d20h: ISAKMP (0:81): Checking ISAKMP transform 3 against priority 1 policy
5d20h: ISAKMP:      encryption DES-CBC
5d20h: ISAKMP:      hash MD5
5d20h: ISAKMP:      auth pre-share
5d20h: ISAKMP:      default group 1
5d20h: ISAKMP (0:81): atts are acceptable. Next payload is 0
5d20h: ISAKMP (0:81): processing vendor id payload
5d20h: ISAKMP (0:81): SA is doing pre-shared key authentication
using id type ID_IPV4_ADDR
5d20h: ISAKMP (0:81): sending packet to 172.16.172.21 (R) MM_SA_SETUP
5d20h: ISAKMP (0:81): received packet from 172.16.172.21 (R) MM_SA_SETUP
5d20h: ISAKMP (0:81): processing KE payload. message ID = 0
5d20h: ISAKMP (0:81): processing NONCE payload. message ID = 0
5d20h: ISAKMP (0:81): found peer pre-shared key matching 172.16.172.21
5d20h: ISAKMP (0:81): SKEYID state generated
5d20h: ISAKMP (0:81): sending packet to 172.16.172.21 (R) MM_KEY_EXCH
5d20h: ISAKMP (0:81): received packet from 172.16.172.21 (R) MM_KEY_EXCH
5d20h: ISAKMP (0:81): processing ID payload. message ID = 0
5d20h: ISAKMP (0:81): processing HASH payload. message ID = 0
5d20h: ISAKMP (0:81): SA has been authenticated with 172.16.172.21
5d20h: ISAKMP (81): ID payload
        next-payload : 8
        type         : 1
```

```
        protocol     : 17
        port         : 500
        length       : 8
5d20h: ISAKMP (81): Total payload length: 12
5d20h: ISAKMP (0:81): sending packet to 172.16.172.21 (R) QM_IDLE
5d20h: ISAKMP (0:81): received packet from 172.16.172.21 (R) QM_IDLE
5d20h: ISAKMP (0:81): processing HASH payload. message ID = 241
5d20h: ISAKMP (0:81): processing SA payload. message ID = 241
5d20h: ISAKMP (0:81): Checking IPSec proposal 1
5d20h: ISAKMP: transform 1, ESP_DES
5d20h: ISAKMP:   attributes in transform:
5d20h: ISAKMP:      SA life type in seconds
5d20h: ISAKMP:      SA life duration (VPI) of  0x0 0x0 0xD 0xAC
5d20h: ISAKMP:      SA life type in kilobytes
5d20h: ISAKMP:      SA life duration (VPI) of  0x0 0x10 0x0 0x0
5d20h: ISAKMP:      encaps is 2
5d20h: ISAKMP:      authenticator is HMAC-MD5
5d20h: ISAKMP (0:81): atts are acceptable.
5d20h: IPSEC(validate_proposal_request): proposal part #1,
  (key eng. msg.) dest= 172.16.172.39, src= 172.16.172.21,
    dest_proxy= 172.16.172.39/255.255.255.255/47/0 (type=1),
    src_proxy= 172.16.172.21/255.255.255.255/47/0 (type=1),
    protocol= ESP, transform= esp-des esp-md5-hmac ,
    lifedur= 0s and 0kb,
    spi= 0x0(0), conn_id= 0, keysize= 0, flags= 0x0
5d20h: ISAKMP (0:81): processing NONCE payload. message ID = 241
5d20h: ISAKMP (0:81): processing ID payload. message ID = 241
5d20h: ISAKMP (81): ID_IPV4_ADDR src 172.16.172.21 prot 47 port 0
5d20h: ISAKMP (0:81): processing ID payload. message ID = 241
5d20h: ISAKMP (81): ID_IPV4_ADDR dst 172.16.172.39 prot 47 port 0
5d20h: ISAKMP (0:81): asking for 1 spis from ipsec
5d20h: IPSEC(key_engine): got a queue event...
5d20h: IPSEC(spi_response): getting spi 895566248 for SA
        from 172.16.172.21   to 172.16.172.39   for prot 3
5d20h: ISAKMP: received ke message (2/1)
5d20h: ISAKMP (0:81): sending packet to 172.16.172.21 (R) QM_IDLE
5d20h: ISAKMP (0:81): received packet from 172.16.172.21 (R) QM_IDLE
5d20h: ISAKMP (0:81): Creating IPSec SAs
5d20h:         inbound SA from 172.16.172.21 to 172.16.172.39
        (proxy 172.16.172.21 to 172.16.172.39)
5d20h:         has spi 0x356141A8 and conn_id 362 and flags 0
5d20h:         lifetime of 3500 seconds
5d20h:         lifetime of 1048576 kilobytes
5d20h:         outbound SA from 172.16.172.39   to 172.16.172.21
(proxy 172.16.172.39   to 172.16.172.21  )
5d20h:         has spi 337 and conn_id 363 and flags 0
5d20h:         lifetime of 3500 seconds
5d20h:         lifetime of 1048576 kilobytes
5d20h: ISAKMP (0:81): deleting node 241 error FALSE reason
"quick mode done (await()"
5d20h: IPSEC(key_engine): got a queue event...
5d20h: IPSEC(initialize_sas): ,
  (key eng. msg.) dest= 172.16.172.39, src= 172.16.172.21,
    dest_proxy= 172.16.172.39/0.0.0.0/47/0 (type=1),
    src_proxy= 172.16.172.21/0.0.0.0/47/0 (type=1),
    protocol= ESP, transform= esp-des esp-md5-hmac ,
    lifedur= 3500s and 1048576kb,
    spi= 0x356141A8(895566248), conn_id= 362, keysize= 0, flags= 0x0
5d20h: IPSEC(initialize_sas): ,
  (key eng. msg.) src= 172.16.172.39, dest= 172.16.172.21,
    src_proxy= 172.16.172.39/0.0.0.0/47/0 (type=1),
    dest_proxy= 172.16.172.21/0.0.0.0/47/0 (type=1),
    protocol= ESP, transform= esp-des esp-md5-hmac ,
    lifedur= 3500s and 1048576kb,
```

```
    spi= 0x151(337), conn_id= 363, keysize= 0, flags= 0x0
5d20h: IPSEC(create_sa): sa created,
  (sa) sa_dest= 172.16.172.39, sa_prot= 50,
    sa_spi= 0x356141A8(895566248),
    sa_trans= esp-des esp-md5-hmac , sa_conn_id= 362
5d20h: IPSEC(create_sa): sa created,
  (sa) sa_dest= 172.16.172.21, sa_prot= 50,
    sa_spi= 0x151(337),
    sa_trans= esp-des esp-md5-hmac , sa_conn_id= 363
5d20h: IPSEC(add_sa): peer asks for new SAs -- expire current in 120 sec.,
  (sa) sa_dest= 172.16.172.21, sa_prot= 50,
    sa_spi= 0x150(336),
    sa_trans= esp-des esp-md5-hmac , sa_conn_id= 361,
  (identity) local= 172.16.172.39, remote= 172.16.172.21,
    local_proxy= 172.16.172.39/255.255.255.255/47/0 (type=1),
    remote_proxy= 172.16.172.21/255.255.255.255/47/0 (type=1)
1720-1#

1720-1#show crypto isakmp sa
dst             src             state          conn-id    slot
172.16.172.39   172.16.172.21   QM_IDLE             81       0

1720-1#show crypto ipsec sa

interface: FastEthernet0
    Crypto map tag: vpn, local addr. 172.16.172.39

   local  ident (addr/mask/prot/port): (172.16.172.39/255.255.255.255/0/0)
   remote ident (addr/mask/prot/port): (172.16.172.21/255.255.255.255/0/0)
   current_peer: 172.16.172.21
     PERMIT, flags={transport_parent,}
    #pkts encaps: 0, #pkts encrypt: 0, #pkts digest 0
    #pkts decaps: 0, #pkts decrypt: 0, #pkts verify 0
    #pkts compressed: 0, #pkts decompressed: 0
    #pkts not compressed: 0, #pkts compr. failed: 0,
    #pkts decompress failed: 0, #send errors 0, #recv errors 0

     local crypto endpt.: 172.16.172.39, remote crypto endpt.: 172.16.172.21
     path mtu 1514, media mtu 1514
     current outbound spi: 0

     inbound esp sas:

     inbound ah sas:

     inbound pcp sas:

     outbound esp sas:

     outbound ah sas:

     outbound pcp sas:

   local  ident (addr/mask/prot/port): (172.16.172.39/255.255.255.255/47/0)
   remote ident (addr/mask/prot/port): (172.16.172.21/255.255.255.255/47/0)
   current_peer: 172.16.172.21
     PERMIT, flags={origin_is_acl,transport_parent,parent_is_transport,}
    #pkts encaps: 34901, #pkts encrypt: 34901, #pkts digest 34901
    #pkts decaps: 34900, #pkts decrypt: 34900, #pkts verify 34900
    #pkts compressed: 0, #pkts decompressed: 0
    #pkts not compressed: 0, #pkts compr. failed: 0,
    #pkts decompress failed: 0, #send errors 0, #recv errors 0

     local crypto endpt.: 172.16.172.39, remote crypto endpt.: 172.16.172.21
```

```
     path mtu 1500, media mtu 1500
     current outbound spi: 151

     inbound esp sas:
      spi: 0x356141A8(895566248)
        transform: esp-des esp-md5-hmac ,
        in use settings ={Transport, }
        slot: 0, conn id: 362, flow_id: 163, crypto map: vpn
        sa timing: remaining key lifetime (k/sec): (1046258/3306)
        IV size: 8 bytes
        replay detection support: Y

     inbound ah sas:

     inbound pcp sas:

     outbound esp sas:
      spi: 0x151(337)
        transform: esp-des esp-md5-hmac ,
        in use settings ={Transport, }
        slot: 0, conn id: 363, flow_id: 164, crypto map: vpn
        sa timing: remaining key lifetime (k/sec): (1046258/3306)
        IV size: 8 bytes
        replay detection support: Y

     outbound ah sas:

     outbound pcp sas:



interface: Tunnel0
    Crypto map tag: vpn, local addr. 172.16.172.39

   local  ident (addr/mask/prot/port): (172.16.172.39/255.255.255.255/0/0)
   remote ident (addr/mask/prot/port): (172.16.172.21/255.255.255.255/0/0)
   current_peer: 172.16.172.21
     PERMIT, flags={transport_parent,}
    #pkts encaps: 0, #pkts encrypt: 0, #pkts digest 0
    #pkts decaps: 0, #pkts decrypt: 0, #pkts verify 0
    #pkts compressed: 0, #pkts decompressed: 0
    #pkts not compressed: 0, #pkts compr. failed: 0,
    #pkts decompress failed: 0, #send errors 0, #recv errors 0

     local crypto endpt.: 172.16.172.39, remote crypto endpt.: 172.16.172.21
     path mtu 1514, media mtu 1514
     current outbound spi: 0

     inbound esp sas:

     inbound ah sas:

     inbound pcp sas:

     outbound esp sas:

     outbound ah sas:

     outbound pcp sas:



   local  ident (addr/mask/prot/port): (172.16.172.39/255.255.255.255/47/0)
   remote ident (addr/mask/prot/port): (172.16.172.21/255.255.255.255/47/0)
```

```
   current_peer: 172.16.172.21
     PERMIT, flags={origin_is_acl,transport_parent,parent_is_transport,}
    #pkts encaps: 35657, #pkts encrypt: 35657, #pkts digest 35657
    #pkts decaps: 35656, #pkts decrypt: 35656, #pkts verify 35656
    #pkts compressed: 0, #pkts decompressed: 0
    #pkts not compressed: 0, #pkts compr. failed: 0,
    #pkts decompress failed: 0, #send errors 0, #recv errors 0

     local crypto endpt.: 172.16.172.39, remote crypto endpt.: 172.16.172.21
     path mtu 1500, media mtu 1500
     current outbound spi: 151

     inbound esp sas:
      spi: 0x356141A8(895566248)
        transform: esp-des esp-md5-hmac ,
        in use settings ={Transport, }
        slot: 0, conn id: 362, flow_id: 163, crypto map: vpn
        sa timing: remaining key lifetime (k/sec): (1046154/3302)
        IV size: 8 bytes
        replay detection support: Y

     inbound ah sas:

     inbound pcp sas:

     outbound esp sas:
      spi: 0x151(337)
        transform: esp-des esp-md5-hmac ,
        in use settings ={Transport, }
        slot: 0, conn id: 363, flow_id: 164, crypto map: vpn
        sa timing: remaining key lifetime (k/sec): (1046154/3302)
        IV size: 8 bytes
        replay detection support: Y

     outbound ah sas:

     outbound pcp sas:

1720-1#show crypto engine connections active

  ID Interface             IP-Address    State  Algorithm    Encrypt Decrypt
  81 FastEthernet0  172.16.172.39   set  HMAC_MD5+DES_56_CB      0       0
 362 FastEthernet0  172.16.172.39   set  HMAC_MD5+DES_56_CB      0   23194
 363 FastEthernet0  172.16.172.39   set  HMAC_MD5+DES_56_CB  23195       0
```

Debugs in de VPN 5002 Concentrator

De uitvoer van Syrische gegevens in de VPN-centrator wordt hier weergegeven.

```
VPN5002_8_323E9040: Main# VPN 0:1 opened for 172.16.172.39 from 172.16.172.39.
User assigned IP address 50.1.1.2

VPN5002_8_323E9040: Main#show vpn partner verbose


Port        Partner         Partner  Default  Bindto          Connect
Number      Address         Port     Partner  Address         Time
-------------------------------------------------------------------------
VPN 0:1     172.16.172.39   500      No       172.16.172.21   00:00:13:26
     Auth/Encrypt: MD5e/DES  User Auth: Shared Key
     Access: Static Peer: 172.16.172.39    Local: 172.16.172.21
     Start:14518 seconds Managed:15299 seconds State:imnt_maintenance
```

```
IOP slot 1:
No active connections found.


VPN5002_8_323E9040: Main#show vpn statistics verbose

          Current  In       High     Running  Script   Script   Script
          Active   Negot    Water    Total    Starts   OK       Error
          -----------------------------------------------------------
Users     0        0        0        0        0        0        0
Partners  1        0        1        81       81       1        158
Total     1        0        1        81       81       1        158

Stats             VPN0:1
Wrapped            79733
Unwrapped          79734
BadEncap               0
BadAuth                0
BadEncrypt             0
rx IP              79749
rx IPX                 0
rx Other               0
tx IP              79761
tx IPX                 0
tx Other               0
IKE rekey              0

Input VPN pkts dropped due to no SA: 0

Input VPN pkts dropped due to no free queue entries: 0

IOP slot 1:

          Current  In       High     Running  Script   Script   Script
          Active   Negot    Water    Total    Starts   OK       Error
          -----------------------------------------------------------
Users     0        0        0        0        0        0        0
Partners  0        0        0        0        0        0        0
Total     0        0        0        0        0        0        0
Stats
Wrapped
Unwrapped
BadEncap
BadAuth
BadEncrypt
rx IP
rx IPX
rx Other
tx IP
tx IPX
tx Other
IKE rekey

Input VPN pkts dropped due to no SA: 0

Input VPN pkts dropped due to no free queue entries: 0
```

Misconfiguratie van de tunnelmodus

VPN 5000 Concentrator stelt standaard transportmodus voor wanneer GRE via IPSec wordt gebruikt. Wanneer de Cisco IOS-router voor tunnelmodus verkeerd is ingesteld, gebeuren deze

fouten.

Debug uitvoer op de Cisco IOS router wordt hier weergegeven.

```
2d21h: ISAKMP (0:23): Checking IPSec proposal 1
2d21h: ISAKMP: transform 1, ESP_DES
2d21h: ISAKMP: attributes in transform:
2d21h: ISAKMP: SA life type in seconds
2d21h: ISAKMP: SA life duration (VPI) of 0x0 0x1 0x51 0x80
2d21h: ISAKMP: SA life type in kilobytes
2d21h: ISAKMP: SA life duration (VPI) of 0x0 0x10 0x0 0x0
2d21h: ISAKMP: encaps is 2
2d21h: ISAKMP: authenticator is HMAC-MD5
2d21h: IPSEC(validate_proposal): invalid transform proposal flags -- 0x0
```

Het logbestand op de VPN 5002 Concentrator toont een ingang die vergelijkbaar is met deze uitvoer.

```
lan-lan-VPN0:1:[172.16.172.39]: received notify from partner --
notify: NO PROPOSAL CHOSEN
```

Gerelateerde informatie

- Cisco VPN 5000 Series Concentrators end-of-sale aankondiging
- Ondersteuning van Cisco VPN 5000 Concentrator-pagina
- Cisco VPN 5000 clientondersteuningspagina
- IPsec-ondersteuningspagina
- Technische ondersteuning - Cisco-systemen