

# PIX-to-PIX 6.x: Configuratievoorbeeld van Easy VPN (NEM)

## Inhoud

[Inleiding](#)

[Voorwaarden](#)

[Vereisten](#)

[Gebruikte componenten](#)

[Conventies](#)

[Configureren](#)

[Netwerkdiagram](#)

[Configuraties](#)

[Verifiëren](#)

[PIX Easy VPN-server toont opdrachten en voorbeelduitvoer](#)

[PIX Easy VPN Remote Hardware Client-show Opdrachten en voorbeelduitvoer](#)

[Problemen oplossen](#)

[Gemakkelijke VPN-serveropdrachten](#)

[Eenvoudig VPN-afstandsbediening voor hardware](#)

[Gerelateerde informatie](#)

## [Inleiding](#)

Dit document biedt een voorbeeldconfiguratie voor IPsec tussen de PIX Easy VPN Remote Hardware Client en de PIX Easy VPN-server. De Easy VPN Remote optie voor PIX is geïntroduceerd in PIX versie 6.2 en wordt ook aangeduid als hardware client/EzVPN-client. Cisco Easy VPN Server wordt ondersteund in PIX-softwareversie 6.0 en hoger.

Raadpleeg [PIX/ASA 7.x Easy VPN met een ASA 5500 als de Server en PIX 506E als het Configuratievoorbeeld van de client \(NEM\)](#) om meer te weten te komen over hetzelfde scenario waarin het beveiligingsapparaat met softwareversie 7.x werkt.

Raadpleeg [PIX/ASA 7.x Easy VPN met een ASA 5500 als de server en Cisco 871 als het Easy VPN Remote Configuration-voorbeeld](#) voor meer informatie over een vergelijkbaar scenario waarin Cisco 871 router werkt als de Easy VPN-afstandsbediening.

Raadpleeg [VPN-hardwareclient voor een PIX 501/506 Series security applicatie met VPN 3000 Concentrator Configuration Voorbeeld](#) voor meer informatie over een vergelijkbaar scenario waarin Cisco VPN 3000 Concentrator fungert als de Easy VPN-server.

Raadpleeg [PIX 501/506 Easy VPN-afstandsbediening naar een IOS-router in Network Extension Mode met uitgebreid verificatievoorbeeld](#) voor meer informatie over een vergelijkbaar scenario waarin Cisco IOS®-router werkt als de Makkelijk VPN-server.

# Voorwaarden

## Vereisten

Zorg ervoor dat u aan deze vereisten voldoet voordat u deze configuratie probeert:

- Zorg ervoor dat uw PIX Easy VPN Remote Hardware Client een PIX 501 of PIX 506/506E is die PIX-softwareversie 6.2 of hoger gebruikt.
- Zorg ervoor dat uw Easy VPN Server een PIX-firewall is die PIX-softwareversie 6.0 of hoger gebruikt.

## Gebruikte componenten

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

- PIX Easy VPN hardware-client is een PIX 501 met PIX-softwareversie 6.3(1).
- Easy VPN Server is een PIX 515 dat PIX-softwareversie 6.3(1) uitvoert.

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 de [Cisco Technical Tips Convention](#) voor meer informatie over documentconventies.

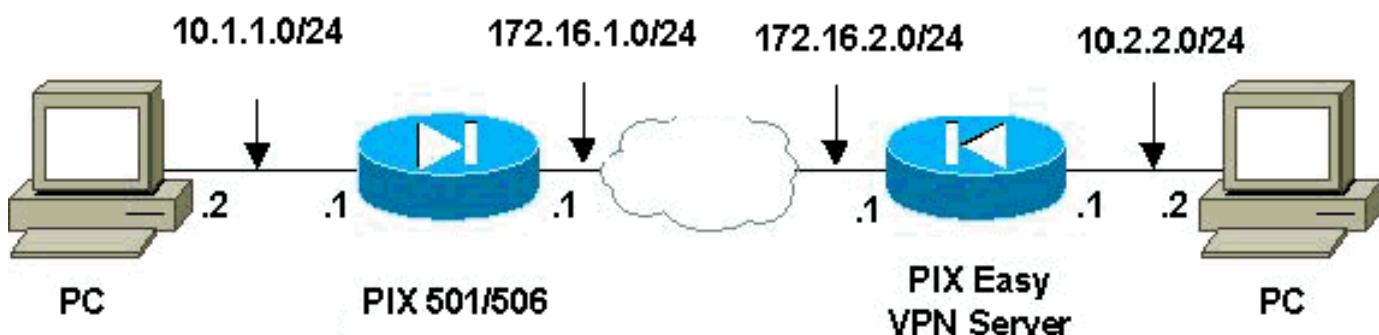
# Configureren

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

**Opmerking:** Gebruik het [Opname Gereedschap](#) ([alleen geregistreerde klanten](#)) om meer informatie te verkrijgen over de opdrachten die in deze sectie worden gebruikt.

## Netwerdiagram

Het netwerk in dit document is als volgt opgebouwd:



## Configuraties

Dit document gebruikt deze configuraties:

- [PIX-Easy VPN-server](#)
- [PIX Makkelijk VPN-externe hardwareclient](#)

### **PIX-Easy VPN-server**

```
pix515#write terminal
Building configuration...
: Saved
:
PIX Version 6.3(1)
!--- Specify speed and duplex settings. interface
ethernet0 auto interface ethernet1 auto interface
ethernet2 auto shutdown interface ethernet3 auto
shutdown interface ethernet4 auto shutdown interface
ethernet5 auto shutdown nameif ethernet0 outside
security0 nameif ethernet1 inside security100 nameif
ethernet2 intf2 security4 nameif ethernet3 intf3
security6 nameif ethernet4 intf4 security8 nameif
ethernet5 intf5 security10 enable password
8Ry2YjIyt7RRXU24 encrypted passwd 2KFQnbNIdI.2KYOU
encrypted hostname pix515 fixup protocol ftp 21 fixup
protocol h323 h225 1720 fixup protocol h323 ras 1718-
1719 fixup protocol http 80 fixup protocol ils 389 fixup
protocol rsh 514 fixup protocol rtsp 554 fixup protocol
sip 5060 fixup protocol sip udp 5060 fixup protocol
skinny 2000 fixup protocol smtp 25 fixup protocol sqlnet
1521 names !--- Specify split tunnelling access list and
"nonat" access list. access-list 101 permit ip 10.2.2.0
255.255.255.0 10.1.1.0 255.255.255.0 pager lines 24 mtu
outside 1500 mtu inside 1500 mtu intf2 1500 mtu intf3
1500 mtu intf4 1500 mtu intf5 1500 !--- Define IP
address for the PIX's inside and outside interfaces. ip
address outside 172.16.2.1 255.255.255.0 ip address
inside 10.2.2.1 255.255.255.0 no ip address intf2 no ip
address intf3 no ip address intf4 no ip address intf5 ip
audit info action alarm ip audit attack action alarm ip
local pool ippool 10.3.3.1-10.3.3.254 no failover
failover timeout 0:00:00 failover poll 15 no failover ip
address outside no failover ip address inside no
failover ip address intf2 no failover ip address intf3
no failover ip address intf4 no failover ip address
intf5 pdm history enable arp timeout 14400 !---
Configure Network Address Translation (NAT) / !--- Port
Address Translation (PAT) for regular traffic, !--- as
well as NAT for IPsec traffic. global (outside) 1
interface nat (inside) 0 access-list 101 nat (inside) 1
0.0.0.0 0.0.0.0 0 0 !--- Define the outside router as
the default gateway. !--- Typically this is the IP
address of your !--- Internet service provider's (ISP)
router. route outside 0.0.0.0 0.0.0.0 172.16.2.2 1
timeout xlate 3:00:00 timeout conn 1:00:00 half-closed
0:10:00 udp 0:02:00 rpc 0:10:00 h225 1:00:00 timeout
h323 0:05:00 mgcp 0:05:00 sip 0:30:00 sip_media 0:02:00
timeout uauth 0:05:00 absolute aaa-server TACACS+
protocol tacacs+ aaa-server RADIUS protocol radius aaa-
server LOCAL protocol local no snmp-server location no
snmp-server contact snmp-server community public no
```

```

snmp-server enable traps floodguard enable syscpt
connection permit-ipsec !--- Configure IPsec transform
set and dynamic crypto map. crypto ipsec transform-set
myset esp-aes esp-md5-hmac crypto dynamic-map dynmap 10
set transform-set myset crypto map mymap 10 ipsec-isakmp
dynamic dynmap !--- Apply crypto map to the outside
interface. crypto map mymap interface outside !---
Configure Phase 1 Internet Security Association -- and
Key Management Protocol (ISAKMP) parameters. isakmp
enable outside isakmp identity address isakmp policy 10
authentication pre-share isakmp policy 10 encryption aes
isakmp policy 10 hash md5 isakmp policy 10 group 2
isakmp policy 10 lifetime 86400 !--- Configure VPNGroup
parameters, to be sent down to the client. vpngroup
mygroup address-pool ippool vpngroup mygroup dns-server
10.2.2.2 vpngroup mygroup wins-server 10.2.2.2 vpngroup
mygroup default-domain cisco.com vpngroup mygroup split-
tunnel 101 vpngroup mygroup idle-time 1800 vpngroup
mygroup password ***** vpngroup idle-time idle-time
1800 telnet timeout 5 ssh timeout 5 console timeout 0
terminal width 80
Cryptochecksum:67106d7a5a3aa3da0caaeeaa93b9fc8d6 : end
[OK] pix515#

```

## PIX Makkelijk VPN-externe hardwareclient

```

pix501#write terminal
Building configuration...
: Saved
:
PIX Version 6.3(1)
!--- Specify speed and duplex settings. interface
ethernet0 auto interface ethernet1 100full nameif
ethernet0 outside security0 nameif ethernet1 inside
security100 enable password 8Ry2YjIyt7RRXU24 encrypted
passwd 2KFQnbNIdI.2KYOU encrypted hostname pix501 fixup
protocol ftp 21 fixup protocol h323 h225 1720 fixup
protocol h323 ras 1718-1719 fixup protocol http 80 fixup
protocol ils 389 fixup protocol rsh 514 fixup protocol
rtsp 554 fixup protocol sip 5060 fixup protocol sip udp
5060 fixup protocol skinny 2000 fixup protocol smtp 25
fixup protocol sqlnet 1521 names pager lines 24 mtu
outside 1500 mtu inside 1500 !--- Define IP address for
the PIX's inside and outside interfaces. ip address
outside 172.16.1.1 255.255.255.0 ip address inside
10.1.1.1 255.255.255.0 ip audit info action alarm ip
audit attack action alarm pdm history enable arp timeout
14400 !--- Configure NAT for traffic that is not
encrypted. global (outside) 1 interface nat (inside) 1
0.0.0.0 0.0.0.0 0 0 !--- Define the outside router as
the default gateway. !--- Typically this is the IP
address of your ISP's router. route outside 0.0.0.0
0.0.0.0 172.16.1.2 1 timeout xlate 3:00:00 timeout conn
1:00:00 half-closed 0:10:00 udp 0:02:00 rpc 0:10:00 h225
1:00:00 timeout h323 0:05:00 mgcp 0:05:00 sip 0:30:00
sip_media 0:02:00 timeout uauth 0:05:00 absolute aaa-
server TACACS+ protocol tacacs+ aaa-server RADIUS
protocol radius aaa-server LOCAL protocol local no snmp-
server location no snmp-server contact snmp-server
community public no snmp-server enable traps floodguard
enable telnet timeout 5 ssh timeout 5 console timeout 0
!--- Define Easy VPN Remote parameters. vpnclient server
172.16.2.1 vpnclient mode network-extension-mode

```

```

vpnclient vpngroup mygroup password ***** !--- Enable
the VPN Client. !--- (This automatically initiates the
IPSec tunnel to the server.) vpnclient enable terminal
width 80 Cryptochecksum:b8242b410ad8e3b372018cd1cff77f91
: end [OK]

```

## Verifiëren

Gebruik dit gedeelte om te bevestigen dat de configuratie correct werkt.

Het [Uitvoer Tolk](#) ([uitsluitend geregistreerde](#) klanten) (OIT) ondersteunt bepaalde **show** opdrachten. Gebruik de OIT om een analyse van **tonen** opdrachtoutput te bekijken.

## PIX Easy VPN-server toont opdrachten en voorbeelduitvoer

- **toon crypto isakmp sa**-Toont alle huidige IKE (Internet Key Exchange) veiligheidsassociaties (SA) bij een peer.

```

pix515#show crypto isakmp sa
Total      : 1
Embryonic : 0
          dst           src       state     pending   created
          172.16.2.1    172.16.1.1  QM_IDLE      0         2
pix515#

```

- **Laat crypto ipsec sa**-displays IPsec SA's zien die tussen peers zijn gebouwd.

```

pix515#show crypto ipsec sa
!--- This command was issued after a ping !--- was attempted from the PC behind the !---
!--- Easy VPN Client to the PC !--- behind the server. interface: outside Crypto map tag: mymap,
local addr. 172.16.2.1 local ident (addr/mask/prot/port): (10.2.2.0/255.255.255.0/0/0)
remote ident (addr/mask/prot/port): (10.1.1.0/255.255.255.0/0/0) current_peer:
172.16.1.1:500 dynamic allocated peer ip: 0.0.0.0 PERMIT, flags={} #pkts encaps: 4, #pkts
encrypt: 4, #pkts digest 4 #pkts decaps: 4, #pkts decrypt: 4, #pkts verify 4 #pkts
compressed: 0, #pkts decompressed: 0 #pkts not compressed: 0, #pkts compr. failed: 0, #pkts
decompress failed: 0 #send errors 0, #recv errors 0 !--- Ping packets !--- were successfully
exchanged between the !--- Easy VPN Remote Hardware Client !--- and the Easy VPN Server.
local crypto endpt.: 172.16.2.1, remote crypto endpt.: 172.16.1.1 path mtu 1500, ipsec
overhead 64, media mtu 1500 current outbound spi: 3a5a28e4 inbound esp sas: spi:
0x505c96c6(1348245190) transform: esp-aes esp-md5-hmac , in use settings ={Tunnel, } slot:
0, conn id: 2, crypto map: mymap sa timing: remaining key lifetime (k/sec): (4607999/28471)
IV size: 16 bytes replay detection support: Y inbound ah sas: inbound pcp sas: outbound esp
sas: spi: 0x3a5a28e4(978987236) transform: esp-aes esp-md5-hmac , in use settings ={Tunnel,
} slot: 0, conn id: 1, crypto map: mymap sa timing: remaining key lifetime (k/sec):
(4607999/28471) IV size: 16 bytes replay detection support: Y outbound ah sas: outbound pcp
sas: local ident (addr/mask/prot/port): (10.2.2.0/255.255.255.0/0/0) remote ident
(addr/mask/prot/port): (172.16.1.1/255.255.255.0/0/0) current_peer: 172.16.1.1:500 dynamic
allocated peer ip: 0.0.0.0 PERMIT, flags={} #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.: 172.16.2.1, remote crypto endpt.: 172.16.1.1 path mtu
1500, ipsec overhead 64, media mtu 1500 current outbound spi: 27f378f9 inbound esp sas: spi:
0xf2bb4f00(4072361728) transform: esp-aes esp-md5-hmac , in use settings ={Tunnel, } slot:
0, conn id: 3, crypto map: mymap sa timing: remaining key lifetime (k/sec): (4608000/27796)
IV size: 16 bytes replay detection support: Y inbound ah sas: inbound pcp sas: outbound esp
sas: spi: 0x27f378f9(670267641) transform: esp-aes esp-md5-hmac , in use settings ={Tunnel,
} slot: 0, conn id: 4, crypto map: mymap sa timing: remaining key lifetime (k/sec):
(4608000/27787) IV size: 16 bytes replay detection support: Y outbound ah sas: outbound pcp
sas: pix515#

```

## PIX Easy VPN Remote Hardware Client-show Opdrachten en voorbeelduitvoer

- **VPN client** schakelt een eenvoudige VPN-afstandsverbinding in. (In Network Extension Mode (NEM) is de tunnel ingeschakeld, zelfs als er geen interessant verkeer wordt uitgewisseld met de head-end Easy VPN-server.)

```
pix501(config)#vpnclient enable
```

- **toon crypto isakmp beleid**-Toont de parameters voor elk IKE beleid.

```
pix501#show crypto isakmp policy
```

```
Default protection suite
  encryption algorithm: DES - Data Encryption Standard (56 bit keys).
  hash algorithm: Secure Hash Standard
  authentication method: Rivest-Shamir-Adleman Signature
  Diffie-Hellman group: #1 (768 bit)
  lifetime: 86400 seconds, no volume limit
```

**Uitvoer van de show crypto isakmp beleidsopdracht nadat de hardwareclient is ingeschakeld wordt hier getoond.**

```
pix501(config)#show crypto isakmp policy
```

```
Protection suite of priority 65001
  encryption algorithm: AES - Advanced Encryption Standard (256 bit keys).
  hash algorithm: Secure Hash Standard
  authentication method: Pre-Shared Key with XAUTH
  Diffie-Hellman group: #2 (1024 bit)
  lifetime: 86400 seconds, no volume limit

Protection suite of priority 65002
  encryption algorithm: AES - Advanced Encryption Standard (256 bit keys).
  hash algorithm: Message Digest 5
  authentication method: Pre-Shared Key with XAUTH
  Diffie-Hellman group: #2 (1024 bit)
  lifetime: 86400 seconds, no volume limit

Protection suite of priority 65003
  encryption algorithm: AES - Advanced Encryption Standard (192 bit keys).
  hash algorithm: Secure Hash Standard
  authentication method: Pre-Shared Key with XAUTH
  Diffie-Hellman group: #2 (1024 bit)
  lifetime: 86400 seconds, no volume limit

Protection suite of priority 65004
  encryption algorithm: AES - Advanced Encryption Standard (192 bit keys).
  hash algorithm: Message Digest 5
  authentication method: Pre-Shared Key with XAUTH
  Diffie-Hellman group: #2 (1024 bit)
  lifetime: 86400 seconds, no volume limit

Protection suite of priority 65005
  encryption algorithm: AES - Advanced Encryption Standard (128 bit keys).
  hash algorithm: Secure Hash Standard
  authentication method: Pre-Shared Key with XAUTH
  Diffie-Hellman group: #2 (1024 bit)
  lifetime: 86400 seconds, no volume limit

Protection suite of priority 65006
  encryption algorithm: AES - Advanced Encryption Standard (128 bit keys).
  hash algorithm: Message Digest 5
  authentication method: Pre-Shared Key with XAUTH
  Diffie-Hellman group: #2 (1024 bit)
  lifetime: 86400 seconds, no volume limit

Protection suite of priority 65007
  encryption algorithm: Three key triple DES
  hash algorithm: Secure Hash Standard
  authentication method: Pre-Shared Key with XAUTH
  Diffie-Hellman group: #2 (1024 bit)
  lifetime: 86400 seconds, no volume limit

Protection suite of priority 65008
```

encryption algorithm: Three key triple DES  
hash algorithm: Message Digest 5  
authentication method: Pre-Shared Key with XAUTH  
Diffie-Hellman group: #2 (1024 bit)  
lifetime: 86400 seconds, no volume limit  
Protection suite of priority 65009  
  encryption algorithm: DES - Data Encryption Standard (56 bit keys).  
  hash algorithm: Message Digest 5  
  authentication method: Pre-Shared Key with XAUTH  
  Diffie-Hellman group: #2 (1024 bit)  
  lifetime: 86400 seconds, no volume limit  
Protection suite of priority 65010  
  encryption algorithm: AES - Advanced Encryption Standard (256 bit keys).  
  hash algorithm: Secure Hash Standard  
  authentication method: Pre-Shared Key  
  Diffie-Hellman group: #2 (1024 bit)  
  lifetime: 86400 seconds, no volume limit  
Protection suite of priority 65011  
  encryption algorithm: AES - Advanced Encryption Standard (256 bit keys).  
  hash algorithm: Message Digest 5  
  authentication method: Pre-Shared Key  
  Diffie-Hellman group: #2 (1024 bit)  
  lifetime: 86400 seconds, no volume limit  
Protection suite of priority 65012  
  encryption algorithm: AES - Advanced Encryption Standard (192 bit keys).  
  hash algorithm: Secure Hash Standard  
  authentication method: Pre-Shared Key  
  Diffie-Hellman group: #2 (1024 bit)  
  lifetime: 86400 seconds, no volume limit  
Protection suite of priority 65013  
  encryption algorithm: AES - Advanced Encryption Standard (192 bit keys).  
  hash algorithm: Message Digest 5  
  authentication method: Pre-Shared Key  
  Diffie-Hellman group: #2 (1024 bit)  
  lifetime: 86400 seconds, no volume limit  
Protection suite of priority 65014  
  encryption algorithm: AES - Advanced Encryption Standard (128 bit keys).  
  hash algorithm: Secure Hash Standard  
  authentication method: Pre-Shared Key  
  Diffie-Hellman group: #2 (1024 bit)  
  lifetime: 86400 seconds, no volume limit  
Protection suite of priority 65015  
  encryption algorithm: AES - Advanced Encryption Standard (128 bit keys).  
  hash algorithm: Message Digest 5  
  authentication method: Pre-Shared Key  
  Diffie-Hellman group: #2 (1024 bit)  
  lifetime: 86400 seconds, no volume limit  
Protection suite of priority 65016  
  encryption algorithm: Three key triple DES  
  hash algorithm: Secure Hash Standard  
  authentication method: Pre-Shared Key  
  Diffie-Hellman group: #2 (1024 bit)  
  lifetime: 86400 seconds, no volume limit  
Protection suite of priority 65017  
  encryption algorithm: Three key triple DES  
  hash algorithm: Message Digest 5  
  authentication method: Pre-Shared Key  
  Diffie-Hellman group: #2 (1024 bit)  
  lifetime: 86400 seconds, no volume limit  
Protection suite of priority 65018  
  encryption algorithm: DES - Data Encryption Standard (56 bit keys).  
  hash algorithm: Message Digest 5  
  authentication method: Pre-Shared Key  
  Diffie-Hellman group: #2 (1024 bit)

lifetime: 86400 seconds, no volume limit

- **toon crypto isakmp sa**-Toont alle huidige IKE SAs bij een peer.

```
pix501(config)#show crypto isakmp sa
Total : 1
Embryonic : 0
dst src state pending created
172.16.2.1 172.16.1.1 QM_IDLE 0 1
```

- **Laat crypto ipsec sa**-displays IPsec SA's zien die tussen peers zijn gebouwd.

```
pix501(config)#show crypto ipsec sa
!--- This command was issued after a ping !--- was attempted from the PC behind the !---
!--- Easy VPN client to the PC !--- behind the server. interface: outside Crypto map tag:
_vpnc_cm, local addr. 172.16.1.1 local ident (addr/mask/prot/port):
(10.1.1.0/255.255.255.0/0/0) remote ident (addr/mask/prot/port):
(10.2.2.0/255.255.255.0/0/0) current_peer: 172.16.2.1:500 PERMIT, flags={origin_is_acl,}
#pkts encaps: 4, #pkts encrypt: 4, #pkts digest 4 #pkts decaps: 4, #pkts decrypt: 4, #pkts
verify 4 #pkts compressed: 0, #pkts decompressed: 0 #pkts not compressed: 0, #pkts compr.
failed: 0, #pkts decompress failed: 0 #send errors 1, #recv errors 0 !--- Ping packets !---
were successfully exchanged between !--- the Easy VPN Remote Hardware Client !--- and the
Easy VPN Server. local crypto endpt.: 172.16.1.1, remote crypto endpt.: 172.16.2.1 path mtu
1500, ipsec overhead 64, media mtu 1500 current outbound spi: 505c96c6 inbound esp sas: spi:
0x3a5a28e4(978987236) transform: esp-aes esp-md5-hmac , in use settings ={Tunnel, } slot: 0,
conn id: 4, crypto map: _vpnc_cm sa timing: remaining key lifetime (k/sec): (4607999/28745)
IV size: 16 bytes replay detection support: Y inbound ah sas: inbound pcp sas: outbound esp
sas: spi: 0x505c96c6(1348245190) transform: esp-aes esp-md5-hmac , in use settings ={Tunnel,
} slot: 0, conn id: 3, crypto map: _vpnc_cm sa timing: remaining key lifetime (k/sec):
(4607999/28745) IV size: 16 bytes replay detection support: Y outbound ah sas: outbound pcp
sas: local ident (addr/mask/prot/port): (172.16.1.1/255.255.255.255/0/0) remote ident
(addr/mask/prot/port): (10.2.2.0/255.255.255.0/0/0) current_peer: 172.16.2.1:500 PERMIT,
flags={origin_is_acl,} #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.: 172.16.1.1, remote crypto endpt.: 172.16.2.1 path mtu 1500,
ipsec overhead 64, media mtu 1500 current outbound spi: f2bb4f00 inbound esp sas: spi:
0x27f378f9(670267641) transform: esp-aes esp-md5-hmac , in use settings ={Tunnel, } slot: 0,
conn id: 1, crypto map: _vpnc_cm sa timing: remaining key lifetime (k/sec): (4608000/28125)
IV size: 16 bytes replay detection support: Y inbound ah sas: inbound pcp sas: outbound esp
sas: spi: 0xf2bb4f00(4072361728) transform: esp-aes esp-md5-hmac , in use settings ={Tunnel,
} slot: 0, conn id: 2, crypto map: _vpnc_cm sa timing: remaining key lifetime (k/sec):
(4608000/28125) IV size: 16 bytes replay detection support: Y outbound ah sas: outbound pcp
sas: pix501(config)#

```

- **Laat VPN-client-displays VPN-client of Makkelijk VPN-configuratieinformatie zien.**

```
pix501(config)#show vpncclient
LOCAL CONFIGURATION
vpncclient server 172.16.2.1
vpncclient mode network-extension-mode
vpncclient vpnclient mygroup password *****
vpncclient enable
```

```
DOWNLOADED DYNAMIC POLICY
Current Server : 172.16.2.1
Primary DNS : 10.2.2.2
Primary WINS : 10.2.2.2
Default Domain : cisco.com
PFS Enabled : No
Secure Unit Authentication Enabled : No
User Authentication Enabled : No
Split Networks : 10.2.2.0/255.255.255.0
Backup Servers : None
```

```
pix501(config)#

```

## Problemen oplossen

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

Als u de Easy VPN Remote Hardware Client en Makkelijk VPN-server hebt ingesteld zoals in dit document wordt beschreven en nog steeds problemen ondervindt, verzamelt u de debug-uitvoer van elke PIX en de uitvoer van de opdrachten van de **show** voor analyse door het Cisco Technical Assistance Center (TAC). Raadpleeg ook de [optie Problemen oplossen door de PIX te selecteren om gegevensverkeer door te geven op een ingestelde IPsec-tunneloplossing of IP-beveiligingsprobleemoplossing - door opdrachten te begrijpen en te gebruiken voor debug](#).

Schakel IPsec in op de PIX.

PIX debug-opdrachten en voorbeelduitvoer worden hier weergegeven.

- [Gemakkelijke VPN-serveropdrachten](#)
- [Eenvoudig VPN-afstandsbediening voor hardware](#)

**Opmerking:** Raadpleeg [Belangrijke informatie over debug Commands](#) voordat u debug-opdrachten gebruikt.

## [Gemakkelijke VPN-serveropdrachten](#)

- **debug crypto ipsec** — displays de IPsec onderhandelingen van fase 2.
- **debug crypto isakmp** — Hiermee geeft u de ISAKMP-onderhandelingen van fase 1 weer.

Dit is een voorbeelduitvoer.

```
pix515(config)#  
! --- As soon as the vpnclient enable command !--- is issued on the remote client PIX, !--- the  
server receives an IKE negotiation request.  
  
crypto_isakmp_process_block:src:172.16.1.1,  
    dest:172.16.2.1 spt:500 dpt:500  
OAK_AG exchange  
ISAKMP (0): processing SA payload. message ID = 0  
  
ISAKMP (0): Checking ISAKMP transform 1 against priority 10 policy  
ISAKMP:      encryption AES-CBC  
ISAKMP:      keylength of 256  
ISAKMP:      hash SHA  
ISAKMP:      default group 2  
ISAKMP:      extended auth pre-share (init)  
ISAKMP:      life type in seconds  
ISAKMP:      life duration (VPI) of 0x0 0x1 0x51 0x80  
ISAKMP (0): atts are not acceptable. Next payload is 3  
ISAKMP (0): Checking ISAKMP transform 2 against priority 10 policy  
ISAKMP:      encryption AES-CBC  
ISAKMP:      keylength of 256  
ISAKMP:      hash MD5  
ISAKMP:      default group 2  
ISAKMP:      extended auth pre-share (init)  
ISAKMP:      life type in seconds  
ISAKMP:      life duration (VPI) of 0x0 0x1 0x51 0x80  
ISAKMP (0): atts are not acceptable. Next payload is 3  
ISAKMP (0): Checking ISAKMP transform 3 against priority 10 policy  
ISAKMP:      encryption AES-CBC  
ISAKMP:      keylength of 192  
ISAKMP:      hash SHA  
ISAKMP:      default group 2  
ISAKMP:      extended auth pre-share (init)
```

```
ISAKMP:      life type in seconds
ISAKMP:      life duration (VPI) of 0x0 0x1 0x51 0x80
ISAKMP (0): atts are not acceptable. Next payload is 3
ISAKMP (0): Checking ISAKMP transform 4 against priority 10 policy
ISAKMP:      encryption AES-CBC
ISAKMP:      keylength of 192
ISAKMP:      hash MD5
ISAKMP:      default group 2
ISAKMP:      extended auth pre-share (init)
ISAKMP:      life type in seconds
ISAKMP:      life duration (VPI) of 0x0 0x1 0x51 0x80
ISAKMP (0): atts are not acceptable. Next payload is 3
ISAKMP (0): Checking ISAKMP transform 5 against priority 10 policy
ISAKMP:      encryption AES-CBC
ISAKMP:      keylength of 128
ISAKMP:      hash SHA
ISAKMP:      default group 2
ISAKMP:      extended auth pre-share (init)
ISAKMP:      life type in seconds
ISAKMP:      life duration (VPI) of 0x0 0x1 0x51 0x80
ISAKMP (0): atts are not acceptable. Next payload is 3
ISAKMP (0): Checking ISAKMP transform 6 against priority 10 policy
ISAKMP:      encryption AES-CBC
ISAKMP:      keylength of 128
ISAKMP:      hash MD5
ISAKMP:      default group 2
ISAKMP:      extended auth pre-share (init)
ISAKMP:      life type in seconds
ISAKMP:      life duration (VPI) of 0x0 0x1 0x51 0x80
ISAKMP (0): atts are not acceptable. Next payload is 3
ISAKMP (0): Checking ISAKMP transform 7 against priority 10 policy
ISAKMP:      encryption 3DES-CBC
ISAKMP:      hash SHA
ISAKMP:      default group 2
ISAKMP:      extended auth pre-share (init)
ISAKMP:      life type in seconds
ISAKMP:      life duration (VPI) of 0x0 0x1 0x51 0x80
ISAKMP (0): atts are not acceptable. Next payload is 3
ISAKMP (0): Checking ISAKMP transform 8 against priority 10 policy
ISAKMP:      encryption 3DES-CBC
ISAKMP:      hash MD5
ISAKMP:      default group 2
ISAKMP:      extended auth pre-share (init)
ISAKMP:      life type in seconds
ISAKMP:      life duration (VPI) of 0x0 0x1 0x51 0x80
ISAKMP (0): atts are not acceptable. Next payload is 3
ISAKMP (0): Checking ISAKMP transform 9 against priority 10 policy
ISAKMP:      encryption DES-CBC
ISAKMP:      hash MD5
ISAKMP:      default group 2
ISAKMP:      extended auth pre-share (init)
ISAKMP:      life type in seconds
ISAKMP:      life duration (VPI) of 0x0 0x1 0x51 0x80
ISAKMP (0): atts are not acceptable. Next payload is 3
ISAKMP (0): Checking ISAKMP transform 10 against priority 10 policy
crypto_isakmp_process_block:src:172.16.1.1,
    dest:172.16.2.1 spt:500 dpt:500
OAK_AG exchange
ISAKMP (0): processing HASH payload. message ID = 0
ISAKMP (0): processing NOTIFY payload 24578 protocol 1
    spi 0, message ID = 0
ISAKMP (0): processing notify INITIAL_CONTACTIPSEC(key_engine):
    got a queue event...
IPSEC(key_engine_delete_sas): rec'd delete notify from ISAKMP
```

```
IPSEC(key_engine_delete_sas): delete all SAs shared with 172.16.1.1

ISAKMP (0): processing vendor id payload

ISAKMP (0): received xauth v6 vendor id

ISAKMP (0): processing vendor id payload

ISAKMP (0): remote peer supports dead peer detection

ISAKMP (0): processing vendor id payload

ISAKMP (0): speaking to another IOS box!

ISAKMP (0): processing vendor id payload

crypto_isakmp_process_block:src:172.16.1.1,
    dest:172.16.2.1 spt:500 dpt:500
ISAKMP_TRANSACTION exchange
crypto_isakmp_process_block:src:172.16.1.1,
    dest:172.16.2.1 spt:500 dpt:500
OAK_QM exchange
oakley_process_quick_mode:
OAK_QM_IDLE
ISAKMP (0): processing SA payload. message ID = 4788683

ISAKMP : Checking IPSec proposal 1

ISAKMP: transform 1, ESP_AES
ISAKMP:   attributes in transform:
ISAKMP:     encaps is 1
ISAKMP:     SA life type in seconds
ISAKMP:     SA life duration (basic) of 28800
ISAKMP:     SA life type in kilobytes
ISAKMP:     SA life duration (VPI) of 0x0 0x46 0x50 0x0
ISAKMP:     authenticator is HMAC-SHA
ISAKMP:     key length is 256IPSEC(validate_proposal):
    transform proposal (prot 3, trans 12, hmac_alg 2) not supported

ISAKMP (0): atts not acceptable. Next payload is 0
ISAKMP : Checking IPSec proposal 2

ISAKMP: transform 1, ESP_AES
ISAKMP:   attributes in transform:
ISAKMP:     encaps is 1
ISAKMP:     SA life type in seconds
ISAKMP:     SA life duration (basic) of 28800
ISAKMP:     SA life type in kilobytes
ISAKMP:     SA life duration (VPI) of 0x0 0x46 0x50 0x0
ISAKMP:     authenticator is HMAC-MD5
ISAKMP:     key length is 256IPSEC(validate_proposal):
    transform proposal (prot 3, trans 12, hmac_alg 1) not supported

ISAKMP (0): atts not acceptable. Next payload is 0
ISAKMP : Checking IPSec proposal 3

ISAKMP: transform 1, ESP_AES
ISAKMP:   attributes in transform:
ISAKMP:     encaps is 1
ISAKMP:     SA life type in seconds
ISAKMP:     SA life duration (basic) of 28800
ISAKMP:     SA life type in kilobytes
ISAKMP:     SA life duration (VPI) of 0x0 0x46 0x50 0x0
ISAKMP:     authenticator is HMAC-SHA
```

```

ISAKMP:      key length is 192IPSEC(validate_proposal):
    transform proposal (prot 3, trans 12, hmac_alg 2) not supported

ISAKMP (0): atts not acceptable. Next payload is 0
ISAKMP : Checking IPSec proposal 4

ISAKMP: transform 1, ESP_AES
ISAKMP: attributes in transform:
ISAKMP:     encaps is 1
ISAKMP:     SA life type in seconds
ISAKMP:     SA life duration (basic) of 28800
ISAKMP:     SA life type in kilobytes
ISAKMP:     SA life duration (VPI) of 0x0 0x46 0x50 0x0
ISAKMP:     authenticator is HMAC-MD5
ISAKMP:     key length is 192IPSEC(validate_proposal):
    transform proposal (prot 3, trans 12, hmac_alg 1) not supported

ISAKMP (0): atts not acceptable. Next payload is 0
ISAKMP : Checking IPSec proposal 5

ISAKMP: transform 1, ESP_AES
ISAKMP: attributes in transform:
ISAKMP:     encaps is 1
ISAKMP:     SA life type in seconds
ISAKMP:     SA life duration (basic) of 28800
ISAKMP:     SA life type in kilobytes
ISAKMP:     SA life duration (VPI) of 0x0 0x46 0x50 0x0
ISAKMP:     authenticator is HMAC-SHA
ISAKMP:     key length is 128IPSEC(validate_proposal):
    transform proposal (prot 3, trans 12, hmac_alg 2) not supported

ISAKMP (0): atts not acceptable. Next payload is 0
ISAKMP : Checking IPSec proposal 6

ISAKMP: transform 1, ESP_AES
ISAKMP: attributes in transform:
ISAKMP:     encaps is 1
ISAKMP:     SA life type in seconds
ISAKMP:     SA life duration (basic) of 28800
ISAKMP:     SA life type in kilobytes
ISAKMP:     SA life duration (VPI) of 0x0 0x46 0x50 0x0
ISAKMP:     authenticator is HMAC-MD5
ISAKMP:     key length is 128
ISAKMP (0): atts are acceptable.IPSEC(validate_proposal_request):
    proposal part #1,
(key eng. msg.) dest= 172.16.2.1, src= 172.16.1.1,
dest_proxy= 10.2.2.0/255.255.255.0/0/0 (type=4),
src_proxy= 172.16.1.1/255.255.255.255/0/0 (type=1),
protocol= ESP, transform= esp-aes esp-md5-hmac ,
lifedur= 0s and 0kb,
spi= 0x0(0), conn_id= 0, keysiz= 128, flags= 0x4
---- Both PIXes accept the policy for IPsec. ISAKMP (0): processing NONCE payload. message ID =
4788683 ISAKMP (0): processing ID payload. message ID = 4788683 ISAKMP (0): ID_IPV4_ADDR src
172.16.1.1 prot 0 port 0 ISAKMP (0): processing ID payload. message ID = 4788683 ISAKMP (0):
ID_IPV4_ADDR_SUBNET dst 10.2.2.0/255.255.255.0 prot 0 port 0IPSEC(key_engine): got a queue
event... IPSEC(spi_response): getting spi 0xf5720496(4117890198) for SA from 172.16.1.1 to
172.16.2.1 for prot 3 return status is IKMP_NO_ERROR crypto_isakmp_process_block:src:172.16.1.1,
dest:172.16.2.1 spt:500 dpt:500 OAK_QM exchange oakley_process_quick_mode: OAK_QM_AUTH_AWAIT
ISAKMP (0): Creating IPSec SAs inbound SA from 172.16.1.1 to 172.16.2.1 (proxy 172.16.1.1 to
10.2.2.0) has spi 4117890198 and conn_id 3 and flags 4 lifetime of 28800 seconds
crypto_isakmp_process_block:src:172.16.1.1, dest:172.16.2.1 spt:500 dpt:500 ISAKMP (0):
processing NOTIFY payload 36136 protocol 1 spi 0, message ID = 843197376 ISAKMP (0): received
DPD_R_U_THERE from peer 172.16.1.1 ISAKMP (0): sending NOTIFY message 36137 protocol 1 return
status is IKMP_NO_ERR_NO_TRANS crypto_isakmp_process_block:src:172.16.1.1, dest:172.16.2.1

```

```
spt:500 dpt:500 ISAKMP (0): processing NOTIFY payload 36136 protocol 1 spi 0, message ID = 1985282089 ISAMKP (0): received DPD_R_U THERE from peer 172.16.1.1 ISAKMP (0): sending NOTIFY message 36137 protocol 1 return status is IKMP_NO_ERR_NO_TRANS
crypto_isakmp_process_block:src:172.16.1.1, dest:172.16.2.1 spt:500 dpt:500 ISAKMP (0): processing NOTIFY payload 36136 protocol 1 spi 0, message ID = 1510977390 ISAMKP (0): received DPD_R_U THERE from peer 172.16.1.1 ISAKMP (0): sending NOTIFY message 36137 protocol 1 return status is IKMP_NO_ERR_NO_TRANS
```

## Eenvoudig VPN-afstandsbediening voor hardware

- **debug crypto ipsec** — Displays de IPsec onderhandelingen van fase 2.
- **debug crypto isakmp** — Hiermee geeft u de ISAKMP-onderhandelingen van fase 1 weer.

```
pix501(config)#vpnclient enable
(cIoSnAfkigM)P# (0): ID payload
    next-payload : 13
    type         : 11
    protocol     : 17
    port          : 0
    length        : 11
ISAKMP (0): Total payload length: 15
ISAKMP (0:0): sending NAT-T vendor ID - rev 2 & 3
ISAKMP (0): beginning Aggressive Mode exchange
crypto_isakmp_process_block:src:172.16.2.1,
    dest:172.16.1.1 spt:500 dpt:500
OAK_AG exchange
ISAKMP (0): processing SA payload. message ID = 0

ISAKMP (0): Checking ISAKMP transform 1 against priority 65001 policy
ISAKMP:      encryption AES-CBC
ISAKMP:      keylength of 128
ISAKMP:      hash MD5
ISAKMP:      default group 2
ISAKMP:      auth pre-share
ISAKMP:      life type in seconds
ISAKMP:      life duration (VPI) of 0x0 0x1 0x51 0x80
ISAKMP (0): atts are not acceptable. Next payload is 0
ISAKMP (0): Checking ISAKMP transform 1 against priority 65002 policy
ISAKMP:      encryption AES-CBC
ISAKMP:      keylength of 128
ISAKMP:      hash MD5
ISAKMP:      default group 2
ISAKMP:      auth pre-share
ISAKMP:      life type in seconds
ISAKMP:      life duration (VPI) of 0x0 0x1 0x51 0x80
ISAKMP (0): atts are not acceptable. Next payload is 0
ISAKMP (0): Checking ISAKMP transform 1 against priority 65003 policy
ISAKMP:      encryption AES-CBC
ISAKMP:      keylength of 128
ISAKMP:      hash MD5
ISAKMP:      default group 2
ISAKMP:      auth pre-share
ISAKMP:      life type in seconds
ISAKMP:      life duration (VPI) of 0x0 0x1 0x51 0x80
ISAKMP (0): atts are not acceptable. Next payload is 0
ISAKMP (0): Checking ISAKMP transform 1 against priority 65004 policy
ISAKMP:      encryption AES-CBC
ISAKMP:      keylength of 128
ISAKMP:      hash MD5
ISAKMP:      default group 2
ISAKMP:      auth pre-share
ISAKMP:      life type in seconds
```

```
ISAKMP:      life duration (VPI) of 0x0 0x1 0x51 0x80
ISAKMP (0): atts are not acceptable. Next payload is 0
ISAKMP (0): Checking ISAKMP transform 1 against priority 65005 policy
ISAKMP:      encryption AES-CBC
ISAKMP:      keylength of 128
ISAKMP:      hash MD5
ISAKMP:      default group 2
ISAKMP:      auth pre-share
ISAKMP:      life type in seconds
ISAKMP:      life duration (VPI) of 0x0 0x1 0x51 0x80
ISAKMP (0): atts are not acceptable. Next payload is 0
ISAKMP (0): Checking ISAKMP transform 1 against priority 65006 policy
ISAKMP:      encryption AES-CBC
ISAKMP:      keylength of 128
ISAKMP:      hash MD5
ISAKMP:      default group 2
ISAKMP:      auth pre-share
ISAKMP:      life type in seconds
ISAKMP:      life duration (VPI) of 0x0 0x1 0x51 0x80
ISAKMP (0): atts are not acceptable. Next payload is 0
ISAKMP (0): Checking ISAKMP transform 1 against priority 65007 policy
ISAKMP:      encryption AES-CBC
ISAKMP:      keylength of 128
ISAKMP:      hash MD5
ISAKMP:      default group 2
ISAKMP:      auth pre-share
ISAKMP:      life type in seconds
ISAKMP:      life duration (VPI) of 0x0 0x1 0x51 0x80
ISAKMP (0): atts are not acceptable. Next payload is 0
ISAKMP (0): Checking ISAKMP transform 1 against priority 65008 policy
ISAKMP:      encryption AES-CBC
ISAKMP:      keylength of 128
ISAKMP:      hash MD5
ISAKMP:      default group 2
ISAKMP:      auth pre-share
ISAKMP:      life type in seconds
ISAKMP:      life duration (VPI) of 0x0 0x1 0x51 0x80
ISAKMP (0): atts are not acceptable. Next payload is 0
ISAKMP (0): Checking ISAKMP transform 1 against priority 65009 policy
ISAKMP:      encryption AES-CBC
ISAKMP:      keylength of 128
ISAKMP:      hash MD5
ISAKMP:      default group 2
ISAKMP:      auth pre-share
ISAKMP:      life type in seconds
ISAKMP:      life duration (VPI) of 0x0 0x1 0x51 0x80
ISAKMP : attributes being requested
```

```
crypto_isakmp_process_block:src:172.16.2.1,
  dest:172.16.1.1 spt:500 dpt:500
ISAKMP (0): beginning Quick Mode exchange,
  M-ID of 1112046058:424879eaIPSEC(key_engine): got a queue event...
IPSEC(spi_response): getting spi 0x274d3063(659370083) for SA
  from      172.16.2.1 to      172.16.1.1 for prot 3
```

```
crypto_isakmp_process_block:src:172.16.2.1,
  dest:172.16.1.1 spt:500 dpt:500
OAK_QM exchange
oakley_process_quick_mode:
OAK_QM_IDLE
ISAKMP (0): processing SA payload. message ID = 1112046058

ISAKMP : Checking IPSec proposal 1
```

```

ISAKMP: transform 1, ESP_AES
ISAKMP:   attributes in transform:
ISAKMP:     encaps is 1
ISAKMP:     SA life type in seconds
ISAKMP:     SA life duration (basic) of 28800
ISAKMP:     SA life type in kilobytes
ISAKMP:     SA life duration (VPI) of 0x0 0x46 0x50 0x0
ISAKMP:     authenticator is HMAC-MD5
ISAKMP:     key length is 128
ISAKMP (0): atts are acceptable.IPSEC(validate_proposal_request):
  proposal part #1,
(key eng. msg.) dest= 172.16.2.1, src= 172.16.1.1,
  dest_proxy= 10.2.2.0/255.255.255.0/0/0 (type=4),
  src_proxy= 172.16.1.1/255.255.255.255/0/0 (type=1),
  protocol= ESP, transform= esp-aes esp-md5-hmac ,
  lifedur= 0s and 0kb,
  spi= 0x0(0), conn_id= 0, keysiz= 128, flags= 0x4

ISAKMP (0): processing NONCE payload. message ID = 1112046058

ISAKMP (0): processing ID payload. message ID = 1112046058
ISAKMP (0): processing ID payload. message ID = 1112046058
ISAKMP (0): Creating IPSec SAs
  inbound SA from 172.16.2.1 to 172.16.1.1
  (proxy 10.2.2.0 to 172.16.1.1)
    has spi 659370083 and conn_id 2 and flags 4
    lifetime of 28800 seconds
    lifetime of 4608000 kilobytes
    outbound SA from 172.16.1.1 to 172.16.2.1
  (proxy 172.16.1.1 to 10.2.2.0)
    has spi 264316759 and conn_id 1 and flags 4
    lifetime of 28800 seconds
    lifetime of 4608000 kilobytesIPSEC(key_engine):
  got a queue event...
IPSEC(initialize_sas): ,
(key eng. msg.) dest= 172.16.1.1, src= 172.16.2.1,
  dest_proxy= 172.16.1.1/255.255.255.255/0/0 (type=1),
  src_proxy= 10.2.2.0/255.255.255.0/0/0 (type=4),
  protocol= ESP, transform= esp-aes esp-md5-hmac ,
  lifedur= 28800s and 4608000kb,
  spi= 0x274d3063(659370083), conn_id= 2, keysiz= 128, flags= 0x4
IPSEC(initialize_sas): ,
(key eng. msg.) src= 172.16.1.1, dest= 172.16.2.1,
  src_proxy= 172.16.1.1/255.255.255.255/0/0 (type=1),
  dest_proxy= 10.2.2.0/255.255.255.0/0/0 (type=4),
  protocol= ESP, transform= esp-aes esp-md5-hmac ,
  lifedur= 28800s and 4608000kb,
  spi= 0xfc12757(264316759), conn_id= 1, keysiz= 128, flags= 0x4

VPN Peer: IPSEC: Peer ip:172.16.2.1/500 Ref cnt incremented to:2
  Total VPN Peers:1
VPN Peer: IPSEC: Peer ip:172.16.2.1/500 Ref cnt incremented to:3
  Total VPN Peers:1
return status is IKMP_NO_ERROR
pix501(config)#
pix501(config)#
ISAKMP (0): sending NOTIFY message 36136 protocol 1
crypto_isakmp_process_block:src:172.16.2.1,
  dest:172.16.1.1 spt:500 dpt:500
ISAKMP (0): processing NOTIFY payload 36137 protocol 1
  spi 0, message ID = 136860646n
ISAMKP (0): received DPD_R_U_THERE_ACK from peer 172.16.2.1

```

- **debug van inhoud:** hiermee wordt de onderhandelingen specifiek voor de VPN-client

weergegeven.

```
pix501(config)#vpnclient enable
pix501(config)# 505: VPNC CFG: transform set unconfig attempt done
506: VPNC CLI: no isakmp keepalive 10
507: VPNC CLI: no isakmp nat-traversal 20
508: VPNC CFG: IKE unconfig successful
509: VPNC CLI: no crypto map _vpnc_cm
510: VPNC CFG: crypto map deletion attempt done
511: VPNC CFG: crypto unconfig successful
512: VPNC CLI: no global (outside) 65001
513: VPNC CLI: no nat (inside) 0 access-list _vpnc_acl
514: VPNC CFG: nat unconfig attempt failed
515: VPNC CLI: no http 10.1.1.1 255.255.255.0 inside
516: VPNC CLI: no http server enable
517: VPNC CLI: no access-list _vpnc_acl
518: VPNC CFG: ACL deletion attempt failed
519: VPNC CLI: no crypto map _vpnc_cm interface outside
520: VPNC CFG: crypto map de/attach failed
521: VPNC CLI: no sysopt connection permit-ipsec
522: VPNC CLI: sysopt connection permit-ipsec
523: VPNC CFG: transform sets configured
524: VPNC CFG: crypto config successful
525: VPNC CLI: isakmp keepalive 10
526: VPNC CLI: isakmp nat-traversal 20
527: VPNC CFG: IKE config successful
528: VPNC CLI: http 10.1.1.1 255.255.255.0 inside
529: VPNC CLI: http server enable
530: VPNC CLI: no access-list _vpnc_acl
531: VPNC CFG: ACL deletion attempt failed
532: VPNC CLI: access-list _vpnc_acl
    permit ip host 172.16.1.1 host 172.16.2.1
533: VPNC CLI: crypto map _vpnc_cm 10 match address _vpnc_acl
534: VPNC CFG: crypto map acl update successful
535: VPNC CLI: no crypto map _vpnc_cm interface outside
536: VPNC CLI: crypto map _vpnc_cm interface outside
537: VPNC INF: IKE trigger request done
538: VPNC INF: Constructing policy download req
539: VPNC INF: Packing attributes for policy request
540: VPNC INF: Attributes being requested
541: VPNC ATT: ALT_DEF_DOMAIN: cisco.com
542: VPNC ATT: INTERNAL_IP4_NBNS: 10.2.2.2
543: VPNC ATT: INTERNAL_IP4_DNS: 10.2.2.2
544: VPNC ATT: ALT_SPLIT_INCLUDE
545: VPNC INF: 10.2.2.0/255.255.255.0
546: VPNC ATT: ALT_PFS: 0
547: VPNC ATT: ALT_CFG_SEC_UNIT: 0
548: VPNC ATT: ALT_CFG_USER_AUTH: 0
549: VPNC CLI: no access-list _vpnc_acl
550: VPNC CLI: access-list _vpnc_acl
    permit ip 10.1.1.0 255.255.255.0 10.2.2.0 255.255.255.0
551: VPNC CLI: access-list _vpnc_acl
    permit ip host 172.16.1.1 10.2.2.0 255.255.255.0
552: VPNC CFG: _vpnc_acl ST define done
553: VPNC CFG: Split DNS config attempt done
554: VPNC CLI: crypto map _vpnc_cm 10 match address _vpnc_acl
555: VPNC CFG: crypto map acl update successful
556: VPNC CLI: no crypto map _vpnc_cm interface outside
557: VPNC CLI: crypto map _vpnc_cm interface outside
558: VPNC CLI: no global (outside) 65001
559: VPNC CLI: no nat (inside) 0 access-list _vpnc_acl
560: VPNC CFG: nat unconfig attempt failed
```

```
561: VPNC CLI: nat (inside) 0 access-list _vpnc_acl  
562: VPNC INF: IKE trigger request done
```

## Gerelateerde informatie

- [PIX-ondersteuningspagina](#)
- [PIX-opdrachtreferenties](#)
- [Ondersteuning van IPsec-onderhandelingen/IKE-protocollen](#)
- [Verzoeken om opmerkingen \(RFC's\)](#)
- [Technische ondersteuning - Cisco-systemen](#)