# Esempio di configurazione di IOS Easy VPN Remote Hardware Client su un server PIX Easy VPN

## Sommario

Introduzione Prerequisiti Requisiti Componenti usati Convenzioni Configurazione Esempio di rete Configurazioni Verifica PIX Easy VPN Server Cisco IOS Easy VPN Remote Hardware Client Risoluzione dei problemi PIX Easy VPN Server Cisco IOS Easy VPN Remote Hardware Client Informazioni correlate

## **Introduzione**

In questo documento viene fornita una configurazione di esempio per IPSec tra il client hardware remoto Cisco IOS® Easy VPN e il server PIX Easy VPN.

Nota: la funzione Easy VPN Remote viene anche definita client hardware e client EzVPN.

Per informazioni su come configurare un router Cisco IOS come EzVPN in <u>modalità</u> di <u>estensione</u> <u>di rete (NEM)</u> per connettersi a un concentratore Cisco VPN 3000, fare riferimento a <u>EzVPN con</u> <u>NEM sul router IOS con configurazione del concentratore</u> VPN<u>3000</u>.

Fare riferimento a <u>PIX/ASA 7.x e versioni successive: Easy VPN con Split Tunneling ASA 5500</u> <u>come server e Cisco 871 come esempio di configurazione remota Easy VPN</u> per informazioni su come configurare IPSec tra Cisco PIX/ASA 7.x e un router Cisco 871 con Easy VPN.

Per ulteriori informazioni, fare riferimento al documento <u>IOS Router: Esempio di configurazione</u> <u>Easy VPN (EzVPN) con modalità di estensione della rete (NEM)</u> per informazioni su come configurare un router Cisco 7200 come EzVPN e il router Cisco 871 come client remoto Easy VPN.

## **Prerequisiti**

## **Requisiti**

Prima di provare questa configurazione, accertarsi di soddisfare i seguenti requisiti:

- Verificare che il sistema operativo e l'hardware Cisco IOS in uso supportino la funzione Easy VPN Remote. Fare riferimento al <u>Software Advisor</u> (solo utenti <u>registrati</u>).
- Verificare che Easy VPN Server sia un firewall PIX con software PIX versione 6.2 o successive.
- Assicurarsi di avere una licenza 3DES installata sul PIX. Fare riferimento a <u>Aggiornamento</u> <u>della chiave di attivazione</u>.

### Componenti usati

Le informazioni fornite in questo documento si basano sulle seguenti versioni software e hardware:

- Cisco IOS Easy VPN Remote Hardware Client è un router 831 con software Cisco IOS versione 12.3(8)T.
- Easy VPN Server è un PIX 525 con software PIX versione 6.3(3).

Le informazioni discusse in questo documento fanno riferimento a dispositivi usati in uno specifico ambiente di emulazione. Su tutti i dispositivi menzionati nel documento la configurazione è stata ripristinata ai valori predefiniti. Se la rete è operativa, valutare attentamente eventuali conseguenze derivanti dall'uso dei comandi.

## **Convenzioni**

Per ulteriori informazioni sulle convenzioni usate, consultare il documento <u>Cisco sulle convenzioni</u> nei suggerimenti tecnici.

## **Configurazione**

In questa sezione vengono presentate le informazioni necessarie per configurare le funzionalità descritte più avanti nel documento.

Nota: per ulteriori informazioni sui comandi menzionati in questa sezione, usare lo <u>strumento di</u> <u>ricerca</u> dei comandi (solo utenti <u>registrati</u>).

## Esempio di rete

Nel documento viene usata questa impostazione di rete:



### **Configurazioni**

Nel documento vengono usate queste configurazioni:

- PIX Easy VPN Server
- <u>Cisco IOS Easy VPN Remote Hardware Client</u>

#### **PIX Easy VPN Server**

```
pix525#show running-config
: Saved
:
PIX Version 6.3(3)
interface ethernet0 auto
interface ethernet1 auto
interface ethernet2 auto shutdown
interface ethernet3 auto shutdown
interface ethernet4 auto shutdown
interface ethernet5 auto shutdown
interface ethernet6 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
nameif ethernet6 intf6 security12
enable password 8Ry2YjIyt7RRXU24 encrypted
passwd 2KFQnbNIdI.2KYOU encrypted
hostname pix525
fixup protocol dns maximum-length 512
fixup protocol ftp 21
fixup protocol h323 h225 1720
fixup protocol h323 ras 1718-1719
fixup protocol http 80
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
fixup protocol tftp 69
names
!--- Specify the access list to bypass !--- Network
Address Translation (NAT) for VPN traffic. access-list
nonat permit ip 172.16.1.0 255.255.255.0 192.168.1.0
255.255.255.0 !--- Specify the split tunneling access
list. access-list 110 permit ip 172.16.1.0 255.255.255.0
192.168.1.0 255.255.255.0 pager lines 24 mtu outside
```

1500 mtu inside 1500 mtu intf2 1500 mtu intf3 1500 mtu

intf4 1500 mtu intf5 1500 mtu intf6 1500 ip address outside 10.66.79.72 255.255.255.224 ip address inside 172.16.1.254 255.255.255.0 no ip address intf2 no ip address intf3 no ip address intf4 no ip address intf5 no ip address intf6 ip audit info action alarm ip audit attack action alarm 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 no failover ip address intf6 pdm history enable arp timeout 14400 !---Configure NAT/Port Address Translation (PAT) !--- for non-encrypted traffic, as well as NAT for IPSec traffic. global (outside) 1 interface nat (inside) 0 access-list nonat nat (inside) 1 172.16.1.0 255.255.255.0 0 0 route outside 0.0.0.0 0.0.0.0 10.66.79.65 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 sysopt connection permitipsec !--- Configure IPSec transform set and dynamic crypto map. crypto ipsec transform-set tripledes esp-3des esp-sha-hmac crypto dynamic-map dynmap 10 set transform-set tripledes 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 3des isakmp policy 10 hash sha isakmp policy 10 group 2 isakmp policy 10 lifetime 86400 !--- Configure VPN Group parameters that are sent down to the client. vpngroup vpn-hw-client-group dns-server 172.16.1.1 vpngroup vpnhw-client-group wins-server 172.16.1.1 vpngroup vpn-hwclient-group default-domain cisco.com vpngroup vpn-hwclient-group split-tunnel 110 vpngroup vpn-hw-clientgroup idle-time 1800 vpngroup vpn-hw-client-group password \*\*\*\*\*\*\* telnet timeout 5 ssh timeout 5 console timeout 0 terminal width 80 Cryptochecksum:700fe4d4e7fcdc6750953e64046930c0 : end

#### **Cisco IOS Easy VPN Remote Hardware Client**

```
831#show running-config
831#show run
Building configuration...
Current configuration : 1226 bytes
!
version 12.3
no service pad
service timestamps debug datetime msec
service timestamps log datetime msec
no service password-encryption
!
hostname 831
!
boot-start-marker
```

```
boot-end-marker
!
!
no aaa new-model
ip subnet-zero
!
!
!
1
ip name-server 172.16.1.1
ip ips po max-events 100
no ftp-server write-enable
!
!
!
1
!
!
!
1
crypto ipsec client ezvpn vpn-hw-client
connect auto
group vpn-hw-client-group key password
mode network-extension
peer 10.66.79.72
1
!
!
1
interface Ethernet0
 ip address 192.168.1.254 255.255.255.0
crypto ipsec client ezvpn vpn-hw-client inside
1
interface Ethernet1
ip address 10.66.79.126 255.255.255.224
duplex auto
crypto ipsec client ezvpn vpn-hw-client
!
interface FastEthernet1
no ip address
duplex auto
speed auto
1
interface FastEthernet2
no ip address
duplex auto
speed auto
1
interface FastEthernet3
no ip address
duplex auto
speed auto
!
interface FastEthernet4
no ip address
duplex auto
speed auto
1
ip classless
ip route 0.0.0.0 0.0.0.0 10.66.79.97
!
ip http server
no ip http secure-server
```

```
I
1
no cdp run
!
control-plane
!
!
line con 0
no modem enable
 transport preferred all
 transport output all
line aux 0
line vty 0 4
!
scheduler max-task-time 5000
end
```

## **Verifica**

Per verificare che la configurazione funzioni correttamente, consultare le sezioni seguenti.

- PIX Easy VPN Server
- <u>Cisco IOS Easy VPN Remote Hardware Client</u>

### **PIX Easy VPN Server**

Lo <u>strumento Output Interpreter</u> (solo utenti <u>registrati</u>) (OIT) supporta alcuni comandi **show**. Usare l'OIT per visualizzare un'analisi dell'output del comando **show**.

 show crypto isakmp sa: visualizza tutte le associazioni di sicurezza (SA) IKE (Internet Key Exchange) correnti in un peer.

```
pix525(config)#show crypto isakmp sa
Total : 1
Embryonic : 0
    dst src state pending created
    10.66.79.72 10.66.79.126 QM_IDLE 0 1
```

• **show crypto ipsec sa**: visualizza le associazioni di protezione IPSec generate tra peer. pix525(config)#**show crypto ipsec sa** 

```
!--- This command is issued after a ping !--- is attempted from the PC behind the !--- Easy
VPN Client to the PC !--- behind the server. interface: outside Crypto map tag: mymap, local
addr. 10.66.79.72 local ident (addr/mask/prot/port): (172.16.1.0/255.255.255.0/0/0) remote
ident (addr/mask/prot/port): (192.168.1.0/255.255.255.0/0/0) current_peer: 10.66.79.126:500
dynamic allocated peer ip: 0.0.0.0 PERMIT, flags={} #pkts encaps: 5, #pkts encrypt: 5, #pkts
digest 5 #pkts decaps: 5, #pkts decrypt: 5, #pkts verify 5 #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 !--- are successfully exchanged between the
!--- Easy VPN Remote Hardware Client !--- and the Easy VPN Server. local crypto endpt.:
10.66.79.72, remote crypto endpt.: 10.66.79.126 path mtu 1500, ipsec overhead 56, media mtu
1500 current outbound spi: 13flaa83 inbound esp sas: spi: 0xf4dd4178(4108140920) transform:
esp-3des esp-sha-hmac , in use settings ={Tunnel, } slot: 0, conn id: 1, crypto map: mymap
sa timing: remaining key lifetime (k/sec): (4607999/28567) IV size: 8 bytes replay detection
support: Y inbound ah sas: inbound pcp sas: outbound esp sas: spi: 0x13f1aa83(334604931)
transform: esp-3des esp-sha-hmac , in use settings ={Tunnel, } slot: 0, conn id: 2, crypto
map: mymap sa timing: remaining key lifetime (k/sec): (4607999/28567) IV size: 8 bytes
replay detection support: Y outbound ah sas: outbound pcp sas:
```

### Cisco IOS Easy VPN Remote Hardware Client

Lo <u>strumento Output Interpreter</u> (solo utenti <u>registrati</u>) (OIT) supporta alcuni comandi **show**. Usare l'OIT per visualizzare un'analisi dell'output del comando **show**.

• show crypto isakmp sa: visualizza tutte le SA IKE correnti in un peer.

831#show crypto	isakmp sa			
dst	src	state	conn-id slo	ot
10.66.79.72	10.66.79.126	QM_IDLE	1	0

• **show crypto ipsec sa**: visualizza le associazioni di protezione IPSec generate tra peer. 831#show crypto ipsec sa

```
!--- This command is issued after a ping !--- is attempted from the PC behind the !--- Easy
VPN Client to the PC !--- behind the server. interface: Ethernetl Crypto map tag: Ethernetl-
head-0, local addr. 10.66.79.126 protected vrf: local ident (addr/mask/prot/port):
(192.168.1.0/255.255.255.0/0/0) remote ident (addr/mask/prot/port):
(172.16.1.0/255.255.255.0/0/0) current_peer: 10.66.79.72:500 PERMIT, flags={origin_is_acl,}
#pkts encaps: 5, #pkts encrypt: 5, #pkts digest: 5 #pkts decaps: 5, #pkts decrypt: 5, #pkts
verify: 5 #pkts compressed: 0, #pkts decompressed: 0 #pkts not compressed: 0, #pkts compr.
failed: 0 #pkts not decompressed: 0, #pkts decompress failed: 0 #send errors 0, #recv errors
0 !--- ping packets !--- are successfully exchanged between !--- the Easy VPN Remote
Hardware Client !--- and the Easy VPN Server. local crypto endpt.: 10.66.79.126, remote
crypto endpt.: 10.66.79.72 path mtu 1500, media mtu 1500 current outbound spi: F4DD4178
inbound esp sas: spi: 0x13F1AA83(334604931) transform: esp-3des esp-sha-hmac , in use
settings ={Tunnel, } slot: 0, conn id: 20, flow_id: 1, crypto map: Ethernet1-head-0 crypto
engine type: Hardware, engine_id: 2 sa timing: remaining key lifetime (k/sec):
(4444258/28648) ike_cookies: A12E6D0D 2C8D9B92 41AB02FB A00A5B03 IV size: 8 bytes replay
detection support: Y inbound ah sas: inbound pcp sas: outbound esp sas: spi:
0xF4DD4178(4108140920) transform: esp-3des esp-sha-hmac , in use settings ={Tunnel, } slot:
0, conn id: 21, flow_id: 2, crypto map: Ethernet1-head-0 crypto engine type: Hardware,
engine_id: 2 sa timing: remaining key lifetime (k/sec): (4444258/28647) ike_cookies:
A12E6D0D 2C8D9B92 41AB02FB A00A5B03 IV size: 8 bytes replay detection support: Y outbound ah
sas: outbound pcp sas:
```

 show crypto ipsec client ezvpn: visualizza le informazioni di configurazione del client VPN o del dispositivo remoto Easy VPN.

831#show crypto ipsec client ezvpn Easy VPN Remote Phase: 2

```
Tunnel name : vpn-hw-client
Inside interface list: Ethernet0,
Outside interface: Ethernet1
Current State: IPSEC ACTIVE
Last Event: SOCKET_UP
DNS Primary: 172.16.1.1
DNS Secondary: 172.16.1.1
NBMS/WINS Primary: 172.16.1.1
NBMS/WINS Secondary: 172.16.1.1
Default Domain: cisco.com
Split Tunnel List: 1
      Address : 172.16.1.0
                : 255.255.255.0
      Mask
      Protocol : 0x0
       Source Port: 0
      Dest Port : 0
```

## Risoluzione dei problemi

Le informazioni contenute in queste sezioni permettono di risolvere i problemi relativi alla configurazione.

- PIX Easy VPN Server
- <u>Cisco IOS Easy VPN Remote Hardware Client</u>

Se si sono configurati Easy VPN Remote Hardware Client e Easy VPN Server come descritto in questo documento e si verificano ancora problemi, raccogliere l'output del comando **debug** da ciascun dispositivo e l'output dei comandi **show** per l'analisi da parte del Cisco Technical Assistance Center (TAC).

per ulteriori informazioni sulla risoluzione dei problemi, fare riferimento a <u>Risoluzione dei problemi</u> <u>di sicurezza IP - Comprensione e uso dei comandi di debug</u> e <u>Risoluzione dei problemi del PIX</u> <u>per il passaggio del traffico di dati su un tunnel IPSec stabilito</u>.

### **PIX Easy VPN Server**

Lo <u>strumento Output Interpreter</u> (solo utenti <u>registrati</u>) (OIT) supporta alcuni comandi **show**. Usare l'OIT per visualizzare un'analisi dell'output del comando **show**.

Nota: consultare le <u>informazioni importanti sui comandi di debug</u> prima di usare i comandi di **debug**.

- debug crypto ipsec: visualizza le negoziazioni IPSec della fase 2.
- debug crypto isakmp: visualizza le negoziazioni ISAKMP della fase 1.

Di seguito è riportato un esempio di output:

```
pix525(config)#
!--- As soon as the crypto ipsec client ezvpn vpn-hw-client command !--- is issued on the
outside interface of the Cisco IOS Easy VPN Remote !--- Hardware Client, the server receives an
IKE negotiation request.
crypto_isakmp_process_block:src:10.66.79.126, dest:10.66.79.72 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 3DES-CBC
ISAKMP:
ISAKMP:
ISAKMP:
           hash SHA
          default group 2
           extended auth pre-share (init)
ISAKMP: life type in seconds
ISAKMP: life duration (VPI) of 0x0 0x20 0xc4 0x9b
ISAKMP (0): atts are not acceptable. Next payload is 3
ISAKMP (0): Checking ISAKMP transform 2 against priority 10 policy
ISAKMP:
           encryption 3DES-CBC
ISAKMP:
           hash MD5
           default group 2
ISAKMP:
           extended auth pre-share (init)
ISAKMP:
ISAKMP: life type in seconds
ISAKMP:
           life duration (VPI) of 0x0 0x20 0xc4 0x9b
ISAKMP (0): atts are not acceptable. Next payload is 3
ISAKMP (0): Checking ISAKMP transform 3 against priority 10 policy
ISAKMP: encryption DES-CBC
ISAKMP: hash SHA
ISAKMP:
ISAKMP:
           default group 2
           extended auth pre-share (init)
ISAKMP:
           life type in seconds
ISAKMP:
           life duration (VPI) of 0x0 0x20 0xc4 0x9b
```

ISAKMP (0): atts are not acceptable. Next payload is 3 ISAKMP (0): Checking ISAKMP transform 4 against priority 10 policy ISAKMP: encryption DES-CBC hash MD5 ISAKMP: ISAKMP: default group 2 ISAKMP: extended auth pre-share (init) life type in seconds ISAKMP: life duration (VPI) of 0x0 0x20 0xc4 0x9b TSAKMP: ISAKMP (0): atts are not acceptable. Next payload is 3 ISAKMP (0): Checking ISAKMP transform 5 against priority 10 policy encryption 3DES-CBC ISAKMP: ISAKMP: hash SHA ISAKMP: default group 2 ISAKMP: auth pre-share ISAKMP: life type in seconds life duration (VPI) of 0x0 0x20 0xc4 0x9b ISAKMP: ISAKMP (0): atts are acceptable. Next payload is 3 ISAKMP (0): processing vendor id payload ISAKMP (0:0): vendor ID is NAT-T ISAKMP (0): processing vendor id payload ISAKMP (0:0): vendor ID is NAT-T ISAKMP (0): processing KE payload. message ID = 0 ISAKMP (0): processing NONCE payload. message ID = 0 ISAKMP (0): processing ID payload. message ID = 0 ISAKMP (0): processing vendor id payload ISAKMP (0): remote peer supports dead peer detection ISAKMP (0): processing vendor id payload ISAKMP (0): received xauth v6 vendor id ISAKMP (0): processing vendor id payload ISAKMP (0): claimed IOS but failed authentication ISAKMP (0): processing vendor id payload ISAKMP (0): speaking to a Unity client ISAKMP (0): ID payload next-payload : 10 : 1 type protocol : 17 : 500 port : 8 length ISAKMP (0): Total payload length: 12 return status is IKMP\_NO\_ERROR crypto\_isakmp\_process\_block:src:10.66.79.126, dest:10.66.79.72 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 10.66.79.126 ISAKMP (0): SA has been authenticated ISAKMP: Created a peer struct for 10.66.79.126, peer port 62465 return status is IKMP\_NO\_ERROR

ISAKMP (0): sending phase 1 RESPONDER\_LIFETIME notify ISAKMP (0): sending NOTIFY message 24576 protocol 1 VPN Peer: ISAKMP: Added new peer: ip:10.66.79.126/500 Total VPN Peers:1 VPN Peer: ISAKMP: Peer ip:10.66.79.126/500 Ref cnt incremented to:1 Total VPN Peers:1 ISAKMP: peer is a remote access client crypto\_isakmp\_process\_block:src:10.66.79.126, dest:10.66.79.72 spt:500 dpt:500 ISAKMP\_TRANSACTION exchange ISAKMP (0:0): processing transaction payload from 10.66.79.126. message ID = 63324444ISAKMP: Config payload CFG\_REQUEST ISAKMP (0:0): checking request: ISAKMP: attribute IP4\_DNS (3) ISAKMP: attribute IP4\_DNS (3) ISAKMP: attribute IP4\_NBNS (4) ISAKMP: attribute IP4\_NBNS (4) ISAKMP: attribute ALT\_SPLIT\_INCLUDE (28676) ISAKMP: attribute ALT\_SPLITDNS\_NAME (28675) ISAKMP: attribute ALT\_DEF\_DOMAIN (28674) ISAKMP: attribute UNKNOWN (28673) Unsupported Attr: 28673 ISAKMP: attribute UNKNOWN (28678) Unsupported Attr: 28678 ISAKMP: attribute ALT\_PFS (28679) ISAKMP: attribute ALT\_BACKUP\_SERVERS (28681) ISAKMP: attribute APPLICATION\_VERSION (7) ISAKMP (0:0): responding to peer config from 10.66.79.126. ID = 2563858956 return status is IKMP\_NO\_ERROR crypto\_isakmp\_process\_block:src:10.66.79.126, dest:10.66.79.72 spt:500 dpt:500 OAK\_QM exchange oakley\_process\_quick\_mode: OAK\_QM\_IDLE ISAKMP (0): processing SA payload. message ID = 3238088328 ISAKMP : Checking IPSec proposal 1 ISAKMP: transform 1, ESP\_3DES ISAKMP: attributes in transform: ISAKMP: encaps is 1 ISAKMP: SA life type in seconds TSAKMP: SA life duration (VPI) of 0x0 0x20 0xc4 0x9b ISAKMP: SA life type in kilobytes ISAKMP: SA life duration (VPI) of 0x0 crypto\_isakmp\_process\_block:src:10.66.79.126, dest:10.66.79.72 spt:500 dpt:500 OAK\_QM exchange ISADB: reaper checking SA 0x3c6420c, conn\_id = 0

### Cisco IOS Easy VPN Remote Hardware Client

Lo <u>strumento Output Interpreter</u> (solo utenti <u>registrati</u>) (OIT) supporta alcuni comandi **show**. Usare l'OIT per visualizzare un'analisi dell'output del comando **show**.

Nota: consultare le <u>informazioni importanti sui comandi di debug</u> prima di usare i comandi di **debug**.

- debug crypto ipsec: visualizza le negoziazioni IPSec della fase 2.
- debug crypto isakmp: visualizza le negoziazioni ISAKMP della fase 1.

Di seguito è riportato un esempio di output:

```
*Mar 1 01:42:18.739: ISAKMP: callback: no SA found for 0.0.0.0/0.0.0.0 [vrf 0]
*Mar 1 01:42:18.739: %CRYPTO-6-ISAKMP_ON_OFF: ISAKMP is ON
*Mar 1 01:42:18.743: ISAKMP: Looking for a matching key for 10.66.79.72 in default
*Mar 1 01:42:18.743: ISAKMP: received ke message (1/1)
*Mar 1 01:42:18.743: ISAKMP:(0:0:N/A:0): SA request profile is (NULL)
*Mar 1 01:42:18.743: ISAKMP: Created a peer struct for 10.66.79.72, peer port 500
*Mar 1 01:42:18.743: ISAKMP: Locking peer struct 0x81F05E5C, IKE refcount
 1 for isakmp_initiator
*Mar 1 01:42:18.747: ISAKMP:(0:0:N/A:0):Setting client config settings 81C8F564
*Mar 1 01:42:18.747: ISAKMP: local port 500, remote port 500
*Mar 1 01:42:18.747: insert sa successfully sa = 81C8EEB8
*Mar 1 01:42:18.747: ISAKMP:(0:0:N/A:0): client mode configured.
     1 01:42:18.751: ISAKMP:(0:0:N/A:0): constructed NAT-T vendor-03 ID
*Mar
*Mar
     1 01:42:18.751: ISAKMP:(0:0:N/A:0): constructed NAT-T vendor-02 ID
*Mar 1 01:42:19.203: ISAKMP:(0:1:HW:2):SA is doing pre-shared key authentication
 plus XAUTH using id type ID_KEY_ID
*Mar 1 01:42:19.203: ISAKMP (0:268435457): ID payload
       next-payload : 13
                   : 11
       type
       group id
                   : vpn-hw-client-group
                   : 17
       protocol
                    : 0
       port
       length : 27
*Mar 1 01:42:19.203: ISAKMP:(0:1:HW:2):Total payload length: 27
*Mar 1 01:42:19.207: ISAKMP:(0:1:HW:2):Input = IKE_MESG_FROM_IPSEC, IKE_SA_REQ_AM
*Mar 1 01:42:19.207: ISAKMP:(0:1:HW:2):Old State = IKE READY New State = IKE I AM1
*Mar 1 01:42:19.207: ISAKMP:(0:1:HW:2): beginning Aggressive Mode exchange
*Mar
     1 01:42:19.207: ISAKMP:(0:1:HW:2): sending packet to 10.66.79.72
 my_port 500 peer_port 500 (I) AG_INIT_EXCH
*Mar 1 01:42:19.267: ISAKMP (0:268435457): received packet from 10.66.79.72
 dport 500 sport 500 Global (I) AG_INIT_EXCH
*Mar 1 01:42:19.271: ISAKMP:(0:1:HW:2): processing SA payload. message ID = 0
*Mar 1 01:42:19.271: ISAKMP:(0:1:HW:2): processing ID payload. message ID = 0
*Mar 1 01:42:19.271: ISAKMP (0:268435457): ID payload
       next-payload : 10
                    : 1
       type
                   : 10.66.79.72
       address
       protocol
                   : 17
       port
                   : 500
                    : 12
       length
*Mar 1 01:42:19.271: ISAKMP:(0:1:HW:2): processing vendor id payload
*Mar
     1 01:42:19.271: ISAKMP:(0:1:HW:2): vendor ID seems Unity/DPD but major
 215 mismatch
*Mar 1 01:42:19.275: ISAKMP:(0:1:HW:2): vendor ID is XAUTH
*Mar 1 01:42:19.275: ISAKMP:(0:1:HW:2): processing vendor id payload
*Mar 1 01:42:19.275: ISAKMP:(0:1:HW:2): vendor ID is DPD
*Mar 1 01:42:19.275: ISAKMP:(0:1:HW:2): processing vendor id payload
*Mar 1 01:42:19.275: ISAKMP:(0:1:HW:2): vendor ID is Unity
*Mar 1 01:42:19.275: ISAKMP:(0:1:HW:2): local preshared key found
*Mar 1 01:42:19.275: ISAKMP : Scanning profiles for xauth ...
*Mar 1 01:42:19.279: ISAKMP:(0:1:HW:2): Authentication by xauth preshared
*Mar 1 01:42:19.279: ISAKMP:(0:1:HW:2):Checking ISAKMP transform 1 against
 priority 65527 policy
*Mar 1 01:42:19.279: ISAKMP:
                                 encryption 3DES-CBC
*Mar 1 01:42:19.279: ISAKMP:
                                 hash SHA
     1 01:42:19.279: ISAKMP:
*Mar
                                 default group 2
*Mar 1 01:42:19.279: ISAKMP:
                                 auth pre-share
*Mar 1 01:42:19.279: ISAKMP:
                                 life type in seconds
*Mar 1 01:42:19.279: ISAKMP: life duration (VPI) of 0x0 0x20 0xC4 0x9B
*Mar 1 01:42:19.279: ISAKMP:(0:1:HW:2):Authentication method offered does
 not match policy!
*Mar 1 01:42:19.283: ISAKMP:(0:1:HW:2):atts are not acceptable.
```

831(config-if)#crypto ipsec client ezvpn vpn-hw-client

```
Next payload is 0
*Mar 1 01:42:19.283: ISAKMP:(0:1:HW:2):Checking ISAKMP transform 1
 against priority 65528 policy
*Mar 1 01:42:19.283: ISAKMP:
                                 encryption 3DES-CBC
                                hash SHA
*Mar 1 01:42:19.283: ISAKMP:
*Mar 1 01:42:19.283: ISAKMP:
                                default group 2
                                auth pre-share
*Mar 1 01:42:19.283: ISAKMP:
*Mar 1 01:42:19.283: ISAKMP: life type in seconds
*Mar 1 01:42:19.283: ISAKMP: life duration (VPI) of 0x0 0x20 0xC4 0x9B
*Mar 1 01:42:19.283: ISAKMP:(0:1:HW:2):Hash algorithm offered does not
 match policy!
*Mar 1 01:42:19.283: ISAKMP:(0:1:HW:2):atts are not acceptable. Next
pavload is 0
*Mar 1 01:42:19.287: ISAKMP:(0:1:HW:2):Checking ISAKMP transform 1
 against priority 65529 policy
*Mar 1 01:42:19.287: ISAKMP:
                               encryption 3DES-CBC
*Mar 1 01:42:19.287: ISAKMP:
                                 hash SHA
*Mar 1 01:42:19.287: ISAKMP:
                                default group 2
                                auth pre-share
*Mar 1 01:42:19.287: ISAKMP:
*Mar 1 01:42:19.287: ISAKMP:
                                 life type in seconds
*Mar 1 01:42:19.287: ISAKMP: Iffe type in seconds
*Mar 1 01:42:19.287: ISAKMP: life duration (VPI) of 0x0 0x20 0xC4 0x9B
*Mar 1 01:42:19.287: ISAKMP:(0:1:HW:2):Encryption algorithm offered does
 not match policy!
*Mar 1 01:42:19.287: ISAKMP:(0:1:HW:2):atts are not acceptable.
 Next payload is 0
*Mar 1 01:42:19.291: ISAKMP:(0:1:HW:2):Checking ISAKMP transform
 1 against priority 65530 policy
*Mar 1 01:42:19.291: ISAKMP:
                                  encryption 3DES-CBC
                                 hash SHA
*Mar 1 01:42:19.291: ISAKMP:
                                 default group 2
*Mar
     1 01:42:19.291: ISAKMP:
*Mar 1 01:42:19.291: ISAKMP:
                                 auth pre-share
*Mar 1 01:42:19.291: ISAKMP:
                                 life type in seconds
*Mar 1 01:42:19.291: ISAKMP: life duration (VPI) of 0x0 0x20 0xC4 0x9B
*Mar 1 01:42:19.291: ISAKMP:(0:1:HW:2):Encryption algorithm offered
 does not match policy!
*Mar 1 01:42:19.291: ISAKMP:(0:1:HW:2):atts are not acceptable. Next
 payload is 0
*Mar 1 01:42:19.295: ISAKMP:(0:1:HW:2):Checking ISAKMP transform 1
 against priority 65531 policy
*Mar 1 01:42:19.295: ISAKMP:
                                 encryption 3DES-CBC
*Mar 1 01:42:19.295: ISAKMP:
                                 hash SHA
*Mar 1 01:42:19.295: ISAKMP:
                                 default group 2
*Mar 1 01:42:19.295: ISAKMP:
                                  auth pre-share
*Mar
     1 01:42:19.295: ISAKMP:
                                  life type in seconds
*Mar 1 01:42:19.295: ISAKMP:
                                  life duration (VPI) of 0x0 0x20 0xC4 0x9B
*Mar 1 01:42:19.295: ISAKMP:(0:1:HW:2):atts are acceptable. Next payload is 0
*Mar 1 01:42:19.295: ISAKMP:(0:1:HW:2): processing KE payload. message ID = 0
*Mar 1 01:42:19.747: ISAKMP:(0:1:HW:2): processing NONCE payload. message ID = 0
*Mar 1 01:42:19.747: ISAKMP:(0:1:HW:2):SKEYID state generated
*Mar 1 01:42:19.747: ISAKMP:(0:1:HW:2): processing HASH payload. message ID = 0
*Mar 1 01:42:19.751: ISAKMP:(0:1:HW:2):SA authentication status:
       authenticated
*Mar 1 01:42:19.751: ISAKMP:(0:1:HW:2):SA has been authenticated with 10.66.79.72
*Mar 1 01:42:19.751: ISAKMP: Trying to insert a peer
 10.66.79.126/10.66.79.72/500/, and inserted successfully.
*Mar 1 01:42:19.751: ISAKMP:(0:1:HW:2):Send initial contact
*Mar 1 01:42:19.759: ISAKMP:(0:1:HW:2): sending packet to 10.66.79.72
 my_port 500 peer_port 500 (I) AG_INIT_EXCH
*Mar 1 01:42:19.759: ISAKMP:(0:1:HW:2):Input = IKE_MESG_FROM_PEER, IKE_AM_EXCH
*Mar 1 01:42:19.759: ISAKMP:(0:1:HW:2):Old State = IKE_I_AM1
 New State = IKE_P1_COMPLETE
*Mar 1 01:42:19.763: ISAKMP:(0:1:HW:2):Need config/address
*Mar 1 01:42:19.763: ISAKMP:(0:1:HW:2):Need config/address
```

\*Mar 1 01:42:19.763: ISAKMP: set new node -1731108340 to CONF\_ADDR \*Mar 1 01:42:19.763: ISAKMP: Sending APPLICATION\_VERSION string: Cisco IOS Software, C831 Software (C831-K9O3SY6-M), Version 12.3(8)T, RELEASE SOFTWARE (fc2) Technical Support: http://www.cisco.com/techsupport Copyright (c) 1986-2004 by Cisco Systems, Inc. Compiled Fri 14-May-04 01:40 by eaarmas \*Mar 1 01:42:19.775: ISAKMP:(0:1:HW:2): initiating peer config to 10.66.79.72. ID = -1731108340\*Mar 1 01:42:19.775: ISAKMP:(0:1:HW:2): sending packet to 10.66.79.72 my\_port 500 peer\_port 500 (I) CONF\_ADDR \*Mar 1 01:42:19.775: ISAKMP:(0:1:HW:2):Input = IKE\_MESG\_INTERNAL, IKE\_PHASE1\_COMPLETE \*Mar 1 01:42:19.775: ISAKMP:(0:1:HW:2):Old State = IKE\_P1\_COMPLETE New State = IKE\_CONFIG\_MODE\_REQ\_SENT \*Mar 1 01:42:19.775: ISAKMP (0:268435457): received packet from 10.66.79.72 dport 500 sport 500 Global (I) CONF\_ADDR \*Mar 1 01:42:19.779: ISAKMP: set new node -531260300 to CONF ADDR \*Mar 1 01:42:19.783: ISAKMP:(0:1:HW:2): processing HASH payload. message ID = -531260300\*Mar 1 01:42:19.783: ISAKMP:(0:1:HW:2): processing NOTIFY RESPONDER\_LIFETIME protocol 1 spi 0, message ID = -531260300, sa = 81C8EEB8 \*Mar 1 01:42:19.783: ISAKMP:(0:1:HW:2):SA authentication status: authenticated \*Mar 1 01:42:19.787: ISAKMP:(0:1:HW:2): processing responder lifetime \*Mar 1 01:42:19.787: ISAKMP:(0:1:HW:2): start processing isakmp responder lifetime \*Mar 1 01:42:19.787: ISAKMP:(0:1:HW:2): restart ike sa timer to 86400 secs \*Mar 1 01:42:19.787: ISAKMP:(0:1:HW:2):deleting node -531260300 error FALSE reason "Informational (in) state 1" \*Mar 1 01:42:19.787: ISAKMP:(0:1:HW:2):Input = IKE\_MESG\_FROM\_PEER, IKE\_INFO\_NOTIFY \*Mar 1 01:42:19.787: ISAKMP:(0:1:HW:2):Old State = IKE\_CONFIG\_MODE\_REQ\_SENT New State = IKE\_CONFIG\_MODE\_REQ\_SENT \*Mar 1 01:42:19.791: ISAKMP (0:268435457): received packet from 10.66.79.72 dport 500 sport 500 Global (I) CONF\_ADDR \*Mar 1 01:42:19.795: ISAKMP:(0:1:HW:2):processing transaction payload from 10.66.79.72. message ID = -1731108340\*Mar 1 01:42:19.795: ISAKMP: Config payload REPLY \*Mar 1 01:42:19.799: ISAKMP(0:268435457) process config reply \*Mar 1 01:42:19.799: ISAKMP:(0:1:HW:2):deleting node -1731108340 error FALSE reason "Transaction mode done" \*Mar 1 01:42:19.799: ISAKMP:(0:1:HW:2):Input = IKE\_MESG\_FROM\_PEER, IKE\_CFG\_REPLY \*Mar 1 01:42:19.799: ISAKMP:(0:1:HW:2):Old State = IKE CONFIG MODE REQ SENT New State = IKE\_P1\_COMPLETE \*Mar 1 01:42:19.807: ISAKMP:(0:1:HW:2):Input = IKE\_MESG\_INTERNAL, IKE\_PHASE1\_COMPLETE \*Mar 1 01:42:19.807: ISAKMP:(0:1:HW:2):Old State = IKE\_P1\_COMPLETE New State = IKE\_P1\_COMPLETE \*Mar 1 01:42:19.815: IPSEC(sa\_request): , (key eng. msg.) OUTBOUND local= 10.66.79.126, remote= 10.66.79.72, local\_proxy= 192.168.1.0/255.255.255.0/0/0 (type=4), remote\_proxy= 172.16.1.0/255.255.255.0/0/0 (type=4), protocol= ESP, transform= esp-3des esp-sha-hmac (Tunnel), lifedur= 2147483s and 4608000kb, spi= 0x13F1AA83(334604931), conn\_id= 0, keysize= 0, flags= 0x400A \*Mar 1 01:42:19.815: IPSEC(sa\_request): , (key eng. msg.) OUTBOUND local= 10.66.79.126, remote= 10.66.79.72,

```
local_proxy= 192.168.1.0/255.255.255.0/0/0 (type=4),
   remote_proxy= 172.16.1.0/255.255.255.0/0/0 (type=4),
   protocol= ESP, transform= esp-3des esp-md5-hmac (Tunnel),
   lifedur= 2147483s and 4608000kb,
    spi= 0xAD8C95C7(2911671751), conn_id= 0, keysize= 0, flags= 0x400A
*Mar 1 01:42:19.819: IPSEC(sa_request): ,
  (key eng. msg.) OUTBOUND local= 10.66.79.126, remote= 10.66.79.72,
    local_proxy= 192.168.1.0/255.255.255.0/0/0 (type=4),
   remote_proxy= 172.16.1.0/255.255.255.0/0/0 (type=4),
   protocol= ESP, transform= esp-des esp-sha-hmac (Tunnel),
    lifedur= 2147483s and 4608000kb,
   spi= 0x7B5EBFA(129362938), conn_id= 0, keysize= 0, flags= 0x400A
*Mar 1 01:42:19.819: IPSEC(sa_request): ,
  (key eng. msg.) OUTBOUND local= 10.66.79.126, remote= 10.66.79.72,
    local_proxy= 192.168.1.0/255.255.255.0/0/0 (type=4),
   remote_proxy= 172.16.1.0/255.255.255.0/0/0 (type=4),
   protocol= ESP, transform= esp-des esp-md5-hmac (Tunnel),
   lifedur= 2147483s and 4608000kb,
   spi= 0x702568AE(1881499822), conn_id= 0, keysize= 0, flags= 0x400A
*Mar 1 01:42:19.823: ISAKMP: received ke message (1/4)
*Mar 1 01:42:19.823: ISAKMP: set new node 0 to QM_IDLE
*Mar 1 01:42:19.823: ISAKMP:(0:1:HW:2): sitting IDLE. Starting QM
 immediately (QM_IDLE
                          )
*Mar 1 01:42:19.823: ISAKMP:(0:1:HW:2):beginning Quick Mode exchange,
 M-ID of -1056878968
*Mar 1 01:42:19.835: ISAKMP:(0:1:HW:2): sending packet to 10.66.79.72
 my_port 500 peer_port 500 (I) QM_IDLE
*Mar 1 01:42:19.835: ISAKMP:(0:1:HW:2):Node -1056878968, Input =
 IKE_MESG_INTERNAL, IKE_INIT_QM
*Mar 1 01:42:19.843: ISAKMP:(0:1:HW:2):Old State = IKE_QM_READY
 New State = IKE_QM_I_QM1
*Mar 1 01:42:19.859: ISAKMP (0:268435457): received packet from
 10.66.79.72 dport 500 sport 500 Global (I) QM_IDLE
*Mar 1 01:42:19.863: ISAKMP:(0:1:HW:2): processing HASH payload.
 message ID = -1056878968
*Mar 1 01:42:19.863: ISAKMP:(0:1:HW:2): processing SA payload.
 message ID = -1056878968
*Mar 1 01:42:19.863: ISAKMP:(0:1:HW:2):Checking IPSec proposal 1
*Mar 1 01:42:19.863: ISAKMP: transform 1, ESP_3DES
*Mar 1 01:42:19.863: ISAKMP: attributes in transform:
*Mar 1 01:42:19.863: ISAKMP:
                                encaps is 1 (Tunnel)
*Mar 1 01:42:19.867: ISAKMP:
                                 SA life type in seconds
                                 SA life duration (VPI) of 0x0 0x20 0xC4 0x9B
*Mar 1 01:42:19.867: ISAKMP:
                                 SA life type in kilobytes
*Mar
     1 01:42:19.867: ISAKMP:
                               SA life duration (VPI) of 0x0 0x46 0x50 0x0
authenticator is HMAC-SHA
*Mar 1 01:42:19.867: ISAKMP:
*Mar 1 01:42:19.867: ISAKMP:
*Mar 1 01:42:19.867: ISAKMP:(0:1:HW:2):atts are acceptable.
*Mar 1 01:42:19.871: IPSEC(validate_proposal_request): proposal part #1,
  (key eng. msg.) INBOUND local= 10.66.79.126, remote= 10.66.79.72,
    local_proxy= 192.168.1.0/255.255.255.0/0/0 (type=4),
   remote_proxy= 172.16.1.0/255.255.255.0/0/0 (type=4),
   protocol= ESP, transform= esp-3des esp-sha-hmac (Tunnel),
    lifedur= 0s and 0kb,
    spi= 0x0(0), conn_id= 0, keysize= 0, flags= 0x2
*Mar 1 01:42:19.871: Crypto mapdb : proxy_match
                   : 192.168.1.0
       src addr
                   : 172.16.1.0
       dst addr
                   : 0
       protocol
       src port
                    : 0
                    : 0
       dst port
*Mar 1 01:42:19.871: ISAKMP:(0:1:HW:2): processing NONCE payload.
 message ID = -1056878968
*Mar 1 01:42:19.875: ISAKMP:(0:1:HW:2): processing ID payload.
 message ID = -1056878968
```

```
*Mar 1 01:42:19.875: ISAKMP:(0:1:HW:2): processing ID payload.
 message ID = -1056878968
*Mar 1 01:42:19.875: ISAKMP:(0:1:HW:2): processing NOTIFY
 RESPONDER_LIFETIME protocol 3
       spi 4108140920, message ID = -1056878968, sa = 81C8EEB8
*Mar 1 01:42:19.875: ISAKMP:(0:1:HW:2):SA authentication status:
       authenticated
*Mar 1 01:42:19.875: ISAKMP:(0:1:HW:2): processing responder lifetime
*Mar 1 01:42:19.875: ISAKMP (268435457): responder lifetime of 28800s
*Mar 1 01:42:19.879: IPSec: Flow_switching Allocated flow for flow_id 268435457
*Mar 1 01:42:19.879: IPSec: Flow_switching Allocated flow for flow_id 268435458
*Mar 1 01:42:19.887: %CRYPTO-5-SESSION_STATUS: Crypto tunnel is UP
 Peer 10.66.79.72:500
                           Id: 10.66.79.72
*Mar 1 01:42:19.887: ISAKMP: Locking peer struct 0x81F05E5C, IPSEC
 refcount 1 for for stuff_ke
*Mar 1 01:42:19.887: ISAKMP:(0:1:HW:2): Creating IPSec SAs
*Mar 1 01:42:19.895:
                            inbound SA from 10.66.79.72 to 10.66.79.126
 (f/i) 0/ 0
      (proxy 172.16.1.0 to 192.168.1.0)
*Mar 1 01:42:19.895: has spi 0x13F1AA83 and conn_id 20 and flags 2
                           lifetime of 28790 seconds
*Mar 1 01:42:19.895:
                         lifetime of 4608000 kilobytes
*Mar 1 01:42:19.895:
*Mar 1 01:42:19.895:
                           has client flags 0x0
                        outbound SA from 10.66.79.126 to 10.66.79.72
*Mar 1 01:42:19.895:
(f/i) 0/0
       (proxy 192.168.1.0 to 172.16.1.0)
*Mar 1 01:42:19.895: has spi -186826376 and conn_id 21 and flags A
                            lifetime of 28790 seconds
*Mar 1 01:42:19.895:
                            lifetime of 4608000 kilobytes
*Mar 1 01:42:19.895:
*Mar 1 01:42:19.895:
                            has client flags 0x0
*Mar 1 01:42:19.899: IPSEC(key_engine): got a queue event with 2 kei messages
*Mar 1 01:42:19.899: IPSEC(initialize_sas): ,
  (key eng. msg.) INBOUND local= 10.66.79.126, remote= 10.66.79.72,
   local_proxy= 192.168.1.0/255.255.255.0/0/0 (type=4),
   remote_proxy= 172.16.1.0/255.255.255.0/0/0 (type=4),
   protocol= ESP, transform= esp-3des esp-sha-hmac (Tunnel),
   lifedur= 28790s and 4608000kb,
   spi= 0x13F1AA83(334604931), conn_id= 268435476, keysize= 0, flags= 0x2
*Mar 1 01:42:19.899: IPSEC(initialize_sas): ,
  (key eng. msg.) OUTBOUND local= 10.66.79.126, remote= 10.66.79.72,
   local_proxy= 192.168.1.0/255.255.255.0/0/0 (type=4),
   remote_proxy= 172.16.1.0/255.255.255.0/0/0 (type=4),
   protocol= ESP, transform= esp-3des esp-sha-hmac (Tunnel),
   lifedur= 28790s and 4608000kb,
   spi= 0xF4DD4178(4108140920), conn_id= 268435477, keysize= 0, flags= 0xA
*Mar 1 01:42:19.903: Crypto mapdb : proxy_match
       src addr : 192.168.1.0
                   : 172.16.1.0
       dst addr
                   : 0
       protocol
       src port
                   : 0
                 : 0
       dst port
*Mar 1 01:42:19.903: IPSEC(crypto_ipsec_sa_find_ident_head):
reconnecting with the same proxies and 10.66.79.72
*Mar 1 01:42:19.903: IPSEC(policy_db_add_ident): src 192.168.1.0,
dest 172.16.1.0, dest_port 0
*Mar 1 01:42:19.907: IPSEC(create_sa): sa created,
  (sa) sa_dest= 10.66.79.126, sa_prot= 50,
   sa_spi= 0x13F1AA83(334604931),
   sa_trans= esp-3des esp-sha-hmac , sa_conn_id= 268435476
*Mar 1 01:42:19.907: IPSEC(create_sa): sa created,
  (sa) sa_dest= 10.66.79.72, sa_prot= 50,
   sa_spi= 0xF4DD4178(4108140920),
   sa_trans= esp-3des esp-sha-hmac , sa_conn_id= 268435477
```

```
*Mar 1 01:42:19.911: ISAKMP:(0:1:HW:2): sending packet to
10.66.79.72 my_port 500 peer_port 500 (I) QM_IDLE
*Mar 1 01:42:19.911: ISAKMP:(0:1:HW:2):deleting node -1056878968
error FALSE reason "No Error"
*Mar 1 01:42:19.911: ISAKMP:(0:1:HW:2):Node -1056878968, Input =
IKE_MESG_FROM_PEER, IKE_QM_EXCH
*Mar 1 01:42:19.911: ISAKMP:(0:1:HW:2):Old State = IKE_QM_I_QM1
New State = IKE_QM_PHASE2_COMPLETE
*Mar 1 01:43:09.787: ISAKMP:(0:1:HW:2):purging node -531260300
*Mar 1 01:43:09.799: ISAKMP:(0:1:HW:2):purging node -1731108340
*Mar 1 01:43:09.911: ISAKMP:(0:1:HW:2):purging node -1056878968
```

• debug vpnclient: visualizza le negoziazioni specifiche del client VPN. Di seguito è riportato un esempio di output:

```
831(config)#int eth 1
831(config-if)#crypto ipsec client ezvpn vpn-hw-client
*Mar 1 01:49:26.543: %CRYPTO-6-ISAKMP_ON_OFF: ISAKMP is ON
*Mar 1 01:49:26.547: EZVPN(vpn-hw-client): Current State: IDLE
*Mar 1 01:49:26.547: EZVPN(vpn-hw-client): Event: VALID_CONFIG_ENTERED
*Mar 1 01:49:26.547: EZVPN(vpn-hw-client): ezvpn_check_tunnel_interface_state
*Mar 1 01:49:26.547: EZVPN(vpn-hw-client): New State: VALID_CFG
*Mar 1 01:49:26.547: EZVPN(vpn-hw-client): Current State: VALID_CFG
*Mar
     1 01:49:26.547: EZVPN(vpn-hw-client): Event: VALID_CONFIG_ENTERED
*Mar 1 01:49:26.547: EZVPN(vpn-hw-client): No state change
*Mar 1 01:49:26.547: EZVPN(vpn-hw-client): Current State: VALID_CFG
*Mar 1 01:49:26.551: EZVPN(vpn-hw-client): Event: TUNNEL_INTERFACE_UP
*Mar 1 01:49:26.551: EZVPN(vpn-hw-client): ezvpn_check_tunnel_interface_address
*Mar 1 01:49:26.551: EZVPN(vpn-hw-client): New State: TUNNEL_INT_UP
*Mar 1 01:49:26.551: EZVPN(vpn-hw-client): Current State: TUNNEL_INT_UP
*Mar 1 01:49:26.551: EZVPN(vpn-hw-client): Event: TUNNEL_HAS_PUBLIC_IP_ADD
*Mar 1 01:49:26.551: EZVPN(vpn-hw-client): New State: CONNECT_REQUIRED
*Mar 1 01:49:26.551: EZVPN(vpn-hw-client): Current State: CONNECT_REQUIRED
*Mar 1 01:49:26.551: EZVPN(vpn-hw-client): Event: CONNECT
*Mar 1 01:49:26.555: EZVPN(vpn-hw-client): ezvpn_connect_request
*Mar 1 01:49:26.555: EZVPN(vpn-hw-client): New State: READY
*Mar 1 01:49:27.535: EZVPN(vpn-hw-client): Current State: READY
*Mar
     1 01:49:27.535: EZVPN(vpn-hw-client): Event: CONN_UP
*Mar
     1 01:49:27.535: EZVPN(vpn-hw-client): ezvpn_conn_up A12E6D0D D9C3B1AE
41AB02FB 62DD1B01
*Mar 1 01:49:27.539: EZVPN(vpn-hw-client): No state change
*Mar 1 01:49:27.563: EZVPN(vpn-hw-client): Current State: READY
*Mar 1 01:49:27.563: EZVPN(vpn-hw-client): Event: MODE_CONFIG_REPLY
*Mar 1 01:49:27.563: EZVPN(vpn-hw-client): ezvpn_mode_config
*Mar 1 01:49:27.563: EZVPN(vpn-hw-client): ezvpn_parse_mode_config_msg
*Mar 1 01:49:27.563: EZVPN: Attributes sent in message:
*Mar 1 01:49:27.563:
                     DNS Primary: 172.16.1.1
*Mar 1 01:49:27.567:
                            DNS Secondary: 172.16.1.1
*Mar 1 01:49:27.567:
                           NBMS/WINS Primary: 172.16.1.1
*Mar 1 01:49:27.567:
                           NBMS/WINS Secondary: 172.16.1.1
*Mar 1 01:49:27.567:
                            Split Tunnel List: 1
*Mar 1 01:49:27.567:
                                   Address : 172.16.1.0
                                            : 255.255.255.0
     1 01:49:27.567:
*Mar
                                   Mask
                                   Protocol : 0x0
*Mar 1 01:49:27.567:
*Mar 1 01:49:27.567:
                                   Source Port: 0
*Mar 1 01:49:27.567:
                                  Dest Port : 0
*Mar 1 01:49:27.567:
                            Default Domain: cisco.com
*Mar 1 01:49:27.567: EZVPN: Unknown/Unsupported Attr: PFS (0x7007)
*Mar 1 01:49:27.571: EZVPN(vpn-hw-client): ezvpn_nat_config
*Mar 1 01:49:27.571: EZVPN: close old connection, len 0
*Mar 1 01:49:27.575: EZVPN(vpn-hw-client): New State: SS_OPEN
*Mar 1 01:49:27.587: EZVPN(vpn-hw-client): Current State: SS_OPEN
```

```
*Mar 1 01:49:27.587: EZVPN(vpn-hw-client): Event: SOCKET_READY
*Mar 1 01:49:27.587: EZVPN(vpn-hw-client): No state change
*Mar 1 01:49:27.619: %CRYPTO-5-SESSION_STATUS: Crypto tunnel is UP
Peer 10.66.79.72:500 Id: 10.66.79.72
*Mar 1 01:49:27.623: EZVPN(vpn-hw-client): Current State: SS_OPEN
*Mar 1 01:49:27.623: EZVPN(vpn-hw-client): No state change
*Mar 1 01:49:27.623: EZVPN(vpn-hw-client): No state change
*Mar 1 01:49:27.627: EZVPN(vpn-hw-client): Current State: SS_OPEN
*Mar 1 01:49:27.627: EZVPN(vpn-hw-client): Event: SOCKET_UP
*Mar 1 01:49:27.631: ezvpn_socket_up
*Mar 1 01:49:27.631: EZVPN(vpn-hw-client): New State: IPSEC_ACTIVE
```

## Informazioni correlate

- Pagina di supporto per PIX serie 500
- Documentazione per PIX Firewall
- <u>Riferimenti per i comandi PIX</u>
- Pagina di supporto per la negoziazione IPSec/i protocolli IKE