IOS Easy VPN Remote Hardware Client إلى PIX لـ VPN مداخ تكوين لمثال

المحتويات

المقدمة

يقدم هذا المستند نموذجا لتكوين IPSec بين عميل الأجهزة البعيدة Easy VPN من Cisco IOS® وخادم PIX Easy VPN.

ملاحظة: يشار أيضا إلى ميزة VPN Remote البسيطة باسم عميل الأجهزة وعميل EZvpn.

ارجع إلى EzVPN مع NEM على موجه IOS مع مثال تكوين مركز VPN 3000 للحصول على معلومات حول كيفية تكوين موجه Cisco IOS كموجه EzVPN في وضع امتداد الشبكة (NEM) للاتصال بمركز Cisco VPN 3000.

ارجع إلى PIX/ASA 7.x والإصدارات الأحدث: شبكة VPN سهلة مع Split Tunneling ASA 5500 كخادم و Cisco 871 كمثال التكوين عن بعد ل VPN سهل للحصول على معلومات حول كيفية تكوين IPSec بين موجه Cisco PIX/ASA 7.x وموجه Cisco 871 باستخدام شبكة VPN سهلة.

أحلت IOS مسحاج تخديد: سهل VPN (EzVPN) مع شبكة امتداد أسلوب (NEM) تشكيل مثال لمعلومة على كيف أن يشكل cisco 7200 مسحاج تخديد بما أن EzVPN و ال cisco 871 مسحاج تخديد بما أن ال VPN بعيد سهل.

المتطلبات الأساسية

المتطلبات

تأكد من استيفاء المتطلبات التالية قبل أن تحاول إجراء هذا التكوين:

- تأكد من أن برنامج Cisco IOS والأجهزة لديك تدعم ميزة VPN Remote السهلة. راجع Software Advisor (مرشد البرامج) (العملاء المسجلون فقط).
- تأكد من أن خادم VPN السهل الخاص بك عبارة عن جدار حماية PIX يشغل برنامج PIX الإصدار 6.2 أو إصدار أحدث.
- تأكد من وجود ترخيص 3DES مثبت على PIX. ارجع إلى ترقية مفتاح التنشيط.

المكونات المستخدمة

تستند المعلومات الواردة في هذا المستند إلى إصدارات البرامج والمكونات المادية التالية:

- عميل الأجهزة البعيدة VPN سهل IOS من Cisco هو موجه 831 يعمل ببرنامج Cisco IOS Software الإصدار T(8)12.3.
- خادم Easy VPN هو PIX 525 الذي يشغل برنامج PIX الإصدار 6.3(3).

تم إنشاء المعلومات الواردة في هذا المستند من الأجهزة الموجودة في بيئة معملية خاصة. بدأت جميع الأجهزة المستخدمة في هذا المستند بتكوين ممسوح (افتراضي). إذا كانت شبكتك مباشرة، فتأكد من فهمك للتأثير المحتمل لأي أمر.

الاصطلاحات

راجع اصطلاحات تلميحات Cisco التقنية للحصول على مزيد من المعلومات حول اصطلاحات المستندات.

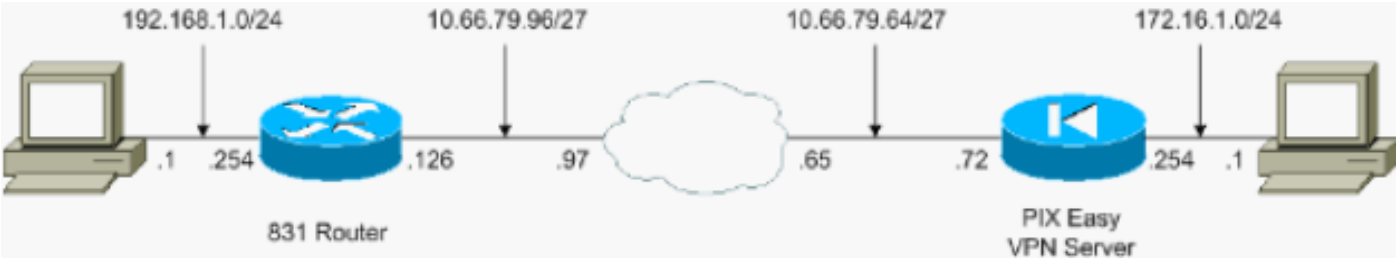
التكوين

في هذا القسم، تُقدّم لك معلومات تكوين الميزات الموضحة في هذا المستند.

ملاحظة: أستخدم أداة بحث الأوامر (للعملاء المسجلين فقط) للحصول على مزيد من المعلومات حول الأوامر المستخدمة في هذا القسم.

الرسم التخطيطي للشبكة

يستخدم هذا المستند إعداد الشبكة التالي:



التكوينات

يستخدم هذا المستند التكوينات التالية:

- خادم PIX Easy VPN
- عميل الأجهزة البعيدة VPN سهل IOS من Cisco

خادم PIX Easy VPN

```
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 permit-
    ipsec !--- 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 vpn-
 hw-client-group wins-server 172.16.1.1 vpngroup vpn-hw-
  client-group default-domain cisco.com vpngroup vpn-hw-
   client-group split-tunnel 110 vpngroup vpn-hw-client-
       group idle-time 1800 vpngroup vpn-hw-client-group
password ******** telnet timeout 5 ssh timeout 5 console
                                timeout 0 terminal width 80
   Cryptochecksum:700fe4d4e7fcdc6750953e64046930c0 : end
```

عميل الأجهزة البعيدة VPN سهل IOS من Cisco

```
                                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
                                                             !
                                                             !
                                                             !
                                                             !
                                        ip name-server 172.16.1.1
                                         ip ips po max-events 100
                                       no ftp-server write-enable
                                                             !
                                                             !
                                                             !
                                                             !
                                                             !
                                                             !
```

```
!
!
!
crypto ipsec client ezvpn vpn-hw-client
connect auto
group vpn-hw-client-group key password
mode network-extension
peer 10.66.79.72
!
!
!
!
interface Ethernet0
ip address 192.168.1.254 255.255.255.0
crypto ipsec client ezvpn vpn-hw-client inside
!
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
!
interface FastEthernet2
no ip address
duplex auto
speed auto
!
interface FastEthernet3
no ip address
duplex auto
speed auto
!
interface FastEthernet4
no ip address
duplex auto
speed auto
!
ip classless
ip route 0.0.0.0 0.0.0.0 10.66.79.97
!
ip http server
no ip http secure-server
!
!
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
```

التحقق من الصحة

أستخدم هذه الأقسام للتأكد من أن التكوين لديك يعمل بشكل صحيح.

- خادم PIX Easy VPN
- عميل الأجهزة البعيدة VPN سهل IOS من Cisco

خادم PIX Easy VPN

تدعم أداة مترجم الإخراج (للعملاءالمسجلين فقط) بعض أوامر **show**. استخدم أداة مترجم الإخراج (OIT) لعرض تحليل مُخرَج الأمر **show** .

- **show crypto isakmp sa**— يعرض جميع اقترانات أمان تبادل مفتاح الإنترنت (IKE) الحالية (SAs) في نظير.

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

- **show crypto ipSecsa**—يعرض رسائل IPSec SAs التي تم إنشاؤها بين الأقران.

```
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: 13f1aa83 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
```

عميل الأجهزة البعيدة VPN سهل IOS من Cisco

تدعم أداة مترجم الإخراج (للعملاءالمسجلين فقط) بعض أوامر **show**. استخدم أداة مترجم الإخراج (OIT) لعرض تحليل مُخرَج الأمر **show** .

- **show crypto isakmp sa**— يعرض جميع شبكات IKE الحالية في نظير.

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

- **show crypto ipSecsa**—يعرض رسائل IPSec SAs التي تم إنشاؤها بين الأقران.

```
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: Ethernet1 Crypto map tag: Ethernet1-
          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**—يعرض معلومات تكوين جهاز عن بعد ل VPN أو عميل VPN سهل.

```
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
                                                               Mask       : 255.255.255.0
                                                                         Protocol   : 0x0
                                                                           Source Port: 0
                                                                           Dest Port  : 0
```

استكشاف الأخطاء وإصلاحها

توفر هذه الأقسام معلومات يمكنك إستخدامها لاستكشاف أخطاء التكوين وإصلاحها.

- خادم PIX Easy VPN
- عميل الأجهزة البعيدة VPN سهل IOS من Cisco

إن setup أنت ال VPN Easy VPN Remote Hardware Client و Easy VPN نادل كما هو موضح في هذا وثيقة ولا يزال أنت تواجه مشكلة، **يجمع ال debug** إنتاج من كل أداة والمخرجات من **العرض** أمر للتحليل ب cisco مساعدة التقنية مركز (TAC).

ارجع إلى أستكشاف أخطاء أمان IP وإصلاحها - فهم أوامر تصحيح الأخطاء واستخدامها واستكشاف أخطاء PIX لتمرير حركة مرور البيانات على نفق IPSec تم إنشاؤه للحصول على معلومات إضافية حول أستكشاف الأخطاء وإصلاحها.

خادم PIX Easy VPN

تدعم أداة مترجم الإخراج (للعملاءالمسجلين فقط) بعض أوامر **show**. استخدم أداة مترجم الإخراج (OIT) لعرض تحليل مُخرَج الأمر **show** .

ملاحظة: ارجع إلى معلومات مهمة حول أوامر التصحيح قبل إستخدام أوامر **debug**.

- **debug crypto ipSec**—يعرض مفاوضات IPSec للمرحلة 2.
- **debug crypto isakmp**—يعرض مفاوضات ISAKMP للمرحلة 1.

يتم عرض إخراج النموذج هنا:

```
                                                                #(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:      hash SHA
                                                    ISAKMP:      default group 2
                                            (ISAKMP:      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
                                                    ISAKMP:      default group 2
                                            (ISAKMP:      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 3 against priority 10 policy
                                                 ISAKMP:      encryption DES-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 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
                                                        ISAKMP:      hash MD5
                                                    ISAKMP:      default group 2
                                            (ISAKMP:      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 5 against priority 10 policy
                                                ISAKMP:      encryption 3DES-CBC
                                                        ISAKMP:      hash SHA
                                                    ISAKMP:      default group 2
                                                     ISAKMP:      auth pre-share
                                                    ISAKMP:      life type in seconds
                                ISAKMP:      life duration (VPI) of  0x0 0x20 0xc4 0x9b
                                     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
                                                           type         : 1
                                                          protocol     : 17
                                                         port         : 500
                                                           length       : 8
                                                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 = 63324444
                                             ISAKMP: 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
ISAKMP:      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
```

[عميل الأجهزة البعيدة VPN سهل IOS من Cisco]

تدعم [أداة مترجم الإخراج (للعملاءالمسجلين فقط) بعض أوامر] **show**. استخدم أداة مترجم الإخراج (OIT) لعرض تحليل مُخرَج الأمر **show** .

ملاحظة: ارجع إلى [معلومات مهمة حول أوامر التصحيح] قبل إستخدام أوامر **debug**.

- **debug crypto ipSec**—يعرض مفاوضات IPSec للمرحلة 2.
- **debug crypto isakmp**—يعرض مفاوضات ISAKMP للمرحلة 1.

يتم عرض إخراج النموذج هنا:

```
config)#int eth 1)831
config-if)#crypto ipsec client ezvpn vpn-hw-client)831
[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*
for isakmp_initiator 1
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*
Mar  1 01:42:18.751: ISAKMP:(0:0:N/A:0): constructed NAT-T vendor-03 ID*
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
type         : 11
group id     : vpn-hw-client-group
protocol     : 17
port         : 0
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_READ  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
                                                  type         : 1
                                           address      : 10.66.79.72
                                                 protocol     : 17
                                                port         : 500
                                                 length       : 12
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*
                                                                mismatch 215
                     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*
                             Mar  1 01:42:19.279: ISAKMP:      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*
                                                          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*
                                Mar  1 01:42:19.283: ISAKMP:      hash SHA*
                             Mar  1 01:42:19.283: ISAKMP:      default group 2*
                              Mar  1 01:42:19.283: ISAKMP:      auth pre-share*
                           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*
                                                             payload 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*
                              Mar  1 01:42:19.287: ISAKMP:      auth pre-share*
                           Mar  1 01:42:19.287: ISAKMP:      life 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*
                                        against priority 65530 policy 1
                Mar  1 01:42:19.291: ISAKMP:      encryption 3DES-CBC*
                      Mar  1 01:42:19.291: ISAKMP:      hash SHA*
                   Mar  1 01:42:19.291: ISAKMP:      default group 2*
                    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*
             .and inserted successfully  ,/10.66.79.126/10.66.79.72/500
             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*
                                          ID = -1731108340 .10.66.79.72
     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*
                                       message ID = -1731108340 .10.66.79.72
                            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*
                                   dport 500 sport 500 Global (I) QM_IDLE 10.66.79.72
               .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*
Mar  1 01:42:19.867: ISAKMP:      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*
                       Mar  1 01:42:19.867: ISAKMP:      authenticator is HMAC-SHA*
                       .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*
                                               src addr     : 192.168.1.0
                                                dst addr     : 172.16.1.0
                                                        protocol     : 0
                                                        src port     : 0
                                                        dst port     : 0
                  .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*
                           Mar  1 01:42:19.895:         lifetime of 28790 seconds*
                         Mar  1 01:42:19.895:         lifetime of 4608000 kilobytes*
                                  Mar  1 01:42:19.895:         has client flags 0x0*
       Mar  1 01:42:19.895:         outbound SA from 10.66.79.126 to 10.66.79.72*
                                                                    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*
                       Mar  1 01:42:19.895:         lifetime of 28790 seconds*
                   Mar  1 01:42:19.895:         lifetime of 4608000 kilobytes*
                            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
                                          dst addr     : 172.16.1.0
                                                  protocol     : 0
                                                  src port     : 0
                                                  dst port     : 0
                  :(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*
                              my_port 500 peer_port 500 (I) QM_IDLE 10.66.79.72
             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**— يعرض المفاوضات الخاصة بعميل VPN.

يتم عرض إخراج النموذج هنا:

```
                                                config)#int eth 1)831
                                    config-if)#crypto ipsec client ezvpn vpn-hw-client)831
                                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*
Mar  1 01:49:27.567:              Mask       : 255.255.255.0*
Mar  1 01:49:27.567:              Protocol   : 0x0*
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): Event: MTU_CHANGED*
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*
```

معلومات ذات صلة

- صفحة دعم سلسلة PIX 500
- وثائق جدار حماية PIX
- مراجع أوامر PIX
- صفحة دعم مفاوضة IPSec/بروتوكولات IKE

حول هذه الترجمة
ترجمت Cisco هذا المستند باستخدام مجموعة من التقنيات الآلية والبشرية لتقديم محتوى دعم للمستخدمين في جميع أنحاء العالم بلغتهم الخاصة. يُرجى ملاحظة أن أفضل ترجمة آلية لن تكون دقيقة كما هو الحال مع الترجمة الاحترافية التي يقدمها مترجم محترف. تخلي Cisco Systems مسئوليتها عن دقة هذه الترجمات وتُوصي بالرجوع دائمًا إلى المستند الإنجليزي الأصلي (الرابط متوفر).