

使用NAT和Cisco VPN客戶端配置PIX到PIX動態到靜態IPSec

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簡介

在此示例配置中，遠端PIX通過動態主機配置協定(DHCP)接收IP地址並連線到中央PIX。此配置使中央PIX能夠接受動態IPsec連線。遠端PIX使用網路地址轉換(NAT)將在其背後的私有定址裝置「加入」到中央PIX背後的私有定址網路。遠端PIX可以啟動與中央PIX的連線（它知道終點），但中央PIX無法啟動與遠端PIX的連線（它不知道終點）。

在此示例配置中，Tiger是遠端PIX，Lion是中央PIX。由於Tiger的IP地址未知，因此您必須將Lion配置為動態接受來自任何位置的連線，同時瞭解萬用字元預共用金鑰。Tiger知道要加密哪些流量（因為它由訪問清單指定）以及Lion終端的位置。Tiger必須啟動連線。兩端都執行NAT和nat 0以繞過IPsec流量的NAT。

此外，此配置中的遠端使用者使用Cisco VPN Client 3.x連線到中央PIX(Lion)。遠端使用者無法連線到遠端PIX(Tiger)，因為兩端都會動態分配IP地址，並且不知道將請求傳送到何處。

請參閱[使用NAT和VPN客戶端的PIX/ASA 7.x PIX到PIX動態到靜態IPsec配置示例](#)，以瞭解有關使用Cisco VPN客戶端4.x的PIX/ASA 7.x中相同方案的詳細資訊。

必要條件

需求

本文件沒有特定需求。

採用元件

本文中的資訊係根據以下軟體和硬體版本：

- Cisco PIX防火牆軟體版本6.0(1) (適用於Cisco VPN客戶端3.x的更高版本)
- Cisco PIX防火牆軟體版本5.3.1 (遠端PIX)
- Cisco VPN使用者端版本3.x

本文中的資訊是根據特定實驗室環境內的裝置所建立。文中使用到的所有裝置皆從已清除（預設）的組態來啟動。如果您的網路正在作用，請確保您已瞭解任何指令可能造成的影響。

慣例

如需文件慣例的詳細資訊，請參閱[思科技術提示慣例](#)。

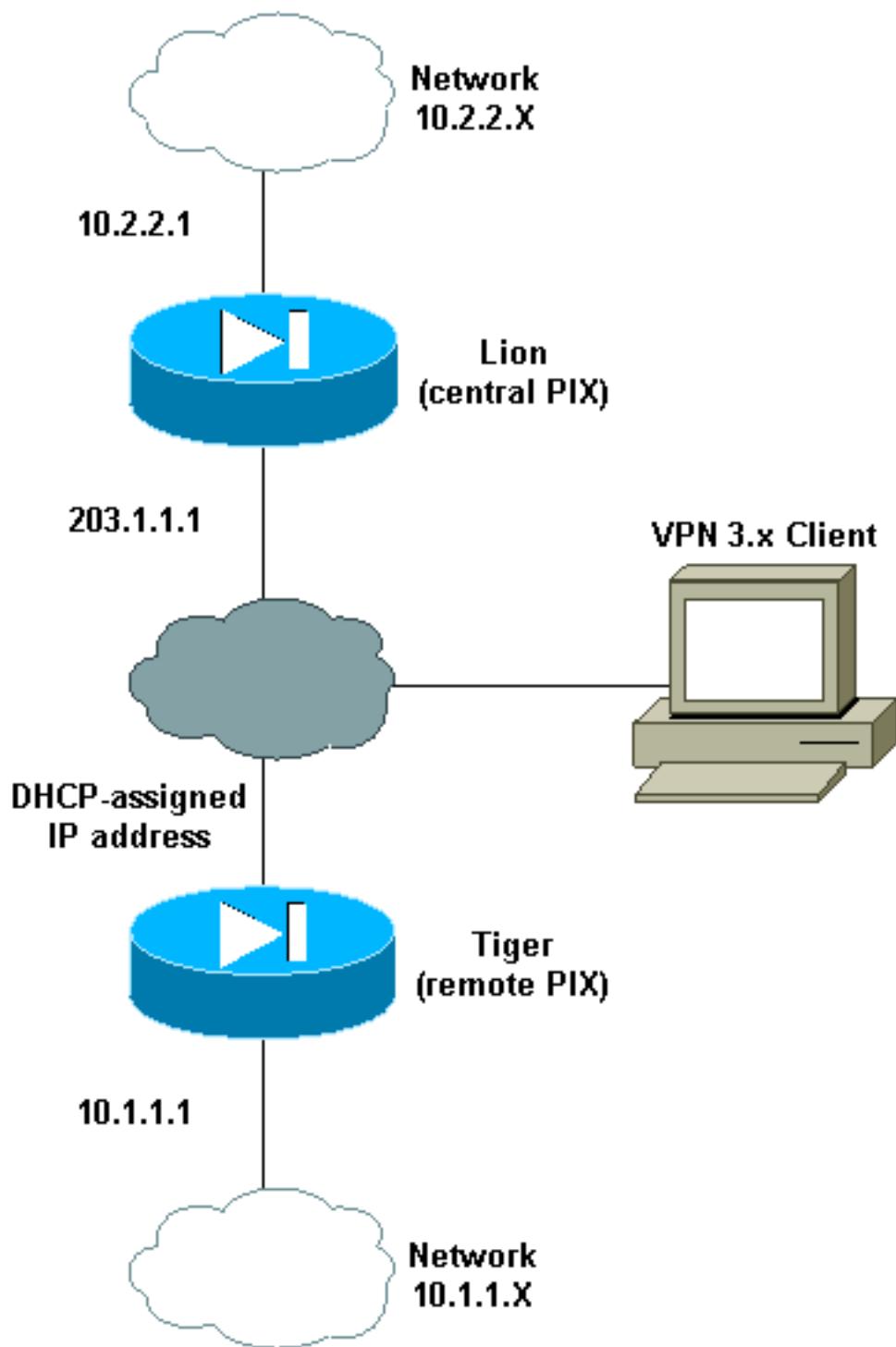
設定

本節提供用於設定本文件中所述功能的資訊。

註：使用[Command Lookup Tool](#)(僅供已註冊客戶使用)可獲取本節中使用的命令的詳細資訊。

網路圖表

本檔案會使用以下網路設定：



組態

Lion配置
<pre> Building configuration... : Saved : PIX Version 6.0(1) nameif gb-ethernet0 sparel security10 nameif gb-ethernet1 spare2 security15 nameif ethernet0 outside security0 nameif ethernet1 inside security100 enable password 8Ry2YjIyt7RRXU24 encrypted passwd 2KFQnbNIIdI.2KYOU encrypted hostname lion </pre>

```
domain-name cisco.com
fixup protocol ftp 21
fixup protocol http 80
fixup protocol h323 1720
fixup protocol rsh 514
fixup protocol smtp 25
fixup protocol sqlnet 1521
fixup protocol sip 5060
fixup protocol skinny 2000
names
!
!-- ACL to avoid Network Address Translation (NAT) on
the IPsec packets. access-list 100 permit ip 10.2.2.0
255.255.255.0 10.1.1.0 255.255.255.0
access-list 100 permit ip 10.2.2.0 255.255.255.0
10.3.3.0 255.255.255.0
!
pager lines 24
logging buffered debugging
interface gb-ethernet0 1000auto shutdown
interface gb-ethernet1 1000auto shutdown
interface ethernet0 10baset
interface ethernet1 10baset
mtu spare1 1500
mtu spare2 1500
mtu outside 1500
mtu inside 1500
ip address spare1 127.0.0.1 255.255.255.255
ip address spare2 127.0.0.1 255.255.255.255
!
!-- IP addresses on the interfaces ip address outside
203.1.1.1 255.255.255.0
ip address inside 10.2.2.1 255.255.255.0
!
ip audit info action alarm
ip audit attack action alarm
ip local pool clientpool 10.3.3.1-10.3.3.10
no failover
failover timeout 0:00:00
failover poll 15
failover ip address spare1 0.0.0.0
failover ip address spare2 0.0.0.0
failover ip address outside 0.0.0.0
failover ip address inside 0.0.0.0
pdm history enable
arp timeout 14400
!-- global (outside) 1 203.1.1.10-203.1.1.15 !--
Change from NAT to PAT on the DHCP interface. global
(outside) 1 interface ! --- Binding ACL 100 to the NAT
statement to avoid NAT on the IPsec packets. nat
(inside) 0 access-list 100
!
nat (inside) 1 0.0.0.0 0.0.0.0 0 0
conduit permit icmp any any
!
!-- Default route to the Internet route outside 0.0.0.0
0.0.0.0 203.1.1.2 1
!
timeout xlate 3:00:00
timeout conn 1:00:00 half-closed 0:10:00 udp 0:02:00 rpc
0:10:00 h323 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
no snmp-server location
no snmp-server contact
snmp-server community public
no snmp-server enable traps
floodguard enable
!
!--- The sysopt command avoids conduit on the IPsec
encrypted traffic.

sysopt connection permit-ipsec
!
no sysopt route dnat
!
!--- Phase 2 encryption type crypto ipsec transform-set
myset esp-des esp-md5-hmac
crypto dynamic-map cisco 1 set transform-set myset
crypto map dyn-map 20 ipsec-isakmp dynamic cisco
!
!--- Binds the IPsec engine on the outside interface.
crypto map dyn-map interface outside
!
!--- Enables ISAKMP key-exchange. isakmp enable outside
!
!--- ISAKMP policy for accepting dynamic connections
from the remote PIX. isakmp key ***** address 0.0.0.0
netmask 0.0.0.0
!--- ISAKMP policy for Cisco VPN Client 2.x isakmp
policy 10 authentication pre-share
isakmp policy 10 encryption des
isakmp policy 10 hash md5
isakmp policy 10 group 1
isakmp policy 10 lifetime 1000
!
!--- ISAKMP policy for Cisco VPN Client 3.x isakmp
policy 20 authentication pre-share
isakmp policy 20 encryption des
isakmp policy 20 hash sha
isakmp policy 20 group 2
isakmp policy 20 lifetime 86400
!
!--- IPsec group configuration for either client
vpngroup unityclient address-pool clientpool
vpngroup unityclient dns-server 10.1.1.3
vpngroup unityclient wins-server 10.1.1.3
vpngroup unityclient default-domain cisco.com
vpngroup unityclient idle-time 1800
vpngroup unityclient password *****
!
telnet timeout 5
ssh timeout 5
terminal width 80
Cryptochecksum:d6fe92db883a052c5765be21a74e7c8d
: end
[OK]

```

Tiger配置

```

Building configuration...
: Saved
:
PIX Version 5.3(1)
nameif gb-ethernet0 spare1 security10

```

```
nameif gb-ethernet1 spare2 security15
nameif ethernet0 outside security0
nameif ethernet1 inside security100
enable password 8Ry2YjIyt7RRXU24 encrypted
passwd 2KFQnbNIdI.2KYOU encrypted
hostname tiger
fixup protocol ftp 21
fixup protocol http 80
fixup protocol h323 1720
fixup protocol rsh 514
fixup protocol smtp 25
fixup protocol sqlnet 1521
fixup protocol sip 5060
names
!
!--- ACL to avoid NAT on the IPsec packets access-list
101 permit ip 10.1.1.0 255.255.255.0 10.2.2.0
255.255.255.0
!
pager lines 24
logging on
no logging timestamp
no logging standby
no logging console
no logging monitor
logging buffered debugging
no logging trap
no logging history
logging facility 20
logging queue 512
interface gb-ethernet0 1000auto shutdown
interface gb-ethernet1 1000auto shutdown
interface ethernet0 10baseT
interface ethernet1 10baseT
mtu spare1 1500
mtu spare2 1500
mtu outside 1500
mtu inside 1500
ip address spare1 127.0.0.1 255.255.255.255
ip address spare2 127.0.0.1 255.255.255.255
!
ip address outside dhcp
ip address inside 10.1.1.1 255.255.255.0
!
ip audit info action alarm
ip audit attack action alarm
no failover
failover timeout 0:00:00
failover poll 15
failover ip address spare1 0.0.0.0
failover ip address spare2 0.0.0.0
failover ip address outside 0.0.0.0
failover ip address inside 0.0.0.0
arp timeout 14400
global (outside) 1 204.1.1.10-204.1.1.15
!
!--- Binds ACL 101 to the NAT statement to avoid NAT on
the IPsec packets. nat (inside) 0 access-list 101
!
nat (inside) 1 0.0.0.0 0.0.0.0 0 0
conduit permit icmp any any
route outside 0.0.0.0 0.0.0.0 204.1.1.2 1
timeout xlate 3:00:00
timeout conn 1:00:00 half-closed 0:10:00 udp 0:02:00 rpc
```

```

0:10:00 h323 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
no snmp-server location
no snmp-server contact
snmp-server community public
no snmp-server enable traps
floodguard enable
!
!--- The sysopt command avoids conduit on the IPsec
encrypted traffic.

sysopt connection permit-ipsec
!
no sysopt route dnat
!
!--- Phase 2 encryption type crypto ipsec transform-set
myset esp-des esp-md5-hmac
crypto map newmap 10 ipsec-isakmp
crypto map newmap 10 match address 101
crypto map newmap 10 set peer 203.1.1.1
crypto map newmap 10 set transform-set myset
!
!--- Binds the IPsec engine on the outside interface.
crypto map newmap interface outside
!
!--- Enables ISAKMP key-exchange isakmp enable outside
!
!--- ISAKMP policy for connecting to the central PIX.
isakmp key ***** address 203.1.1.1 netmask
255.255.255.255
isakmp identity hostname
isakmp policy 10 authentication pre-share
isakmp policy 10 encryption des
isakmp policy 10 hash md5
isakmp policy 10 group 1
isakmp policy 10 lifetime 1000
!
telnet timeout 5
ssh timeout 5
terminal width 80
Cryptochecksum:6743b7bf9476590ecd1a1a8c6d75245b
: end
[OK]

```

驗證

本節提供的資訊可用於確認您的組態是否正常運作。

[輸出直譯器工具](#)(僅供[已註冊](#)客戶使用)(OIT)支援某些**show**命令。使用OIT檢視**show**命令輸出的分析。

注意：clear命令必須在配置模式下執行。

- **clear crypto ipsec sa** — 在嘗試協商VPN隧道失敗後重置IPsec關聯。
- **clear crypto isakmp sa** — 在嘗試協商VPN隧道失敗後重置Internet安全關聯和金鑰管理協定(ISAKMP)安全關聯。

- **show crypto engine ipsec** — 顯示加密會話。

疑難排解

本節提供的資訊可用於對組態進行疑難排解。

疑難排解指令

輸出直譯器工具(僅供已註冊客戶使用)(OIT)支援某些**show**命令。使用OIT檢視**show**命令輸出的分析。

附註：使用 **debug** 指令之前，請先參閱[有關 Debug 指令的重要資訊](#)。

- **debug crypto ipsec** — 用於檢視客戶端是否協商VPN連線的IPsec部分。
- **debug crypto isakmp connection** — 用於檢視對等體是否正在協商VPN的ISAKMP部分。

「正常」調試輸出示例

- [中央PIX調試](#)
- [遠端PIX調試](#)
- [客戶端調試](#)

Central Pix調試

```
crypto_isakmp_process_block: src 204.1.1.1, dest 203.1.1.1
OAK_MM exchange
ISAKMP (0): processing SA payload. message ID = 0

ISAKMP (0): Checking ISAKMP transform 1 against priority 10 policy
ISAKMP:      encryption DES-CBC
ISAKMP:      hash MD5
ISAKMP:      default group 1
ISAKMP:      auth pre-share
ISAKMP:      life type in seconds
ISAKMP:      life duration (basic) of 1000
ISAKMP (0): atts are acceptable. Next payload is 0
ISAKMP (0): SA is doing pre-shared key authentication using id type ID_FQDN
return status is IKMP_NO_ERROR
crypto_isakmp_process_block: src 204.1.1.1, dest 203.1.1.1
OAK_MM exchange
ISAKMP (0): processing KE payload. message ID = 0

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

ISAKMP (0): processing vendor id payload

ISAKMP (0): processing vendor id payload
ISAKMP (0): processing vendor id payload

ISAKMP (0): speaking to another IOS box!

return status is IKMP_NO_ERROR
```

```
crypto_isakmp_process_block: src 204.1.1.1, dest 203.1.1.1
OAK_MM exchange
ISAKMP (0): processing ID payload. message ID = 0
ISAKMP (0): processing HASH payload. message ID = 0
ISAKMP (0): SA has been authenticated

ISAKMP (0): ID payload
    next-payload : 8
    type         : 2
    protocol     : 17
    port          : 500
    length        : 10
ISAKMP (0): Total payload length: 14
return status is IKMP_NO_ERROR
crypto_isakmp_process_block: src 204.1.1.1, dest 203.1.1.1
OAK_QM exchange
oakley_process_quick_mode:
OAK_QM_IDLE
ISAKMP (0): processing SA payload. message ID = 1223411072

ISAKMP : Checking IPSec proposal 1

ISAKMP: transform 1, ESP_DES
ISAKMP:   attributes in transform:
ISAKMP:     encaps is 1
ISAKMP:     SA life type in seconds
ISAKMP:     SA life duration (basic) of 28800
ISAKMP:     SA life type in kilobytes
ISAKMP:     SA life duration (VPI) of 0x0 0x46 0x50 0x0
ISAKMP:     authenticator is HMAC-MD5
ISAKMP (0): atts are acceptable.IPSEC(validate_proposal_request): proposal part #1,
(key eng. msg.) dest= 203.1.1.1, src= 204.1.1.1,
dest_proxy= 10.1.1.0/255.255.255.0/0/0 (type=4),
src_proxy= 10.2.2.0/255.255.255.0/0/0 (type=4),
protocol= ESP, transform= esp-des esp-md5-hmac ,
lifedur= 0s and 0kb,
spi= 0x0(0), conn_id= 0, keysize= 0, flags= 0x4

ISAKMP (0): processing NONCE payload. message ID = 1223411072

ISAKMP (0): processing ID payload. message ID = 1223411072
ISAKMP (0): ID_IPV4_ADDR_SUBNET src 10.2.2.0/255.255.255.0 prot 0 port 0
ISAKMP (0): processing ID payload. message ID = 1223411072
ISAKMP (0): ID_IPV4_ADDR_SUBNET dst 10.1.1.0/255.255.255.0 prot 0 port
    0IPSEC(key_engine): got a queue event...
IPSEC(spi_response): getting spi 0xd0e27cb6(3504503990) for SA from 204.1.1.1
    to 203.1.1.1 for prot 3

return status is IKMP_NO_ERROR
crypto_isakmp_process_block: src 204.1.1.1, dest 203.1.1.1
OAK_QM exchange
oakley_process_quick_mode:
OAK_QM_AUTH_AWAIT
ISAKMP (0): Creating IPSec SAs
    inbound SA from 204.1.1.1 to 203.1.1.1 proxy 10.2.2.0 to 10.1.1.0)
    has spi 3504503990 and conn_id 4 and flags 4
    lifetime of 28800 seconds
    lifetime of 4608000 kilobytes
    outbound SA from 203.1.1.1 to 204.1.1.1(proxy 10.1.1.0 to 10.2.2.0)
    has spi 2729504033 and conn_id 3 and flags 4
    lifetime of 28800 seconds
    lifetime of 4608000 kilobytesIPSEC(key_engine): got a queue event...
IPSEC(initialize_sas):
(key eng. msg.) dest= 203.1.1.1, src= 204.1.1.1,
```

```

dest_proxy= 10.1.1.0/255.255.255.0/0/0 (type=4),
src_proxy= 10.2.2.0/255.255.255.0/0/0 (type=4),
protocol= ESP, transform= esp-des esp-md5-hmac ,
lifedur= 28800s and 4608000kb,
spi= 0xd0e27cb6(3504503990), conn_id= 4, keysiz= 0, flags= 0x4
IPSEC(initialize_sas): ,
(key eng. msg.) src= 203.1.1.1, dest= 204.1.1.1,
src_proxy= 10.1.1.0/255.255.255.0/0/0 (type=4),
dest_proxy= 10.2.2.0/255.255.255.0/0/0 (type=4),
protocol= ESP, transform= esp-des esp-md5-hmac ,
lifedur= 28800s and 4608000kb,
spi= 0xa2b0ed21(2729504033), conn_id= 3, keysiz= 0, flags= 0x4

```

return status is IKMP_NO_ERROR

遠端PIX調試

```

ISAKMP (0): beginning Main Mode exchange

crypto_isakmp_process_block: src 203.1.1.1, dest 204.1.1.1
OAK_MM exchange
ISAKMP (0): processing SA payload. message ID = 0

ISAKMP (0): Checking ISAKMP transform 1 against priority 10 policy
ISAKMP:      encryption DES-CBC
ISAKMP:      hash MD5
ISAKMP:      default group 1
ISAKMP:      auth pre-share
ISAKMP:      life type in seconds
ISAKMP:      life duration (basic) of 1000
ISAKMP (0): atts are acceptable. Next payload is 0
ISAKMP (0): SA is doing pre-shared key authentication using id type ID_FQDN
return status is IKMP_NO_ERROR
crypto_isakmp_process_block: src 203.1.1.1, dest 204.1.1.1
OAK_MM exchange
ISAKMP (0): processing KE payload. message ID = 0

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

ISAKMP (0): processing vendor id payload

ISAKMP (0): speaking to another IOS box!

ISAKMP (0): ID payload
next-payload : 8
type         : 2
protocol     : 17
port          : 500
length        : 18
ISAKMP (0): Total payload length: 22
return status is IKMP_NO_ERROR
crypto_isakmp_process_block: src 203.1.1.1, dest 204.1.1.1
OAK_MM exchange
ISAKMP (0): processing ID payload. message ID = 0
ISAKMP (0): processing HASH payload. message ID = 0
ISAKMP (0): SA has been authenticated

ISAKMP (0): beginning Quick Mode exchange, M-ID of
1223411072:48ebc580IPSEC(key_engine):got a queue event...
IPSEC(spi_response): getting spi 0xa2b0ed21(2729504033) for SA
from          203.1.1.1 to          204.1.1.1 for prot 3

return status is IKMP_NO_ERROR

```

```

crypto_isakmp_process_block: src 203.1.1.1, dest 204.1.1.1
OAK_QM exchange
oakley_process_quick_mode:
OAK_QM_IDLE
ISAKMP (0): processing SA payload. message ID = 1223411072

ISAKMP : Checking IPSec proposal 1

ISAKMP: transform 1, ESP_DES
ISAKMP:   attributes in transform:
ISAKMP:     encaps is 1
ISAKMP:     SA life type in seconds
ISAKMP:     SA life duration (basic) of 28800
ISAKMP:     SA life type in kilobytes
ISAKMP:     SA life duration (VPI) of 0x0 0x46 0x50 0x0
ISAKMP:     authenticator is HMAC-MD5
ISAKMP (0): atts are acceptable.IPSEC(validate_proposal_request): proposal part #1,
(key eng. msg.) dest= 203.1.1.1, src= 204.1.1.1,
dest_proxy= 10.1.1.0/255.255.255.0/0/0 (type=4),
src_proxy= 10.2.2.0/255.255.255.0/0/0 (type=4),
protocol= ESP, transform= esp-des esp-md5-hmac ,
lifedur= 0s and 0kb,
spi= 0x0(0), conn_id= 0, keysiz= 0, flags= 0x4

ISAKMP (0): processing NONCE payload. message ID = 1223411072

ISAKMP (0): processing ID payload. message ID = 1223411072
ISAKMP (0): processing ID payload. message ID = 1223411072
ISAKMP (0): Creating IPSec SAs
    inbound SA from 203.1.1.1 to 204.1.1.1 (proxy 10.1.1.0 to 10.2.2.0)
    has spi 2729504033 and conn_id 4 and flags 4
    lifetime of 28800 seconds
    lifetime of 4608000 kilobytes
    outbound SA from 204.1.1.1 to 203.1.1.1 (proxy 10.2.2.0 to 10.1.1.0)
    has spi 3504503990 and conn_id 3 and flags 4
    lifetime of 28800 seconds
    lifetime of 4608000 kilobytesIPSEC(key_engine): got a queue event...
IPSEC(initialize_sas):
(key eng. msg.) dest= 204.1.1.1, src= 203.1.1.1,
dest_proxy= 10.2.2.0/255.255.255.0/0/0 (type=4),
src_proxy= 10.1.1.0/255.255.255.0/0/0 (type=4),
protocol= ESP, transform= esp-des esp-md5-hmac ,
lifedur= 28800s and 4608000kb,
spi= 0xa2b0ed21(2729504033), conn_id= 4, keysiz= 0, flags= 0x4
IPSEC(initialize_sas):
(key eng. msg.) src= 204.1.1.1, dest= 203.1.1.1,
src_proxy= 10.2.2.0/255.255.255.0/0/0 (type=4),
dest_proxy= 10.1.1.0/255.255.255.0/0/0 (type=4),
protocol= ESP, transform= esp-des esp-md5-hmac ,
lifedur= 28800s and 4608000kb,
spi= 0xd0e27cb6(3504503990), conn_id= 3, keysiz= 0, flags= 0x4

return status is IKMP_NO_ERROR

```

客戶端調試

```

19      16:43:20.402 06/28/01 Sev=Info/4          CM/0x63100004
Establish secure connection using Ethernet

20      16:43:20.402 06/28/01 Sev=Info/4          CM/0x63100025
Attempt connection with server "203.1.1.1"

21      16:43:20.402 06/28/01 Sev=Info/6          IKE/0x6300003B

```

Attempting to establish a connection with 203.1.1.1.

```
22      16:43:20.442 06/28/01 Sev=Info/4          IKE/0x63000013
SENDING >>> ISAKMP OAK AG (SA, KE, NON, ID, VID, VID, VID) to 203.1.1.1

23      16:43:20.452 06/28/01 Sev=Info/4          IPSEC/0x63700014
Deleted all keys

24      16:43:20.492 06/28/01 Sev=Info/5          IKE/0x6300002F
Received ISAKMP packet: peer = 203.1.1.1

25      16:43:20.492 06/28/01 Sev=Info/4          IKE/0x63000014
RECEIVING <<< ISAKMP OAK AG (SA, VID, VID, VID, KE, ID, NON, HASH) from 203.1.1.1

26      16:43:20.492 06/28/01 Sev=Info/5          IKE/0x63000059
Vendor ID payload = 12F5F28C457168A9702D9FE274CC0100

27      16:43:20.492 06/28/01 Sev=Info/5          IKE/0x63000001
Peer is a Cisco-Unity compliant peer

28      16:43:20.492 06/28/01 Sev=Info/5          IKE/0x63000059
Vendor ID payload = AFCAD71368A1F1C96B8696FC77570100

29      16:43:20.492 06/28/01 Sev=Info/5          IKE/0x63000001
Peer supports DPD

30      16:43:20.492 06/28/01 Sev=Info/5          IKE/0x63000059
Vendor ID payload = A0EB477E6627B406AA10F958254B3517

31      16:43:20.542 06/28/01 Sev=Info/4          IKE/0x63000013
SENDING >>> ISAKMP OAK AG *(HASH, NOTIFY:STATUS_INITIAL_CONTACT) to 203.1.1.1

32      16:43:20.542 06/28/01 Sev=Info/4          CM/0x6310000E
Established Phase 1 SA. 1 Phase 1 SA in the system

33      16:43:21.143 06/28/01 Sev=Info/4          IKE/0x63000013
SENDING >>> ISAKMP OAK TRANS *(HASH, ATTR) to 203.1.1.1

34      16:43:24.067 06/28/01 Sev=Info/5          IKE/0x6300002F
Received ISAKMP packet: peer = 203.1.1.1

35      16:43:24.067 06/28/01 Sev=Info/4          IKE/0x63000014
RECEIVING <<< ISAKMP OAK TRANS *(HASH, ATTR) from 203.1.1.1

36      16:43:24.067 06/28/01 Sev=Info/5          IKE/0x63000010
MODE_CFG_REPLY: Attribute = INTERNAL_IPV4_ADDRESS: , value = 10.3.3.1

37      16:43:24.067 06/28/01 Sev=Info/5          IKE/0x63000010
MODE_CFG_REPLY: Attribute = INTERNAL_IPV4_DNS(1): , value = 10.1.1.3

38      16:43:24.067 06/28/01 Sev=Info/5          IKE/0x63000010
MODE_CFG_REPLY: Attribute = INTERNAL_IPV4_NBNS(1) (a.k.a. WINS) : , value = 10.1.1.3

39      16:43:24.067 06/28/01 Sev=Info/5          IKE/0x6300000E
MODE_CFG_REPLY: Attribute = MODECFG_UNITY_DEFDOMAIN: , value = cisco.com

40      16:43:24.067 06/28/01 Sev=Info/4          CM/0x63100018
```

Mode Config data received

41 16:43:24.668 06/28/01 Sev=Info/5 IKE/0x63000055
Received a key request from Driver for IP address 203.1.1.1, GW IP = 203.1.1.1

42 16:43:24.668 06/28/01 Sev=Info/4 IKE/0x63000013
SENDING >>> ISAKMP OAK QM *(HASH, SA, NON, ID, ID) to 203.1.1.1

43 16:43:24.668 06/28/01 Sev=Info/5 IKE/0x63000055
Received a key request from Driver for IP address 10.10.10.255, GW IP = 203.1.1.1

44 16:43:24.668 06/28/01 Sev=Info/4 IKE/0x63000013
SENDING >>> ISAKMP OAK QM *(HASH, SA, NON, ID, ID) to 203.1.1.1

45 16:43:24.668 06/28/01 Sev=Info/4 IPSEC/0x63700014
Deleted all keys

46 16:43:25.619 06/28/01 Sev=Info/5 IKE/0x6300002F
Received ISAKMP packet: peer = 203.1.1.1

47 16:43:25.619 06/28/01 Sev=Info/4 IKE/0x63000014
RECEIVING <<< ISAKMP OAK QM *(HASH, SA, NON, ID, ID, NOTIFY:STATUS_RESP_LIFETIME) from 203.1.1.1

48 16:43:25.619 06/28/01 Sev=Info/5 IKE/0x63000044
RESPONDER-LIFETIME notify has value of 28800 seconds

49 16:43:25.619 06/28/01 Sev=Info/5 IKE/0x63000045
RESPONDER-LIFETIME notify has value of 4608000 kb

50 16:43:25.619 06/28/01 Sev=Info/4 IKE/0x63000013
SENDING >>> ISAKMP OAK QM *(HASH) to 203.1.1.1

51 16:43:25.619 06/28/01 Sev=Info/5 IKE/0x63000058
Loading IPsec SA (Message ID = 0x59515364 OUTBOUND SPI = 0xB24CDB55 INBOUND SPI = 0x83AA0042)

52 16:43:25.619 06/28/01 Sev=Info/5 IKE/0x63000025
Loaded OUTBOUND ESP SPI: 0xB24CDB55

53 16:43:25.619 06/28/01 Sev=Info/5 IKE/0x63000026
Loaded INBOUND ESP SPI: 0x83AA0042

54 16:43:25.619 06/28/01 Sev=Info/4 CM/0x63100019
One secure connection established

55 16:43:25.629 06/28/01 Sev=Info/6 DIALER/0x63300003
Connection established.

56 16:43:25.669 06/28/01 Sev=Info/6 DIALER/0x63300008
MAPI32 Information - Outlook not default mail client

57 16:43:25.960 06/28/01 Sev=Info/5 IKE/0x6300002F
Received ISAKMP packet: peer = 203.1.1.1

58 16:43:25.960 06/28/01 Sev=Info/4 IKE/0x63000014
RECEIVING <<< ISAKMP OAK QM *(HASH, SA, NON, ID, ID, NOTIFY:STATUS_RESP_LIFETIME) from 203.1.1.1

59 16:43:25.960 06/28/01 Sev=Info/5 IKE/0x63000044
RESPONDER-LIFETIME notify has value of 28800 seconds

60 16:43:25.960 06/28/01 Sev=Info/5 IKE/0x63000045
RESPONDER-LIFETIME notify has value of 4608000 kb

61 16:43:25.960 06/28/01 Sev=Info/4 IKE/0x63000013

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SENDING >>> ISAKMP OAK QM *(HASH) to 203.1.1.1

62      16:43:25.960 06/28/01 Sev=Info/5          IKE/0x63000058
Loading IPsec SA (Message ID = 0x23A23005 OUTBOUND SPI = 0xAD0599DB INBOUND SPI = 0x2B74D4A4)

63      16:43:25.960 06/28/01 Sev=Info/5          IKE/0x63000025
Loaded OUTBOUND ESP SPI: 0xAD0599DB

64      16:43:25.960 06/28/01 Sev=Info/5          IKE/0x63000026
Loaded INBOUND ESP SPI: 0x2B74D4A4

65      16:43:25.960 06/28/01 Sev=Info/4          CM/0x63100021
Additional Phase 2 SA established.

66      16:43:25.960 06/28/01 Sev=Info/4          IPSEC/0x63700010
Created a new key structure

67      16:43:25.960 06/28/01 Sev=Info/4          IPSEC/0x6370000F
Added key with SPI=0x55db4cb2 into key list

68      16:43:25.960 06/28/01 Sev=Info/4          IPSEC/0x63700010
Created a new key structure

69      16:43:25.960 06/28/01 Sev=Info/4          IPSEC/0x6370000F
Added key with SPI=0x4200aa83 into key list

70      16:43:25.960 06/28/01 Sev=Info/4          IPSEC/0x63700010
Created a new key structure

71      16:43:25.960 06/28/01 Sev=Info/4          IPSEC/0x6370000F
Added key with SPI=0xdb9905ad into key list

72      16:43:25.960 06/28/01 Sev=Info/4          IPSEC/0x63700010
Created a new key structure

73      16:43:25.960 06/28/01 Sev=Info/4          IPSEC/0x6370000F
Added key with SPI=0xa4d4742b into key list

74      16:43:35.173 06/28/01 Sev=Info/6          IKE/0x6300003D
Sending DPD request to 203.1.1.1, seq# = 1856135987

75      16:43:35.173 06/28/01 Sev=Info/4          IKE/0x63000013
SENDING >>> ISAKMP OAK INFO *(HASH, NOTIFY:DPD_REQUEST) to 203.1.1.1

76      16:43:35.173 06/28/01 Sev=Info/5          IKE/0x6300002F
Received ISAKMP packet: peer = 203.1.1.1

77      16:43:35.173 06/28/01 Sev=Info/4          IKE/0x63000014
RECEIVING <<< ISAKMP OAK INFO *(HASH, NOTIFY:DPD_ACK) from 203.1.1.1

78      16:43:35.173 06/28/01 Sev=Info/5          IKE/0x6300003F
Received DPD ACK from 203.1.1.1, seq# received = 1856135987, seq# expected = 1856135987

```

相關資訊

- [PIX支援頁](#)
- [PIX命令參考](#)
- [配置IPSec網路安全](#)
- [IP安全\(IPSec\)產品支援頁面](#)
- [技術支援與文件 - Cisco Systems](#)