Cisco IOS Router - NEM으로 EzVPN 구성

목차

소개

이 문서에서는 Easy VPN(EzVPN)을 사용하는 Cisco 871 라우터와 Cisco 7200VXR 라우터 간의 IPsec에 대한 샘플 컨피그레이션을 제공합니다. 7200은 Easy VPN 서버 역할을 하며 871은 Easy VPN Remote 역할을 합니다. 이 예에서는 루프백 인터페이스가 두 라우터에서 모두 프라이빗 네트워크로 사용됩니다. 필요에 따라 FastEthernet 또는 Serial 인터페이스와 같은 다른 인터페이스로 교체할 수 있습니다.

Easy VPN을 사용하여 PIX/ASA 7.x와 Cisco 871 라우터 간에 IPsec을 구성하려면 ASA 5500을 서버로 사용하는 PIX/ASA 7.x Easy VPN 및 Cisco 871을 Easy VPN Remote Configuration 예로 참조하십시오.

Cisco IOS® Easy VPN Remote Hardware Client와 PIX Easy VPN Server 간에 IPsec을 구성하려면 PIX Easy VPN Remote Hardware Client to a PIX Easy VPN Server Configuration Example을 참조하십시오.

Cisco VPN 3000 Concentrator에 연결되는 NEM(Network Extension Mode)에서 Cisco IOS 라우터를 EzVPN으로 구성하려면 VPN 3000 Concentrator를 사용하여 Cisco IOS에서 Cisco EzVPN 클라이언트 구성을 참조하십시오.

사전 요구 사항

요구 사항

이 컨피그레이션을 시도하기 전에 IPsec 및 Cisco 7200/871 운영 체제에 대한 기본적인 이해가 있어야 합니다.

사용되는 구성 요소

이 문서의 정보는 다음 소프트웨어 및 하드웨어 버전을 기반으로 합니다.

- Cisco Easy VPN Server는 Cisco IOS® Software 릴리스 12.4(4)T1을 실행하는 7200 라우터(VXR)입니다.
- Cisco Easy VPN Remote는 Cisco IOS Software 릴리스 12.4(2)T1을 실행하는 871W 라우터입니다.

이 문서의 정보는 특정 랩 환경의 디바이스를 토대로 작성되었습니다. 이 문서에 사용된 모든 디바이스는 초기화된(기본) 컨피그레이션으로 시작되었습니다. 현재 네트워크가 작동 중인 경우, 모든 명령어의 잠재적인 영향을 미리 숙지하시기 바랍니다.

표기 규칙

문서 규칙에 대한 자세한 내용은 Cisco 기술 팁 표기 규칙을 참고하십시오.

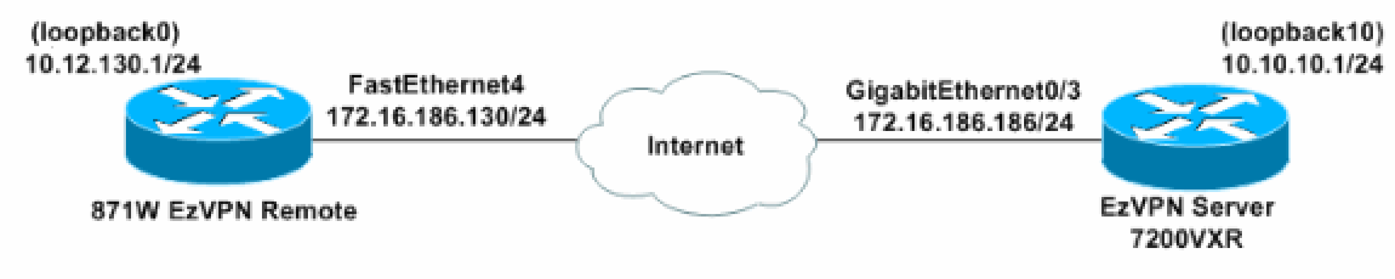
구성

이 섹션에는 이 문서에서 설명하는 기능을 구성하기 위한 정보가 표시됩니다.

참고: 명령 조회 도구(등록된 고객만 해당)를 사용하여 이 문서에 사용된 명령에 대한 자세한 내용을 확인하십시오.

네트워크 다이어그램

이 문서에서는 다음 네트워크 설정을 사용합니다.



참고: 루프백 인터페이스가 내부 PC를 시뮬레이션하고 있습니다.

구성

이 문서에서는 다음 구성을 사용합니다.

- Easy VPN Server(Cisco 7200VXR Router)
- Easy VPN Remote(Cisco 871W Router)

Easy VPN Server(Cisco 7200VXR Router)

```
3-07-07-7200VXR#show running-config
Building configuration...

Current configuration : 2059 bytes
!
version 12.4
service timestamps debug datetime msec
service timestamps log datetime msec
no service password-encryption
!
hostname 3-07-07-7200VXR
!
boot-start-marker
boot-end-marker
!
!
!--- Enable Authentication, Authorizing and Accounting
(AAA) !--- for user authentication and group
authorization. aaa new-model
!

!--- Enable the AAA commands in order !--- to enable
Xauth for user authentication. aaa authentication login
userauthen local

!--- Enable the AAA commands !--- in order to enable
group authorization. aaa authorization network
groupauthor local
!
aaa session-id common
!
resource policy
!
ip subnet-zero
ip cef
!
!
!--- Define the username and password to use for Xauth.
username cisco password 0 cisco123
!
!
!--- Create an Internet Security Association and !---
Key Management Protocol (ISAKMP) policy for Phase 1
negotiations. crypto isakmp policy 3
 encr 3des
 authentication pre-share
 group 2
!
!
!--- Create a group with the pre-shared key for IKE
authentication. crypto isakmp client configuration group
vpngrp
 key cisco123
!
!
!--- Create the Phase 2 policy for actual data
encryption. crypto ipsec transform-set myset esp-3des
esp-sha-hmac
!

!--- Create a dynamic map and !--- apply the transform
set that was created earlier. crypto dynamic-map dynmap
```

```
10
 set transform-set myset
!
!
!--- Create the actual crypto map, !--- and apply the
AAA lists that were created earlier. !--- These commands
associate the AAA commands to the crypto map. crypto map
clientmap client authentication list userauthen
crypto map clientmap isakmp authorization list
groupauthor
crypto map clientmap 10 ipsec-isakmp dynamic dynmap
!
!
!
interface Loopback10
 ip address 10.10.10.1 255.255.255.0
!
interface GigabitEthernet0/1
 ip address 158.100.101.254 255.255.255.0
 ip nat inside
 ip virtual-reassembly
 duplex auto
 speed auto
 media-type rj45
 no negotiation auto
!
interface GigabitEthernet0/2
 ip address 158.100.102.254 255.255.255.0
 ip nat outside
 ip virtual-reassembly
 duplex auto
 speed 100
 media-type rj45
 no negotiation auto
!
!
!
!--- Apply the crypto map on the interface where !---
traffic leaves the router. interface GigabitEthernet0/3
 ip address 172.16.186.186 255.255.255.0
 duplex auto
 speed auto
 media-type rj45
 no negotiation auto
 crypto map clientmap
!
interface FastEthernet1/0
 no ip address
 shutdown
 duplex half
!
ip default-gateway 172.16.186.1
ip classless
ip route 0.0.0.0 0.0.0.0 172.16.186.1
no ip http server
no ip http secure-server
!
!
ip nat Stateful id 10
ip nat pool honnat 158.100.96.90 158.100.96.99 netmask
255.255.255.0
ip nat inside source route-map test pool honnat mapping-
id 10 overload
!
```

```
logging alarm informational
access-list 100 permit ip any any
!
route-map test permit 10
 match ip address 100
!
!
!
!
control-plane
!
!
!
!
!
!
gatekeeper
 shutdown
!
!
line con 0
 logging synchronous
 stopbits 1
line aux 0
 stopbits 1
line vty 0 4
!
!
end
```

Easy VPN Remote(Cisco 871W Router)

```
3-03-06-871W#show running-config
Current configuration : 1563 bytes
!
version 12.4
no service pad
service timestamps debug datetime msec
service timestamps log datetime msec
service password-encryption
!
hostname 3-03-06-871W
!
boot-start-marker
boot-end-marker
!
!
no aaa new-model
!
resource policy
!
ip cef
!
!
!
!
ip name-server 171.70.168.183
!
!
username cisco privilege 15 password 7 00071A150754
!
!
!
```

```
!
!--- Set the parameters to connect to the !---
appropriate Easy VPN group on the Easy VPN server.
crypto ipsec client ezvpn ez
 connect auto
 group vpngrp key cisco123
 mode network-extension
 peer 172.16.186.186
 xauth userid mode interactive
!
!
!
!--- Define the inside interfaces that will access !---
and can be accessed via Easy VPN. interface Loopback0
 ip address 10.12.130.1 255.255.255.255
 crypto ipsec client ezvpn ez inside
!
interface FastEthernet0
!
interface FastEthernet1
!
interface FastEthernet2
!
interface FastEthernet3

!--- Use the crypto ipsec client ezvpn



           command on the !--- interface that connects
to the Easy VPN server !--- in order to complete the
Easy VPN.


interface FastEthernet4
 ip address 172.16.186.130 255.255.255.0
 duplex auto
 speed auto
 crypto ipsec client ezvpn ez
!
interface Dot11Radio0
 no ip address
 shutdown
 speed basic-1.0 basic-2.0 basic-5.5 6.0 9.0 basic-11.0
12.0 18.0 24.0 36.0 48.0 54.0
 station-role root
!
interface Vlan1
 no ip address
!
ip default-gateway 172.16.186.1
ip route 0.0.0.0 0.0.0.0 172.16.186.1
!
!
no ip http server
no ip http secure-server
!
access-list 121 dynamic testlist permit tcp any host
12.12.12.12 eq 5900
snmp-server community presto RW
!
!
!
route-map polo permit 10
```

```
!
route-map asa permit 10
!
tacacs-server host 66.94.234.13
tacacs-server directed-request
!
control-plane
!
!
line con 0
 no modem enable
line aux 0
line vty 0 4
 login
!
scheduler max-task-time 5000
!
webvpn context Default_context
 ssl authenticate verify all
 !
 no inservice
!
end
```

다음을 확인합니다.

이 섹션을 사용하여 컨피그레이션이 제대로 작동하는지 확인합니다.

- Cisco 7200 Easy VPN Server show 명령 및 샘플 출력
- Cisco 871W Easy VPN Remote show 명령 및 샘플 출력

Output Interpreter 도구(등록된 고객만 해당)(OIT)는 특정 **show** 명령을 지원합니다. OIT를 사용하여 **show** 명령 출력의 분석을 봅니다.

Cisco 7200 Easy VPN Server show 명령 및 샘플 출력

- **show crypto isakmp sa** —피어의 현재 IKE(Internet Key Exchange) 보안 연결(SA)을 모두 표시합니다.

```
3-07-07-7200VXR#show crypto isakmp sa
IPv4 Crypto ISAKMP SA
dst             src             state          conn-id slot status
172.16.186.186  172.16.186.130  QM_IDLE           1008    0 ACTIVE

IPv6 Crypto ISAKMP SA
```

- **show crypto ipsec sa** - 피어 간에 구축된 IPsec SA를 표시합니다.

```
3-07-07-7200VXR#show crypto ipsec sa

interface: GigabitEthernet0/3
    Crypto map tag: clientmap, local addr 172.16.186.186

   protected vrf: (none)
   local  ident (addr/mask/prot/port): (0.0.0.0/0.0.0.0/0/0)
   remote ident (addr/mask/prot/port): (10.12.130.1/255.255.255.255/0/0)
   current_peer 172.16.186.130 port 500
     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 not decompressed: 0, #pkts decompress failed: 0
    #send errors 0, #recv errors 0

     local crypto endpt.: 172.16.186.186, remote crypto endpt.: 172.16.186.130
     path mtu 1500, ip mtu 1500
     current outbound spi: 0x29354010(691355664)

     inbound esp sas:
      spi: 0x6875F644(1752561220)
        transform: esp-3des esp-sha-hmac ,
        in use settings ={Tunnel, }
        conn id: 11, flow_id: SW:11, crypto map: clientmap
        sa timing: remaining key lifetime (k/sec): (4439946/3526)
        IV size: 8 bytes
        replay detection support: Y
        Status: ACTIVE

     inbound ah sas:

     inbound pcp sas:

     outbound esp sas:
      spi: 0x29354010(691355664)
        transform: esp-3des esp-sha-hmac ,
        in use settings ={Tunnel, }
        conn id: 12, flow_id: SW:12, crypto map: clientmap
        sa timing: remaining key lifetime (k/sec): (4439946/3524)
        IV size: 8 bytes
        replay detection support: Y
        Status: ACTIVE
```

Cisco 871W Easy VPN Remote show 명령 및 샘플 출력

- **show crypto isakmp sa** - 피어의 현재 모든 IKE SA를 표시합니다.

```
3-03-06-871W#show crypto isakmp sa
IPv4 Crypto ISAKMP SA
dst             src             state          conn-id slot status
172.16.186.186  172.16.186.130  QM_IDLE           2003    0 ACTIVE

IPv6 Crypto ISAKMP SA
```

- **show crypto ipsec sa** - 피어 간에 구축된 IPsec SA를 표시합니다.

```
3-03-06-871W#show crypto ipsec sa
interface: FastEthernet4
    Crypto map tag: FastEthernet4-head-0, local addr 172.16.186.130

   protected vrf: (none)
   local  ident (addr/mask/prot/port): (10.12.130.1/255.255.255.255/0/0)
   remote ident (addr/mask/prot/port): (0.0.0.0/0.0.0.0/0/0)
   current_peer 172.16.186.186 port 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

     local crypto endpt.: 172.16.186.130, remote crypto endpt.: 172.16.186.186
     path mtu 1500, ip mtu 1500
     current outbound spi: 0x6875F644(1752561220)

     inbound esp sas:
      spi: 0x29354010(691355664)
        transform: esp-3des esp-sha-hmac ,
        in use settings ={Tunnel, }
        conn id: 11, flow_id: Motorola SEC 1.0:11, crypto map: FastEthernet4-head-0
        sa timing: remaining key lifetime (k/sec): (4607687/3531)
        IV size: 8 bytes
        replay detection support: Y
        Status: ACTIVE

     inbound ah sas:

     inbound pcp sas:

     outbound esp sas:
      spi: 0x6875F644(1752561220)
        transform: esp-3des esp-sha-hmac ,
        in use settings ={Tunnel, }
        conn id: 12, flow_id: Motorola SEC 1.0:12, crypto map: FastEthernet4-head-0
        sa timing: remaining key lifetime (k/sec): (4607687/3528)
        IV size: 8 bytes
        replay detection support: Y
        Status: ACTIVE

     outbound ah sas:

     outbound pcp sas:
```

- **show crypto ipsec client ezvpn** - Cisco Easy VPN Remote 컨피그레이션을 표시합니다.

```
3-03-06-871W#show crypto ipsec client ezvpn
Easy VPN Remote Phase: 6

Tunnel name : ez
Inside interface list: Loopback0
Outside interface: FastEthernet4
Current State: IPSEC_ACTIVE
Last Event: SOCKET_UP
Save Password: Disallowed
Current EzVPN Peer: 172.16.186.186

3-03-06-871W#ping 10.10.10.1 source 10.12.130.1

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 10.10.10.1, timeout is 2 seconds:
Packet sent with a source address of 10.12.130.1
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 1/2/4 ms
```

문제 해결

이 섹션에서는 컨피그레이션 문제를 해결할 수 있습니다.

Output Interpreter 도구(등록된 고객만 해당)(OIT)는 특정 **show** 명령을 지원합니다. OIT를 사용하여 **show** 명령 출력의 분석을 봅니다.

참고: debug **명령**을 사용하기 전에 디버그 명령에 대한 중요 정보를 참조하십시오.

이 문서에서 설명한 대로 Easy VPN Remote 및 Easy VPN Server를 설정했지만 문제가 계속 발생하면 각 디바이스의 **디버그** 출력 및 Cisco Technical Support의 분석**을** 위한 show 명령의 출력을 수집합니다.

다음 섹션에는 **debug** 명령 및 샘플 출력이 표시됩니다.

- Easy VPN Server 명령
- Easy VPN Remote 명령

Easy VPN Server 명령

- **debug crypto ipsec** - 2단계의 IPsec 협상을 표시합니다.
- **debug crypto isakmp** - 1단계의 ISAKMP 협상을 표시합니다.

```
3-07-07-7200VXR#debug crypto ipsec
3-07-07-7200VXR#debug crypto isakmp
*May  4 00:44:19.389: IPSEC(key_engine): got a queue event with 1 KMI message(s)
*May  4 00:44:20.937: ISAKMP (0:0): received packet from 172.16.186.130 dport
                      500 sport 500 Global (N) NEW SA
*May  4 00:44:20.937: ISAKMP: Created a peer struct for 172.16.186.130, peer port 500
*May  4 00:44:20.937: ISAKMP: New peer created peer = 0x6745B8E0
                      peer_handle = 0x80000009
*May  4 00:44:20.937: ISAKMP: Locking peer struct 0x6745B8E0, refcount 1
                      for crypto_isakmp_process_block
*May  4 00:44:20.937: ISAKMP:(0):Setting client config settings 6741FF98
*May  4 00:44:20.937: ISAKMP:(0):(Re)Setting client xauth list  and state
*May  4 00:44:20.937: ISAKMP/xauth: initializing AAA request
*May  4 00:44:20.937: ISAKMP: local port 500, remote port 500
*May  4 00:44:20.937: ISAKMP: Find a dup sa in the avl tree during
                      calling isadb_insert sa = 67369734
*May  4 00:44:20.937: ISAKMP:(0): processing SA payload. message ID = 0
*May  4 00:44:20.937: ISAKMP:(0): processing ID payload. message ID = 0
*May  4 00:44:20.937: ISAKMP (0:0): ID payload
        next-payload : 13
        type         : 11
        group id     : vpngrp
        protocol     : 17
        port         : 0
        length       : 14
*May  4 00:44:20.937: ISAKMP:(0):: peer matches *none* of the profiles
*May  4 00:44:20.937: ISAKMP:(0): processing vendor id payload
*May  4 00:44:20.937: ISAKMP:(0): vendor ID seems Unity/DPD but major 245 mismatch
*May  4 00:44:20.937: ISAKMP (0:0): vendor ID is NAT-T v7
*May  4 00:44:20.937: ISAKMP:(0): processing vendor id payload
*May  4 00:44:20.937: ISAKMP:(0): vendor ID seems Unity/DPD but major 157 mismatch
*May  4 00:44:20.937: ISAKMP:(0): vendor ID is NAT-T v3
*May  4 00:44:20.937: ISAKMP:(0): processing vendor id payload
*May  4 00:44:20.937: ISAKMP:(0): vendor ID seems Unity/DPD but major 123 mismatch
*May  4 00:44:20.937: ISAKMP:(0): vendor ID is NAT-T v2
*May  4 00:44:20.937: ISAKMP:(0): Authentication by xauth preshared
*May  4 00:44:20.937: ISAKMP:(0):Checking ISAKMP transform 1 against priority 3 policy
*May  4 00:44:20.937: ISAKMP:      encryption AES-CBC
*May  4 00:44:20.937: ISAKMP:      keylength of 128
*May  4 00:44:20.937: ISAKMP:      hash SHA
*May  4 00:44:20.937: ISAKMP:      default group 2
*May  4 00:44:20.937: ISAKMP:      auth XAUTHInitPreShared
*May  4 00:44:20.937: ISAKMP:      life type in seconds
*May  4 00:44:20.937: ISAKMP:      life duration (VPI) of  0x0 0x20 0xC4 0x9B
*May  4 00:44:20.937: ISAKMP:(0):Encryption algorithm offered does not match policy!
*May  4 00:44:20.937: ISAKMP:(0):atts are not acceptable. Next payload is 3
*May  4 00:44:20.937: ISAKMP:(0):Checking ISAKMP transform 2 against priority 3 policy
*May  4 00:44:20.937: ISAKMP:      encryption AES-CBC
*May  4 00:44:20.937: ISAKMP:      keylength of 128
*May  4 00:44:20.937: ISAKMP:      hash MD5
```

```
*May  4 00:44:20.937: ISAKMP:      default group 2
*May  4 00:44:20.937: ISAKMP:      auth XAUTHInitPreShared
*May  4 00:44:20.937: ISAKMP:      life type in seconds
*May  4 00:44:20.937: ISAKMP:      life duration (VPI) of  0x0 0x20 0xC4 0x9B
*May  4 00:44:20.937: ISAKMP:(0):Encryption algorithm offered does not match policy!
*May  4 00:44:20.937: ISAKMP:(0):atts are not acceptable. Next payload is 3
*May  4 00:44:20.937: ISAKMP:(0):Checking ISAKMP transform 3 against priority 3 policy
*May  4 00:44:20.937: ISAKMP:      encryption AES-CBC
*May  4 00:44:20.937: ISAKMP:      keylength of 192
*May  4 00:44:20.937: ISAKMP:      hash SHA
*May  4 00:44:20.937: ISAKMP:      default group 2
*May  4 00:44:20.937: ISAKMP:      auth XAUTHInitPreShared
*May  4 00:44:20.937: ISAKMP:      life type in seconds
*May  4 00:44:20.937: ISAKMP:      life duration (VPI) of  0x0 0x20 0xC4 0x9B
*May  4 00:44:20.937: ISAKMP:(0):Encryption algorithm offered does not match policy!
*May  4 00:44:20.937: ISAKMP:(0):atts are not acceptable. Next payload is 3
*May  4 00:44:20.937: ISAKMP:(0):Checking ISAKMP transform 4 against priority 3 policy
*May  4 00:44:20.937: ISAKMP:      encryption AES-CBC
*May  4 00:44:20.937: ISAKMP:      keylength of 192
*May  4 00:44:20.937: ISAKMP:      hash MD5
*May  4 00:44:20.937: ISAKMP:      default group 2
*May  4 00:44:20.937: ISAKMP:      auth XAUTHInitPreShared
*May  4 00:44:20.937: ISAKMP:      life type in seconds
*May  4 00:44:20.937: ISAKMP:      life duration (VPI) of  0x0 0x20 0xC4 0x9B
*May  4 00:44:20.937: ISAKMP:(0):Encryption algorithm offered does not match policy!
*May  4 00:44:20.937: ISAKMP:(0):atts are not acceptable. Next payload is 3
*May  4 00:44:20.937: ISAKMP:(0):Checking ISAKMP transform 5 against priority 3 policy
*May  4 00:44:20.937: ISAKMP:      encryption AES-CBC
*May  4 00:44:20.937: ISAKMP:      keylength of 256
*May  4 00:44:20.937: ISAKMP:      hash SHA
*May  4 00:44:20.937: ISAKMP:      default group 2
*May  4 00:44:20.937: ISAKMP:      auth XAUTHInitPreShared
*May  4 00:44:20.937: ISAKMP:      life type in seconds
*May  4 00:44:20.937: ISAKMP:      life duration (VPI) of  0x0 0x20 0xC4 0x9B
*May  4 00:44:20.937: ISAKMP:(0):Encryption algorithm offered does not match policy!
*May  4 00:44:20.937: ISAKMP:(0):atts are not acceptable. Next payload is 3
*May  4 00:44:20.937: ISAKMP:(0):Checking ISAKMP transform 6 against priority 3 policy
*May  4 00:44:20.937: ISAKMP:      encryption AES-CBC
*May  4 00:44:20.937: ISAKMP:      keylength of 256
*May  4 00:44:20.941: ISAKMP:      hash MD5
*May  4 00:44:20.941: ISAKMP:      default group 2
*May  4 00:44:20.941: ISAKMP:      auth XAUTHInitPreShared
*May  4 00:44:20.941: ISAKMP:      life type in seconds
*May  4 00:44:20.941: ISAKMP:      life duration (VPI) of  0x0 0x20 0xC4 0x9B
*May  4 00:44:20.941: ISAKMP:(0):Encryption algorithm offered does not match policy!
*May  4 00:44:20.941: ISAKMP:(0):atts are not acceptable. Next payload is 3
*May  4 00:44:20.941: ISAKMP:(0):Checking ISAKMP transform 7 against priority 3 policy
*May  4 00:44:20.941: ISAKMP:      encryption AES-CBC
*May  4 00:44:20.941: ISAKMP:      keylength of 128
*May  4 00:44:20.941: ISAKMP:      hash SHA
*May  4 00:44:20.941: ISAKMP:      default group 2
*May  4 00:44:20.941: ISAKMP:      auth pre-share
*May  4 00:44:20.941: ISAKMP:      life type in seconds
*May  4 00:44:20.941: ISAKMP:      life duration (VPI) of  0x0 0x20 0xC4 0x9B
*May  4 00:44:20.941: ISAKMP:(0):Encryption algorithm offered does not match policy!
*May  4 00:44:20.941: ISAKMP:(0):atts are not acceptable. Next payload is 3
*May  4 00:44:20.941: ISAKMP:(0):Checking ISAKMP transform 8 against priority 3 policy
*May  4 00:44:20.941: ISAKMP:      encryption AES-CBC
*May  4 00:44:20.941: ISAKMP:      keylength of 128
*May  4 00:44:20.941: ISAKMP:      hash MD5
*May  4 00:44:20.941: ISAKMP:      default group 2
*May  4 00:44:20.941: ISAKMP:      auth pre-share
*May  4 00:44:20.941: ISAKMP:      life type in seconds
*May  4 00:44:20.941: ISAKMP:      life duration (VPI) of  0x0 0x20 0xC4 0x9B
```

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*May  4 00:44:20.941: ISAKMP:(0):Encryption algorithm offered does not match policy!
*May  4 00:44:20.941: ISAKMP:(0):atts are not acceptable. Next payload is 3
*May  4 00:44:20.941: ISAKMP:(0):Checking ISAKMP transform 9 against priority 3 policy
*May  4 00:44:20.941: ISAKMP:      encryption AES-CBC
*May  4 00:44:20.941: ISAKMP:      keylength of 192
*May  4 00:44:20.941: ISAKMP:      hash SHA
*May  4 00:44:20.941: ISAKMP:      default group 2
*May  4 00:44:20.941: ISAKMP:      auth pre-share
*May  4 00:44:20.941: ISAKMP:      life type in seconds
*May  4 00:44:20.941: ISAKMP:      life duration (VPI) of  0x0 0x20 0xC4 0x9B
*May  4 00:44:20.941: ISAKMP:(0):Encryption algorithm offered does not match policy!
*May  4 00:44:20.941: ISAKMP:(0):atts are not acceptable. Next payload is 3
*May  4 00:44:20.941: ISAKMP:(0):Checking ISAKMP transform 10 against priority 3 policy
*May  4 00:44:20.941: ISAKMP:      encryption AES-CBC
*May  4 00:44:20.941: ISAKMP:      keylength of 192
*May  4 00:44:20.941: ISAKMP:      hash MD5
*May  4 00:44:20.941: ISAKMP:      default group 2
*May  4 00:44:20.941: ISAKMP:      auth pre-share
*May  4 00:44:20.941: ISAKMP:      life type in seconds
*May  4 00:44:20.941: ISAKMP:      life duration (VPI) of  0x0 0x20 0xC4 0x9B
*May  4 00:44:20.941: ISAKMP:(0):Encryption algorithm offered does not match policy!
*May  4 00:44:20.941: ISAKMP:(0):atts are not acceptable. Next payload is 3
*May  4 00:44:20.941: ISAKMP:(0):Checking ISAKMP transform 11 against priority 3 policy
*May  4 00:44:20.941: ISAKMP:      encryption AES-CBC
*May  4 00:44:20.941: ISAKMP:      keylength of 256
*May  4 00:44:20.941: ISAKMP:      hash SHA
*May  4 00:44:20.941: ISAKMP:      default group 2
*May  4 00:44:20.941: ISAKMP:      auth pre-share
*May  4 00:44:20.941: ISAKMP:      life type in seconds
*May  4 00:44:20.941: ISAKMP:      life duration (VPI) of  0x0 0x20 0xC4 0x9B
*May  4 00:44:20.941: ISAKMP:(0):Encryption algorithm offered does not match policy!
*May  4 00:44:20.941: ISAKMP:(0):atts are not acceptable. Next payload is 3
*May  4 00:44:20.941: ISAKMP:(0):Checking ISAKMP transform 12 against priority 3 policy
*May  4 00:44:20.941: ISAKMP:      encryption AES-CBC
*May  4 00:44:20.941: ISAKMP:      keylength of 256
*May  4 00:44:20.941: ISAKMP:      hash MD5
*May  4 00:44:20.941: ISAKMP:      default group 2
*May  4 00:44:20.941: ISAKMP:      auth pre-share
*May  4 00:44:20.941: ISAKMP:      life type in seconds
*May  4 00:44:20.941: ISAKMP:      life duration (VPI) of  0x0 0x20 0xC4 0x9B
*May  4 00:44:20.941: ISAKMP:(0):Encryption algorithm offered does not match policy!
*May  4 00:44:20.941: ISAKMP:(0):atts are not acceptable. Next payload is 3
*May  4 00:44:20.941: ISAKMP:(0):Checking ISAKMP transform 13 against priority 3 policy
*May  4 00:44:20.941: ISAKMP:      encryption 3DES-CBC
*May  4 00:44:20.941: ISAKMP:      hash SHA
*May  4 00:44:20.941: ISAKMP:      default group 2
*May  4 00:44:20.941: ISAKMP:      auth XAUTHInitPreShared
*May  4 00:44:20.941: ISAKMP:      life type in seconds
*May  4 00:44:20.941: ISAKMP:      life duration (VPI) of  0x0 0x20 0xC4 0x9B
*May  4 00:44:20.941: ISAKMP:(0):atts are acceptable. Next payload is 3
*May  4 00:44:20.941: ISAKMP:(0): processing vendor id payload
*May  4 00:44:20.941: ISAKMP:(0): vendor ID seems Unity/DPD but major 245 mismatch
*May  4 00:44:20.941: ISAKMP (0:0): vendor ID is NAT-T v7
*May  4 00:44:20.941: ISAKMP:(0): processing vendor id payload
*May  4 00:44:20.941: ISAKMP:(0): vendor ID seems Unity/DPD but major 157 mismatch
*May  4 00:44:20.941: ISAKMP:(0): vendor ID is NAT-T v3
*May  4 00:44:20.941: ISAKMP:(0): processing vendor id payload
*May  4 00:44:20.941: ISAKMP:(0): vendor ID seems Unity/DPD but major 123 mismatch
*May  4 00:44:20.941: ISAKMP:(0): vendor ID is NAT-T v2
*May  4 00:44:20.941: ISAKMP:(0): processing KE payload. message ID = 0
*May  4 00:44:20.957: ISAKMP:(0): processing NONCE payload. message ID = 0
*May  4 00:44:20.957: ISAKMP:(0): processing vendor id payload
*May  4 00:44:20.957: ISAKMP:(0): vendor ID is DPD
*May  4 00:44:20.957: ISAKMP:(0): processing vendor id payload
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*May  4 00:44:20.957: ISAKMP:(0): vendor ID seems Unity/DPD but major 79 mismatch
*May  4 00:44:20.957: ISAKMP:(0): vendor ID is XAUTH
*May  4 00:44:20.957: ISAKMP:(0): processing vendor id payload
*May  4 00:44:20.957: ISAKMP:(0): claimed IOS but failed authentication
*May  4 00:44:20.957: ISAKMP:(0): processing vendor id payload
*May  4 00:44:20.957: ISAKMP:(0): vendor ID is Unity
*May  4 00:44:20.957: ISAKMP:(0):Input = IKE_MESG_FROM_PEER, IKE_AM_EXCH
*May  4 00:44:20.957: ISAKMP:(0):Old State = IKE_READY  New State = IKE_R_AM_AAA_AWAIT

*May  4 00:44:20.957: ISAKMP:(1008): constructed NAT-T vendor-07 ID
*May  4 00:44:20.957: ISAKMP:(1008):SA is doing pre-shared key authentication
                      plus XAUTH using id type ID_IPV4_ADDR
*May  4 00:44:20.957: ISAKMP (0:1008): ID payload
        next-payload : 10
        type         : 1
        address      : 172.16.186.186
        protocol     : 17
        port         : 0
        length       : 12
*May  4 00:44:20.957: ISAKMP:(1008):Total payload length: 12
*May  4 00:44:20.957: ISAKMP:(1008): sending packet to 172.16.186.130 my_port
                      500 peer_port 500 (R) AG_INIT_EXCH
*May  4 00:44:20.957: ISAKMP:(1008):Input = IKE_MESG_FROM_AAA, PRESHARED_KEY_REPLY
*May  4 00:44:20.957: ISAKMP:(1008):Old State = IKE_R_AM_AAA_AWAIT  New State = IKE_R_AM2

*May  4 00:44:20.985: ISAKMP (0:1008): received packet from 172.16.186.130 dport
                      500 sport 500 Global (R) AG_INIT_EXCH
*May  4 00:44:20.985: ISAKMP:(1008): processing HASH payload. message ID = 0
*May  4 00:44:20.985: ISAKMP:(1008): processing NOTIFY INITIAL_CONTACT protocol 1
        spi 0, message ID = 0, sa = 67369734
*May  4 00:44:20.985: ISAKMP:(1008):SA authentication status:
        authenticated
*May  4 00:44:20.985: ISAKMP:(1008):SA has been authenticated with 172.16.186.130
*May  4 00:44:20.985: ISAKMP:(1008):SA authentication status:
        authenticated
*May  4 00:44:20.985: ISAKMP:(1008): Process initial contact,
bring down existing phase 1 and 2 SA's with local 172.16.186.186 remote 172.16.186.130
          remote port 500
*May  4 00:44:20.985: ISAKMP:(1008):returning IP addr to the address pool
*May  4 00:44:20.985: ISAKMP: Trying to insert a peer 172.16.186.186/172.16.186.130/500/,
                      and inserted successfully 6745B8E0.
*May  4 00:44:20.985: ISAKMP: set new node 1361385973 to CONF_XAUTH
*May  4 00:44:20.985: ISAKMP:(1008):Sending NOTIFY RESPONDER_LIFETIME protocol 1
        spi 1722618680, message ID = 1361385973
*May  4 00:44:20.985: ISAKMP:(1008): sending packet to 172.16.186.130 my_port 500
                      peer_port 500 (R) QM_IDLE
*May  4 00:44:20.985: ISAKMP:(1008):purging node 1361385973
*May  4 00:44:20.985: ISAKMP: Sending phase 1 responder lifetime 86400

*May  4 00:44:20.985: ISAKMP:(1008):Input = IKE_MESG_FROM_PEER, IKE_AM_EXCH
*May  4 00:44:20.985: ISAKMP:(1008):Old State = IKE_R_AM2  New State = IKE_P1_COMPLETE
!--- Requesting Xauth. *May 4 00:44:20.985: IPSEC(key_engine): got a queue event with 1 KMI
message(s) *May 4 00:44:20.985: ISAKMP:(1008):Need XAUTH *May 4 00:44:20.985: ISAKMP: set new
node -605466681 to CONF_XAUTH *May 4 00:44:20.985: ISAKMP/xauth: request attribute
XAUTH_USER_NAME_V2 *May 4 00:44:20.985: ISAKMP/xauth: request attribute XAUTH_USER_PASSWORD_V2
*May 4 00:44:20.985: ISAKMP:(1008): initiating peer config to 172.16.186.130. ID = -605466681
*May 4 00:44:20.985: ISAKMP:(1008): sending packet to 172.16.186.130 my_port 500 peer_port 500
(R) CONF_XAUTH *May 4 00:44:20.985: ISAKMP:(1008):Input = IKE_MESG_INTERNAL, IKE_PHASE1_COMPLETE
*May 4 00:44:20.985: ISAKMP:(1008):Old State = IKE_P1_COMPLETE New State = IKE_XAUTH_REQ_SENT
*May 4 00:44:35.985: ISAKMP:(1008): retransmitting phase 2 CONF_XAUTH -605466681 ... *May 4
00:44:35.985: ISAKMP (0:1008): incrementing error counter on node, attempt 1 of 5: retransmit
phase 2 *May 4 00:44:35.985: ISAKMP (0:1008): incrementing error counter on sa, attempt 1 of 5:
retransmit phase 2 *May 4 00:44:35.985: ISAKMP:(1008): retransmitting phase 2 -605466681
CONF_XAUTH *May 4 00:44:35.985: ISAKMP:(1008): sending packet to 172.16.186.130 my_port 500
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peer_port 500 (R) CONF_XAUTH R# 3-07-07-7200VXR# *May 4 00:44:50.985: ISAKMP:(1008):
retransmitting phase 2 CONF_XAUTH -605466681 ... *May 4 00:44:50.985: ISAKMP (0:1008):
incrementing error counter on node, attempt 2 of 5: retransmit phase 2 *May 4 00:44:50.985:
ISAKMP (0:1008): incrementing error counter on sa, attempt 2 of 5: retransmit phase 2 *May 4
00:44:50.985: ISAKMP:(1008): retransmitting phase 2 -605466681 CONF_XAUTH *May 4 00:44:50.985:
ISAKMP:(1008): sending packet to 172.16.186.130 my_port 500 peer_port 500 (R) CONF_XAUTH 3-07-
07-7200VXR# *May 4 00:45:01.997: ISAKMP (0:1008): received packet from 172.16.186.130 dport 500
sport 500 Global (R) CONF_XAUTH *May 4 00:45:01.997: ISAKMP:(1008):processing transaction
payload from 172.16.186.130. message ID = -605466681 *May 4 00:45:01.997: ISAKMP: Config payload
REPLY *May 4 00:45:01.997: ISAKMP/xauth: reply attribute XAUTH_USER_NAME_V2 *May 4 00:45:01.997:
ISAKMP/xauth: reply attribute XAUTH_USER_PASSWORD_V2 *May 4 00:45:01.997: ISAKMP:(1008):deleting
node -605466681 error FALSE reason "Done with xauth request/reply exchange" *May 4 00:45:01.997:
ISAKMP:(1008):Input = IKE_MESG_FROM_PEER, IKE_CFG_REPLY *May 4 00:45:01.997: ISAKMP:(1008):Old
State = IKE_XAUTH_REQ_SENT New State = IKE_XAUTH_AAA_CONT_LOGIN_AWAIT *May 4 00:45:01.997:
ISAKMP: set new node 1283697340 to CONF_XAUTH *May 4 00:45:01.997: ISAKMP:(1008): initiating
peer config to 172.16.186.130. ID = 1283697340 *May 4 00:45:01.997: ISAKMP:(1008): sending
packet to 172.16.186.130 my_port 5 3-07-07-7200VX00 peer_port 500 (R) CONF_XAUTH *May 4
00:45:01.997: ISAKMP:(1008):Input = IKE_MESG_FROM_AAA, IKE_AAA_CONT_LOGIN *May 4 00:45:01.997:
ISAKMP:(1008):Old State = IKE_XAUTH_AAA_CONT_LOGIN_AWAIT New State = IKE_XAUTH_SET_SENT *May 4
00:45:02.005: ISAKMP (0:1008): received packet from 172.16.186.130 dport 500 sport 500 Global
(R) CONF_XAUTH *May 4 00:45:02.005: ISAKMP:(1008):processing transaction payload from
172.16.186.130. message ID = 1283697340 *May 4 00:45:02.005: ISAKMP: Config payload ACK *May 4
00:45:02.005: ISAKMP:(1008): XAUTH ACK Processed *May 4 00:45:02.005: ISAKMP:(1008):deleting
node 1283697340 error FALSE reason "Transaction mode done" *May 4 00:45:02.005:
ISAKMP:(1008):Input = IKE_MESG_FROM_PEER, IKE_CFG_ACK *May 4 00:45:02.005: ISAKMP:(1008):Old
State = IKE_XAUTH_SET_SENT New State = IKE_P1_COMPLETE *May 4 00:45:02.005: ISAKMP:(1008):Input
= IKE_MESG_INTERNAL, IKE_PHASE1_COMPLETE *May 4 00:45:02.005: ISAKMP:(1008):Old State =
IKE_P1_COMPLETE New State = IKE_P1_COMPLETE *May 4 00:45:02.005: ISAKMP (0:1008): received
packet from 172.16.186.130 dport 500 sport 500 Global (R) QM_IDLE *May 4 00:45:02.005: ISAKMP:
set new node 104696831 to QM_IDLE *May 4 00:45:02.005: ISAKMP:(1008):processing transaction
payload from 172.16.186.130. message ID = 104696831 *May 4 00:45:02.005: ISAKMP: Config payload
REQUEST *May 4 00:45:02.005: ISAKMP:(1008):checking request: *May 4 00:45:02.005: ISAKMP:
MODECFG_CONFIG_URL *May 4 00:45:02.005: ISAKMP: MODECFG_CONFIG_VERSION *May 4 00:45:02.009:
ISAKMP: IP4_DNS *May 4 00:45:02.009: ISAKMP: IP4_DNS *May 4 00:45:02.009: ISAKMP: IP4_NBNS *May
4 00:45:02.009: ISAKMP: IP4_NBNS *May 4 00:45:02.009: ISAKMP: SPLIT_INCLUDE *May 4 00:45:02.009:
ISAKMP: SPLIT_DNS *May 4 00:45:02.009: ISAKMP: DEFAULT_DOMAIN *May 4 00:45:02.009: ISAKMP:
MODECFG_SAVEPWD *May 4 00:45:02.009: ISAKMP: INCLUDE_LOCAL_LAN *May 4 00:45:02.009: ISAKMP: PFS
*May 4 00:45:02.009: ISAKMP: BACKUP_SERVER *May 4 00:45:02.009: ISAKMP: APPLICATION_VERSION *May
4 00:45:02.009: ISAKMP: MODECFG-BANNER *May 4 00:45:02.009: ISAKMP: MODECFG_IPSEC_INT_CONF *May
4 00:45:02.009: ISAKMP/author: Author request for group vpngrpsuccessfully sent to AAA *May 4
00:45:02.009: ISAKMP:(1008):Input = IKE_MESG_FROM_PEER, IKE_CFG_REQUEST *May 4 00:45:02.009:
ISAKMP:(1008):Old State = IKE_P1_COMPLETE New State = IKE_CONFIG_AUTHOR_AAA_AWAIT *May 4
00:45:02.009: ISAKMP:(1008):Receive config attributes requested butconfig attributes not in
crypto map. Sending empty reply. *May 4 00:45:02.009: ISAKMP:(1008):attributes sent in message:
*May 4 00:45:02.009: ISAKMP: Sending APPLICATION_VERSION string: Cisco IOS Software, 7200
Software (C7200-ADVENTERPRISEK9-M), Version 12.4(4)T1, RELEASE SOFTWARE (fc4) Technical Support:
http://www.cisco.com/techsupport Copyright (c) 1986-2005 by Cisco Systems, Inc. Compiled Wed 21-
Dec-05 22:58 by ccai *May 4 00:45:02.009: ISAKMP: Sending IPsec Interface Config reply value 0
*May 4 00:45:02.009: ISAKMP:(1008): responding to peer config from 172.16.186.130. ID =
104696831 *May 4 00:45:02.009: ISAKMP:(1008): sending packet to 172.16.186.130 my_port 500
peer_port 500 (R) CONF_ADDR *May 4 00:45:02.009: ISAKMP:(1008):deleting node 104696831 error
FALSE reason "No Error" *May 4 00:45:02.009: ISAKMP:(1008):Input = IKE_MESG_FROM_AAA,
IKE_AAA_GROUP_ATTR *May 4 00:45:02.009: ISAKMP:(1008):Old State = IKE_CONFIG_AUTHOR_AAA_AWAIT
New State = IKE_P1_COMPLETE *May 4 00:45:02.009: ISAKMP:(1008):Input = IKE_MESG_INTERNAL,
IKE_PHASE1_COMPLETE *May 4 00:45:02.009: ISAKMP:(1008):Old State = IKE_P1_COMPLETE New State =
IKE_P1_COMPLETE *May 4 00:45:02.029: ISAKMP (0:1008): received packet from 172.16.186.130 dport
500 sport 500 Global (R) QM_IDLE *May 4 00:45:02.029: ISAKMP: set new node -1665883002 to
QM_IDLE *May 4 00:45:02.029: ISAKMP:(1008): processing HASH payload. message ID = -1665883002
*May 4 00:45:02.029: ISAKMP:(1008): processing SA payload. message ID = -1665883002 *May 4
00:45:02.029: ISAKMP:(1008):Checking IPSec proposal 1 *May 4 00:45:02.029: ISAKMP: transform 1,
ESP_AES *May 4 00:45:02.029: ISAKMP: attributes in transform: *May 4 00:45:02.029: ISAKMP:
encaps is 1 (Tunnel) *May 4 00:45:02.029: ISAKMP: SA life type in seconds *May 4 00:45:02.029:
ISAKMP: SA life duration (VPI) of 0x0 0x20 0xC4 0x9B *May 4 00:45:02.029: ISAKMP: SA life type
in kilobytes *May 4 00:45:02.029: ISAKMP: SA life duration (VPI) of 0x0 0x46 0x50 0x0 *May 4
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00:45:02.029: ISAKMP: authenticator is HMAC-SHA *May 4 00:45:02.029: ISAKMP: key length is 128
*May 4 00:45:02.029: ISAKMP:(1008):atts are acceptable. *May 4 00:45:02.029:
IPSEC(validate_proposal_request): proposal part #1 *May 4 00:45:02.029:
IPSEC(validate_proposal_request): proposal part #1, (key eng. msg.) INBOUND local=
172.16.186.186, remote= 172.16.186.130, local_proxy= 0.0.0.0/0.0.0.0/0/0 (type=4), remote_proxy=
10.12.130.1/255.255.255.255/0/0 (type=1), protocol= ESP, transform= esp-aes esp-sha-hmac
(Tunnel), lifedur= 0s and 0kb, spi= 0x0(0), conn_id= 0, keysize= 128, flags= 0x0 *May 4
00:45:02.029: IPSEC(crypto_ipsec_process_proposal): transform proposal not supported for
identity: {esp-aes esp-sha-hmac } *May 4 00:45:02.029: ISAKMP:(1008): IPSec policy invalidated
proposal *May 4 00:45:02.029: ISAKMP:(1008):Checking IPSec proposal 2 *May 4 00:45:02.029:
ISAKMP: transform 1, ESP_AES *May 4 00:45:02.029: ISAKMP: attributes in transform: *May 4
00:45:02.029: ISAKMP: encaps is 1 (Tunnel) *May 4 00:45:02.029: ISAKMP: SA life type in seconds
*May 4 00:45:02.029: ISAKMP: SA life duration (VPI) of 0x0 0x20 0xC4 0x9B *May 4 00:45:02.029:
ISAKMP: SA life type in kilobytes *May 4 00:45:02.029: ISAKMP: SA life duration (VPI) of 0x0
0x46 0x50 0x0 *May 4 00:45:02.029: ISAKMP: authenticator is HMAC-MD5 *May 4 00:45:02.029:
ISAKMP: key length is 128 *May 4 00:45:02.029: ISAKMP:(1008):atts are acceptable. *May 4
00:45:02.029: IPSEC(validate_proposal_request): proposal part #1 *May 4 00:45:02.029:
IPSEC(validate_proposal_request): proposal part #1, (key eng. msg.) INBOUND local=
172.16.186.186, remote= 172.16.186.130, local_proxy= 0.0.0.0/0.0.0.0/0/0 (type=4), remote_proxy=
10.12.130.1/255.255.255.255/0/0 (type=1), protocol= ESP, transform= esp-aes esp-md5-hmac
(Tunnel), lifedur= 0s and 0kb, spi= 0x0(0), conn_id= 0, keysize= 128, flags= 0x0 *May 4
00:45:02.029: IPSEC(crypto_ipsec_process_proposal): transform proposal not supported for
identity: {esp-aes esp-md5-hmac } *May 4 00:45:02.029: ISAKMP:(1008): IPSec policy invalidated
proposal *May 4 00:45:02.029: ISAKMP:(1008):Checking IPSec proposal 3 *May 4 00:45:02.029:
ISAKMP: transform 1, ESP_AES *May 4 00:45:02.029: ISAKMP: attributes in transform: *May 4
00:45:02.029: ISAKMP: encaps is 1 (Tunnel) *May 4 00:45:02.029: ISAKMP: SA life type in seconds
*May 4 00:45:02.029: ISAKMP: SA life duration (VPI) of 0x0 0x20 0xC4 0x9B *May 4 00:45:02.029:
ISAKMP: SA life type in kilobytes *May 4 00:45:02.029: ISAKMP: SA life duration (VPI) of 0x0
0x46 0x50 0x0 *May 4 00:45:02.029: ISAKMP: authenticator is HMAC-SHA *May 4 00:45:02.029:
ISAKMP: key length is 192 *May 4 00:45:02.029: ISAKMP:(1008):atts are acceptable. *May 4
00:45:02.029: IPSEC(validate_proposal_request): proposal part #1 *May 4 00:45:02.029:
IPSEC(validate_proposal_request): proposal part #1, (key eng. msg.) INBOUND local=
172.16.186.186, remote= 172.16.186.130, local_proxy= 0.0.0.0/0.0.0.0/0/0 (type=4), remote_proxy=
10.12.130.1/255.255.255.255/0/0 (type=1), protocol= ESP, transform= esp-aes 192 esp-sha-hmac
(Tunnel), lifedur= 0s and 0kb, spi= 0x0(0), conn_id= 0, keysize= 192, flags= 0x0 *May 4
00:45:02.029: IPSEC(crypto_ipsec_process_proposal): transform proposal not supported for
identity: {esp-aes 192 esp-sha-hmac } *May 4 00:45:02.029: ISAKMP:(1008): IPSec policy
invalidated proposal *May 4 00:45:02.029: ISAKMP:(1008):Checking IPSec proposal 4 *May 4
00:45:02.029: ISAKMP: transform 1, ESP_AES *May 4 00:45:02.029: ISAKMP: attributes in transform:
*May 4 00:45:02.029: ISAKMP: encaps is 1 (Tunnel) *May 4 00:45:02.029: ISAKMP: SA life type in
seconds *May 4 00:45:02.029: ISAKMP: SA life duration (VPI) of 0x0 0x20 0xC4 0x9B *May 4
00:45:02.029: ISAKMP: SA life type in kilobytes *May 4 00:45:02.029: ISAKMP: SA life duration
(VPI) of 0x0 0x46 0x50 0x0 *May 4 00:45:02.029: ISAKMP: authenticator is HMAC-MD5 *May 4
00:45:02.029: ISAKMP: key length is 192 *May 4 00:45:02.029: ISAKMP:(1008):atts are acceptable.
*May 4 00:45:02.029: IPSEC(validate_proposal_request): proposal part #1 *May 4 00:45:02.029:
IPSEC(validate_proposal_request): proposal part #1, (key eng. msg.) INBOUND local=
172.16.186.186, remote= 172.16.186.130, local_proxy= 0.0.0.0/0.0.0.0/0/0 (type=4), remote_proxy=
10.12.130.1/255.255.255.255/0/0 (type=1), protocol= ESP, transform= esp-aes 192 esp-md5-hmac
(Tunnel), lifedur= 0s and 0kb, spi= 0x0(0), conn_id= 0, keysize= 192, flags= 0x0 *May 4
00:45:02.029: IPSEC(crypto_ipsec_process_proposal): transform proposal not supported for
identity: {esp-aes 192 esp-md5-hmac } *May 4 00:45:02.029: ISAKMP:(1008): IPSec policy
invalidated proposal *May 4 00:45:02.029: ISAKMP:(1008):Checking IPSec proposal 5 *May 4
00:45:02.029: ISAKMP: transform 1, ESP_AES *May 4 00:45:02.029: ISAKMP: attributes in transform:
*May 4 00:45:02.029: ISAKMP: encaps is 1 (Tunnel) *May 4 00:45:02.029: ISAKMP: SA life type in
seconds *May 4 00:45:02.029: ISAKMP: SA life duration (VPI) of 0x0 0x20 0xC4 0x9B *May 4
00:45:02.029: ISAKMP: SA life type in kilobytes *May 4 00:45:02.029: ISAKMP: SA life duration
(VPI) of 0x0 0x46 0x50 0x0 *May 4 00:45:02.029: ISAKMP: authenticator is HMAC-SHA *May 4
00:45:02.033: ISAKMP: key length is 256 *May 4 00:45:02.033: ISAKMP:(1008):atts are acceptable.
*May 4 00:45:02.033: IPSEC(validate_proposal_request): proposal part #1 *May 4 00:45:02.033:
IPSEC(validate_proposal_request): proposal part #1, (key eng. msg.) INBOUND local=
172.16.186.186, remote= 172.16.186.130, local_proxy= 0.0.0.0/0.0.0.0/0/0 (type=4), remote_proxy=
10.12.130.1/255.255.255.255/0/0 (type=1), protocol= ESP, transform= esp-aes 256 esp-sha-hmac
(Tunnel), lifedur= 0s and 0kb, spi= 0x0(0), conn_id= 0, keysize= 256, flags= 0x0 *May 4
00:45:02.033: IPSEC(crypto_ipsec_process_proposal): transform proposal not supported for
```

```
identity: {esp-aes 256 esp-sha-hmac } *May 4 00:45:02.033: ISAKMP:(1008): IPSec policy
invalidated proposal *May 4 00:45:02.033: ISAKMP:(1008):Checking IPSec proposal 6 *May 4
00:45:02.033: ISAKMP: transform 1, ESP_AES *May 4 00:45:02.033: ISAKMP: attributes in transform:
*May 4 00:45:02.033: ISAKMP: encaps is 1 (Tunnel) *May 4 00:45:02.033: ISAKMP: SA life type in
seconds *May 4 00:45:02.033: ISAKMP: SA life duration (VPI) of 0x0 0x20 0xC4 0x9B *May 4
00:45:02.033: ISAKMP: SA life type in kilobytes *May 4 00:45:02.033: ISAKMP: SA life duration
(VPI) of 0x0 0x46 0x50 0x0 *May 4 00:45:02.033: ISAKMP: authenticator is HMAC-MD5 *May 4
00:45:02.033: ISAKMP: key length is 256 *May 4 00:45:02.033: ISAKMP:(1008):atts are acceptable.
*May 4 00:45:02.033: IPSEC(validate_proposal_request): proposal part #1 *May 4 00:45:02.033:
IPSEC(validate_proposal_request): proposal part #1, (key eng. msg.) INBOUND local=
172.16.186.186, remote= 172.16.186.130, local_proxy= 0.0.0.0/0.0.0.0/0/0 (type=4), remote_proxy=
10.12.130.1/255.255.255.255/0/0 (type=1), protocol= ESP, transform= esp-aes 256 esp-md5-hmac
(Tunnel), lifedur= 0s and 0kb, spi= 0x0(0), conn_id= 0, keysize= 256, flags= 0x0 *May 4
00:45:02.033: IPSEC(crypto_ipsec_process_proposal): transform proposal not supported for
identity: {esp-aes 256 esp-md5-hmac } *May 4 00:45:02.033: ISAKMP:(1008): IPSec policy
invalidated proposal *May 4 00:45:02.033: ISAKMP:(1008):Checking IPSec proposal 7 *May 4
00:45:02.033: ISAKMP: transform 1, ESP_3DES *May 4 00:45:02.033: ISAKMP: attributes in
transform: *May 4 00:45:02.033: ISAKMP: encaps is 1 (Tunnel) *May 4 00:45:02.033: ISAKMP: SA
life type in seconds *May 4 00:45:02.033: ISAKMP: SA life duration (VPI) of 0x0 0x20 0xC4 0x9B
*May 4 00:45:02.033: ISAKMP: SA life type in kilobytes *May 4 00:45:02.033: ISAKMP: SA life
duration (VPI) of 0x0 0x46 0x50 0x0 *May 4 00:45:02.033: ISAKMP: authenticator is HMAC-SHA *May
4 00:45:02.033: ISAKMP:(1008):atts are acceptable. *May 4 00:45:02.033:
IPSEC(validate_proposal_request): proposal part #1 *May 4 00:45:02.033:
IPSEC(validate_proposal_request): proposal part #1, (key eng. msg.) INBOUND local=
172.16.186.186, remote= 172.16.186.130, local_proxy= 0.0.0.0/0.0.0.0/0/0 (type=4), remote_proxy=
10.12.130.1/255.255.255.255/0/0 (type=1), protocol= ESP, transform= esp-3des esp-sha-hmac
(Tunnel), lifedur= 0s and 0kb, spi= 0x0(0), conn_id= 0, keysize= 0, flags= 0x0 *May 4
00:45:02.033: ISAKMP:(1008): processing NONCE payload. message ID = -1665883002 *May 4
00:45:02.033: ISAKMP:(1008): processing ID payload. message ID = -1665883002 *May 4
00:45:02.033: ISAKMP:(1008): processing ID payload. message ID = -1665883002 *May 4
00:45:02.033: ISAKMP:(1008): asking for 1 spis from ipsec *May 4 00:45:02.033:
ISAKMP:(1008):Node -1665883002, Input = IKE_MESG_FROM_PEER, IKE_QM_EXCH *May 4 00:45:02.033:
ISAKMP:(1008):Old State = IKE_QM_READY New State = IKE_QM_SPI_STARVE *May 4 00:45:02.033:
IPSEC(key_engine): got a queue event with 1 KMI message(s) *May 4 00:45:02.033:
IPSEC(spi_response): getting spi 1752561220 for SA from 172.16.186.186 to 172.16.186.130 for
prot 3 *May 4 00:45:02.033: ISAKMP:(1008): Creating IPSec SAs *May 4 00:45:02.033: inbound SA
from 172.16.186.130 to 172.16.186.186 (f/i) 0/ 0 (proxy 10.12.130.1 to 0.0.0.0) *May 4
00:45:02.033: has spi 0x6875F644 and conn_id 0 *May 4 00:45:02.033: lifetime of 2147483 seconds
*May 4 00:45:02.033: lifetime of 4608000 kilobytes *May 4 00:45:02.033: outbound SA from
172.16.186.186 to 172.16.186.130 (f/i) 0/0 (proxy 0.0.0.0 to 10.12.130.1) *May 4 00:45:02.033:
has spi 0x29354010 and conn_id 0 *May 4 00:45:02.033: lifetime of 2147483 seconds *May 4
00:45:02.033: lifetime of 4608000 kilobytes *May 4 00:45:02.033: ISAKMP:(1008): sending packet
to 172.16.186.130 my_port 500 peer_port 500 (R) QM_IDLE *May 4 00:45:02.033: ISAKMP:(1008):Node
-1665883002, Input = IKE_MESG_FROM_IPSEC, IKE_SPI_REPLY *May 4 00:45:02.033: ISAKMP:(1008):Old
State = IKE_QM_SPI_STARVE New State = IKE_QM_R_QM2 *May 4 00:45:02.033: IPSEC(key_engine): got a
queue event with 1 KMI message(s) *May 4 00:45:02.033: IPSec: Flow_switching Allocated flow for
sibling 80000007 *May 4 00:45:02.033: IPSEC(policy_db_add_ident): src 0.0.0.0, dest 10.12.130.1,
dest_port 0 *May 4 00:45:02.033: IPSEC(create_sa): sa created, (sa) sa_dest= 172.16.186.186,
sa_proto= 50, sa_spi= 0x6875F644(1752561220), sa_trans= esp-3des esp-sha-hmac , sa_conn_id= 11
*May 4 00:45:02.033: IPSEC(create_sa): sa created, (sa) sa_dest= 172.16.186.130, sa_proto= 50,
sa_spi= 0x29354010(691355664), sa_trans= esp-3des esp-sha-hmac , sa_conn_id= 12 *May 4
00:45:02.045: ISAKMP (0:1008): received packet from 172.16.186.130 dport 500 sport 500 Global
(R) QM_IDLE *May 4 00:45:02.045: ISAKMP:(1008):deleting node -1665883002 error FALSE reason "QM
done (await)" *May 4 00:45:02.045: ISAKMP:(1008):Node -1665883002, Input = IKE_MESG_FROM_PEER,
IKE_QM_EXCH *May 4 00:45:02.045: ISAKMP:(1008):Old State = IKE_QM_R_QM2 New State =
IKE_QM_PHASE2_COMPLETE *May 4 00:45:02.045: IPSEC(key_engine): got a queue event with 1 KMI
message(s) *May 4 00:45:02.045: IPSEC(key_engine_enable_outbound): rec'd enable notify from
ISAKMP *May 4 00:45:02.045: IPSEC(key_engine_enable_outbound): enable SA with spi 691355664/50
```

Easy VPN Remote 명령

- **debug crypto ipsec** - 2단계의 IPsec 협상을 표시합니다.
- **debug crypto isakmp** - 1단계의 ISAKMP 협상을 표시합니다.

```
3-03-06-871W#debug crypto ipsec3-03-06-871W#debug crypto isakmp
*Jun  3 05:59:27.431: ISAKMP:(0): beginning Aggressive Mode exchange
*Jun  3 05:59:27.431: ISAKMP:(0): sending packet to 172.16.186.186 my_port
                       500 peer_port 500 (I) AG_INIT_EXCH
*Jun  3 05:59:27.455: ISAKMP (0:0): received packet from 172.16.186.186 dport
                       500 sport 500 Global (I) AG_INIT_EXCH
*Jun  3 05:59:27.455: ISAKMP:(0): processing SA payload. message ID = 0
*Jun  3 05:59:27.455: ISAKMP:(0): processing ID payload. message ID = 0
*Jun  3 05:59:27.455: ISAKMP (0:0): ID payload
        next-payload : 10
        type         : 1
        address      : 172.16.186.186
        protocol     : 17
        port         : 0
        length       : 12
*Jun  3 05:59:27.455: ISAKMP:(0):: peer matches *none* of the profiles
*Jun  3 05:59:27.455: ISAKMP:(0): processing vendor id payload
*Jun  3 05:59:27.455: ISAKMP:(0): vendor ID is Unity
*Jun  3 05:59:27.455: ISAKMP:(0): processing vendor id payload
*Jun  3 05:59:27.455: ISAKMP:(0): vendor ID is DPD
*Jun  3 05:59:27.455: ISAKMP:(0): processing vendor id payload
*Jun  3 05:59:27.455: ISAKMP:(0): speaking to another IOS box!
*Jun  3 05:59:27.455: ISAKMP:(0): local preshared key found
*Jun  3 05:59:27.455: ISAKMP : Scanning profiles for xauth ...
*Jun  3 05:59:27.455: ISAKMP:(0): Authentication by xauth preshared
*Jun  3 05:59:27.455: ISAKMP:(0):Checking ISAKMP transform 1 against priority 65515 policy
*Jun  3 05:59:27.455: ISAKMP:      encryption 3DES-CBC
*Jun  3 05:59:27.455: ISAKMP:      hash SHA
*Jun  3 05:59:27.455: ISAKMP:      default group 2
*Jun  3 05:59:27.459: ISAKMP:      auth XAUTHInitPreShared
*Jun  3 05:59:27.459: ISAKMP:      life type in seconds
*Jun  3 05:59:27.459: ISAKMP:      life duration (VPI) of  0x0 0x20 0xC4 0x9B
*Jun  3 05:59:27.459: ISAKMP:(0):Encryption algorithm offered does not match policy!
*Jun  3 05:59:27.459: ISAKMP:(0):atts are not acceptable. Next payload is 0
*Jun  3 05:59:27.459: ISAKMP:(0):Checking ISAKMP transform 1 against priority 65516 policy
*Jun  3 05:59:27.459: ISAKMP:      encryption 3DES-CBC
*Jun  3 05:59:27.459: ISAKMP:      hash SHA
*Jun  3 05:59:27.459: ISAKMP:      default group 2
*Jun  3 05:59:27.459: ISAKMP:      auth XAUTHInitPreShared
*Jun  3 05:59:27.459: ISAKMP:      life type in seconds
*Jun  3 05:59:27.459: ISAKMP:      life duration (VPI) of  0x0 0x20 0xC4 0x9B
*Jun  3 05:59:27.459: ISAKMP:(0):Encryption algorithm offered does not match policy!
*Jun  3 05:59:27.459: ISAKMP:(0):atts are not acceptable. Next payload is 0
*Jun  3 05:59:27.459: ISAKMP:(0):Checking ISAKMP transform 1 against priority 65517 policy
*Jun  3 05:59:27.459: ISAKMP:      encryption 3DES-CBC
*Jun  3 05:59:27.459: ISAKMP:      hash SHA
*Jun  3 05:59:27.459: ISAKMP:      default group 2
*Jun  3 05:59:27.459: ISAKMP:      auth XAUTHInitPreShared
*Jun  3 05:59:27.459: ISAKMP:      life type in seconds
*Jun  3 05:59:27.459: ISAKMP:      life duration (VPI) of  0x0 0x20 0xC4 0x9B
*Jun  3 05:59:27.459: ISAKMP:(0):Encryption algorithm offered does not match policy!
*Jun  3 05:59:27.459: ISAKMP:(0):atts are not acceptable. Next payload is 0
*Jun  3 05:59:27.459: ISAKMP:(0):Checking ISAKMP transform 1 against priority 65518 policy
*Jun  3 05:59:27.459: ISAKMP:      encryption 3DES-CBC
*Jun  3 05:59:27.459: ISAKMP:      hash SHA
*Jun  3 05:59:27.459: ISAKMP:      default group 2
*Jun  3 05:59:27.459: ISAKMP:      auth XAUTHInitPreShared
*Jun  3 05:59:27.459: ISAKMP:      life type in seconds
*Jun  3 05:59:27.459: ISAKMP:      life duration (VPI) of  0x0 0x20 0xC4 0x9B
*Jun  3 05:59:27.459: ISAKMP:(0):Encryption algorithm offered does not match policy!
*Jun  3 05:59:27.459: ISAKMP:(0):atts are not acceptable. Next payload is 0
*Jun  3 05:59:27.459: ISAKMP:(0):Checking ISAKMP transform 1 against priority 65519 policy
```

```
*Jun  3 05:59:27.459: ISAKMP:      encryption 3DES-CBC
*Jun  3 05:59:27.459: ISAKMP:      hash SHA
*Jun  3 05:59:27.459: ISAKMP:      default group 2
*Jun  3 05:59:27.459: ISAKMP:      auth XAUTHInitPreShared
*Jun  3 05:59:27.459: ISAKMP:      life type in seconds
*Jun  3 05:59:27.463: ISAKMP:      life duration (VPI) of  0x0 0x20 0xC4 0x9B
*Jun  3 05:59:27.463: ISAKMP:(0):Encryption algorithm offered does not match policy!
*Jun  3 05:59:27.463: ISAKMP:(0):atts are not acceptable. Next payload is 0
*Jun  3 05:59:27.463: ISAKMP:(0):Checking ISAKMP transform 1 against priority 65520 policy
*Jun  3 05:59:27.463: ISAKMP:      encryption 3DES-CBC
*Jun  3 05:59:27.463: ISAKMP:      hash SHA
*Jun  3 05:59:27.463: ISAKMP:      default group 2
*Jun  3 05:59:27.463: ISAKMP:      auth XAUTHInitPreShared
*Jun  3 05:59:27.463: ISAKMP:      life type in seconds
*Jun  3 05:59:27.463: ISAKMP:      life duration (VPI) of  0x0 0x20 0xC4 0x9B
*Jun  3 05:59:27.463: ISAKMP:(0):Encryption algorithm offered does not match policy!
*Jun  3 05:59:27.463: ISAKMP:(0):atts are not acceptable. Next payload is 0
*Jun  3 05:59:27.463: ISAKMP:(0):Checking ISAKMP transform 1 against priority 65521 policy
*Jun  3 05:59:27.463: ISAKMP:      encryption 3DES-CBC
*Jun  3 05:59:27.463: ISAKMP:      hash SHA
*Jun  3 05:59:27.463: ISAKMP:      default group 2
*Jun  3 05:59:27.463: ISAKMP:      auth XAUTHInitPreShared
*Jun  3 05:59:27.463: ISAKMP:      life type in seconds
*Jun  3 05:59:27.463: ISAKMP:      life duration (VPI) of  0x0 0x20 0xC4 0x9B
*Jun  3 05:59:27.463: ISAKMP:(0):Encryption algorithm offered does not match policy!
*Jun  3 05:59:27.463: ISAKMP:(0):atts are not acceptable. Next payload is 0
*Jun  3 05:59:27.463: ISAKMP:(0):Checking ISAKMP transform 1 against priority 65522 policy
*Jun  3 05:59:27.463: ISAKMP:      encryption 3DES-CBC
*Jun  3 05:59:27.463: ISAKMP:      hash SHA
*Jun  3 05:59:27.463: ISAKMP:      default group 2
*Jun  3 05:59:27.463: ISAKMP:      auth XAUTHInitPreShared
*Jun  3 05:59:27.463: ISAKMP:      life type in seconds
*Jun  3 05:59:27.463: ISAKMP:      life duration (VPI) of  0x0 0x20 0xC4 0x9B
*Jun  3 05:59:27.463: ISAKMP:(0):Encryption algorithm offered does not match policy!
*Jun  3 05:59:27.463: ISAKMP:(0):atts are not acceptable. Next payload is 0
*Jun  3 05:59:27.463: ISAKMP:(0):Checking ISAKMP transform 1 against priority 65523 policy
*Jun  3 05:59:27.463: ISAKMP:      encryption 3DES-CBC
*Jun  3 05:59:27.463: ISAKMP:      hash SHA
*Jun  3 05:59:27.463: ISAKMP:      default group 2
*Jun  3 05:59:27.463: ISAKMP:      auth XAUTHInitPreShared
*Jun  3 05:59:27.463: ISAKMP:      life type in seconds
*Jun  3 05:59:27.463: ISAKMP:      life duration (VPI) of  0x0 0x20 0xC4 0x9B
*Jun  3 05:59:27.463: ISAKMP:(0):Encryption algorithm offered does not match policy!
*Jun  3 05:59:27.463: ISAKMP:(0):atts are not acceptable. Next payload is 0
*Jun  3 05:59:27.463: ISAKMP:(0):Checking ISAKMP transform 1 against priority 65524 policy
*Jun  3 05:59:27.467: ISAKMP:      encryption 3DES-CBC
*Jun  3 05:59:27.467: ISAKMP:      hash SHA
*Jun  3 05:59:27.467: ISAKMP:      default group 2
*Jun  3 05:59:27.467: ISAKMP:      auth XAUTHInitPreShared
*Jun  3 05:59:27.467: ISAKMP:      life type in seconds
*Jun  3 05:59:27.467: ISAKMP:      life duration (VPI) of  0x0 0x20 0xC4 0x9B
*Jun  3 05:59:27.467: ISAKMP:(0):Encryption algorithm offered does not match policy!
*Jun  3 05:59:27.467: ISAKMP:(0):atts are not acceptable. Next payload is 0
*Jun  3 05:59:27.467: ISAKMP:(0):Checking ISAKMP transform 1 against priority 65525 policy
*Jun  3 05:59:27.467: ISAKMP:      encryption 3DES-CBC
*Jun  3 05:59:27.467: ISAKMP:      hash SHA
*Jun  3 05:59:27.467: ISAKMP:      default group 2
*Jun  3 05:59:27.467: ISAKMP:      auth XAUTHInitPreShared
*Jun  3 05:59:27.467: ISAKMP:      life type in seconds
*Jun  3 05:59:27.467: ISAKMP:      life duration (VPI) of  0x0 0x20 0xC4 0x9B
*Jun  3 05:59:27.467: ISAKMP:(0):Encryption algorithm offered does not match policy!
*Jun  3 05:59:27.467: ISAKMP:(0):atts are not acceptable. Next payload is 0
*Jun  3 05:59:27.467: ISAKMP:(0):Checking ISAKMP transform 1 against priority 65526 policy
*Jun  3 05:59:27.467: ISAKMP:      encryption 3DES-CBC
```

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*Jun  3 05:59:27.467: ISAKMP:      hash SHA
*Jun  3 05:59:27.467: ISAKMP:      default group 2
*Jun  3 05:59:27.467: ISAKMP:      auth XAUTHInitPreShared
*Jun  3 05:59:27.467: ISAKMP:      life type in seconds
*Jun  3 05:59:27.467: ISAKMP:      life duration (VPI) of  0x0 0x20 0xC4 0x9B
*Jun  3 05:59:27.467: ISAKMP:(0):Encryption algorithm offered does not match policy!
*Jun  3 05:59:27.467: ISAKMP:(0):atts are not acceptable. Next payload is 0
*Jun  3 05:59:27.467: ISAKMP:(0):Checking ISAKMP transform 1 against priority 65527 policy
*Jun  3 05:59:27.467: ISAKMP:      encryption 3DES-CBC
*Jun  3 05:59:27.467: ISAKMP:      hash SHA
*Jun  3 05:59:27.467: ISAKMP:      default group 2
*Jun  3 05:59:27.467: ISAKMP:      auth XAUTHInitPreShared
*Jun  3 05:59:27.467: ISAKMP:      life type in seconds
*Jun  3 05:59:27.467: ISAKMP:      life duration (VPI) of  0x0 0x20 0xC4 0x9B
*Jun  3 05:59:27.467: ISAKMP:(0):atts are acceptable. Next payload is 0
*Jun  3 05:59:27.467: ISAKMP (0:0): vendor ID is NAT-T v7
*Jun  3 05:59:27.467: ISAKMP:(0): processing KE payload. message ID = 0
*Jun  3 05:59:27.475: ISAKMP:(0): processing NONCE payload. message ID = 0
*Jun  3 05:59:27.475: ISAKMP:(2006): processing HASH payload. message ID = 0
*Jun  3 05:59:27.475: ISAKMP:(2006):SA authentication status:
        authenticated
*Jun  3 05:59:27.475: ISAKMP:(2006):SA has been authenticated with 172.16.186.186

*Jun  3 05:59:27.475: ISAKMP:(2006):Send initial contact
*Jun  3 05:59:27.475: ISAKMP:(2006): sending packet to 172.16.186.186
                      my_port 500 peer_port 500 (I) AG_INIT_EXCH
*Jun  3 05:59:27.479: ISAKMP:(2006):Input = IKE_MESG_FROM_PEER, IKE_AM_EXCH
*Jun  3 05:59:27.479: ISAKMP:(2006):Old State = IKE_I_AM1  New State = IKE_P1_COMPLETE

*Jun  3 05:59:27.479: ISAKMP:(2006):Need XAUTH
*Jun  3 05:59:27.479: ISAKMP:(2006):Input = IKE_MESG_INTERNAL, IKE_PHASE1_COMPLETE
```

```
!--- Phase 1 (ISAKMP) is complete. *Jun 3 05:59:27.479: ISAKMP:(2006):Old State =
IKE_P1_COMPLETE New State = IKE_P1_COMPLETE !--- Xauth initiates. *Jun 3 05:59:27.479: ISAKMP
(0:2006): received packet from 172.16.186.186 dport 500 sport 500 Global (I) CONF_XAUTH *Jun 3
05:59:27.483: ISAKMP: set new node 850198625 to CONF_XAUTH *Jun 3 05:59:27.487:
ISAKMP:(2006):processing transaction payload from 172.16.186.186. message ID = -1517216966 *Jun
3 05:59:27.487: ISAKMP: Config payload REQUEST *Jun 3 05:59:27.487: ISAKMP:(2006):checking
request: *Jun 3 05:59:27.487: ISAKMP: XAUTH_USER_NAME_V2 *Jun 3 05:59:27.487: ISAKMP:
XAUTH_USER_PASSWORD_V2 *Jun 3 05:59:27.487: ISAKMP:(2006):Xauth process request *Jun 3
05:59:27.487: ISAKMP:(2006):Input = IKE_MESG_FROM_PEER, IKE_CFG_REQUEST *Jun 3 05:59:27.487:
ISAKMP:(2006):Old State = IKE_P1_COMPLETE New State = IKE_XAUTH_REPLY_AWAIT *Jun 3 05:59:30.242:
EZVPN(ez): Pending XAuth Request, Please enter the following command: *Jun 3 05:59:30.242:
EZVPN: crypto ipsec client ezvpn xauth !--- Enter the crypto ipsec client ezvpn xauth command.
```

```
3-03-06-871W#crypto ipsec client ezvpn xauth

Username: cisco
Password:
```

```
*Jun  3 06:02:46.498:         username: cisco
*Jun  3 06:02:46.498:         password: <omitted>
*Jun  3 06:02:46.498: ISAKMP:(2008): responding to peer config from
                      172.16.186.186. ID = -605466681
*Jun  3 06:02:46.498: ISAKMP:(2008): sending packet to 172.16.186.186 my_port
                      500 peer_port 500 (I) CONF_XAUTH
*Jun  3 06:02:46.498: ISAKMP:(2008):deleting node -605466681 error FALSE reason
                       "Done with xauth request/reply exchange"
*Jun  3 06:02:46.498: ISAKMP:(2008):Input = IKE_MESG_INTERNAL, IKE_XAUTH_REPLY_ATTR
```

```
*Jun  3 06:02:46.498: ISAKMP:(2008):Old State = IKE_XAUTH_REPLY_AWAIT  New State =
                      IKE_XAUTH_REPLY_SENT

*Jun  3 06:02:46.502: ISAKMP (0:2008): received packet from 172.16.186.186 dport
                      500 sport 500 Global (I) CONF_XAUTH
*Jun  3 06:02:46.502: ISAKMP: set new node 1283697340 to CONF_XAUTH
*Jun  3 06:02:46.502: ISAKMP:(2008):processing transaction payload from
                      172.16.186.186. message ID = 1283697340
*Jun  3 06:02:46.502: ISAKMP: Config payload SET
*Jun  3 06:02:46.502: ISAKMP:(2008):Xauth process set, status = 1
*Jun  3 06:02:46.502: ISAKMP:(2008):checking SET:
*Jun  3 06:02:46.502: ISAKMP:    XAUTH_STATUS_V2 XAUTH-OK
*Jun  3 06:02:46.502: ISAKMP:(2008):attributes sent in message:
*Jun  3 06:02:46.502:         Status: 1
*Jun  3 06:02:46.506: ISAKMP:(2008): sending packet to 172.16.186.186
                      my_port 500 peer_port 500 (I) CONF_XAUTH
*Jun  3 06:02:46.506: ISAKMP:(2008):deleting node 1283697340 error FALSE
                       reason "No Error"
*Jun  3 06:02:46.506: ISAKMP:(2008):Input = IKE_MESG_FROM_PEER, IKE_CFG_SET
*Jun  3 06:02:46.506: ISAKMP:(2008):Old State = IKE_XAUTH_REPLY_SENT
                      New State = IKE_P1_COMPLETE

*Jun  3 06:02:46.506: ISAKMP:(2008):Need config/address
*Jun  3 06:02:46.506: ISAKMP: set new node 104696831 to CONF_ADDR
*Jun  3 06:02:46.506: ISAKMP: Sending APPLICATION_VERSION string: Cisco IOS
                      Software, C870 Software (C870-ADVIPSERVICESK9-M),
                      Experimental Version 12.4(20060201:210845)
                      [prchadal-CSCsb79792-haw_t_pi4 101]
Copyright (c) 1986-2006 by Cisco Systems, Inc.
Compiled Thu 02-Feb-06 03:19 by prchadal
*Jun  3 06:02:46.506: ISAKMP:(2008): initiating peer config to 172.16.186.186.
                      ID = 104696831
*Jun  3 06:02:46.506: ISAKMP:(2008): sending packet to 172.16.186.186 my_port
                      500 peer_port 500 (I) CONF_ADDR
*Jun  3 06:02:46.506: ISAKMP:(2008):Input = IKE_MESG_INTERNAL, IKE_PHASE1_COMPLETE
*Jun  3 06:02:46.506: ISAKMP:(2008):Old State = IKE_P1_COMPLETE  New State =
                      IKE_CONFIG_MODE_REQ_SENT

*Jun  3 06:02:46.510: ISAKMP (0:2008): received packet from 172.16.186.186 dport
                      500 sport 500 Global (I) CONF_ADDR
*Jun  3 06:02:46.514: ISAKMP:(2008):processing transaction payload from
                      172.16.186.186. message ID = 104696831
*Jun  3 06:02:46.514: ISAKMP: Config payload REPLY
*Jun  3 06:02:46.514: ISAKMP(0:2008) process config reply
*Jun  3 06:02:46.514: ISAKMP:(2008):deleting node 104696831 error
                      FALSE reason "Transaction mode done"
*Jun  3 06:02:46.514: ISAKMP:(2008):Input = IKE_MESG_FROM_PEER, IKE_CFG_REPLY
*Jun  3 06:02:46.514: ISAKMP:(2008):Old State = IKE_CONFIG_MODE_REQ_SENT
                      New State = IKE_P1_COMPLETE

*Jun  3 06:02:46.518: insert of map into mapdb AVL failed, map + ace pair
                      already exists on the mapdb
*Jun  3 06:02:46.518: ISAKMP:(2008):Input = IKE_MESG_INTERNAL, IKE_PHASE1_COMPLETE
*Jun  3 06:02:46.518: ISAKMP:(2008):Old State = IKE_P1_COMPLETE  New State =
                      IKE_P1_COMPLETE

*Jun  3 06:02:46.522: IPSEC(sa_request): ,
  (key eng. msg.) OUTBOUND local= 172.16.186.130, remote= 172.16.186.186,
    local_proxy= 10.12.130.1/255.255.255.255/0/0 (type=1),
    remote_proxy= 0.0.0.0/0.0.0.0/0/0 (type=4),
    protocol= ESP, transform= NONE  (Tunnel),
    lifedur= 2147483s and 4608000kb,
    spi= 0xA0FC0985(2700872069), conn_id= 0, keysize= 128, flags= 0x2000
*Jun  3 06:02:46.522: IPSEC(sa_request): ,
  (key eng. msg.) OUTBOUND local= 172.16.186.130, remote= 172.16.186.186,
    local_proxy= 10.12.130.1/255.255.255.255/0/0 (type=1),
    remote_proxy= 0.0.0.0/0.0.0.0/0/0 (type=4),
    protocol= ESP, transform= NONE  (Tunnel),
    lifedur= 2147483s and 4608000kb,
    spi= 0xBB426C9(196355785), conn_id= 0, keysize= 128, flags= 0x2000
*Jun  3 06:02:46.522: IPSEC(sa_request): ,
  (key eng. msg.) OUTBOUND local= 172.16.186.130, remote= 172.16.186.186,
    local_proxy= 10.12.130.1/255.255.255.255/0/0 (type=1),
    remote_proxy= 0.0.0.0/0.0.0.0/0/0 (type=4),
    protocol= ESP, transform= NONE  (Tunnel),
    lifedur= 2147483s and 4608000kb,
    spi= 0xB349BB06(3007953670), conn_id= 0, keysize= 192, flags= 0x2000
*Jun  3 06:02:46.522: IPSEC(sa_request): ,
  (key eng. msg.) OUTBOUND local= 172.16.186.130, remote= 172.16.186.186,
    local_proxy= 10.12.130.1/255.255.255.255/0/0 (type=1),
    remote_proxy= 0.0.0.0/0.0.0.0/0/0 (type=4),
    protocol= ESP, transform= NONE  (Tunnel),
    lifedur= 2147483s and 4608000kb,
    spi= 0xC114CFB8(3239366584), conn_id= 0, keysize= 192, flags= 0x2000
*Jun  3 06:02:46.522: IPSEC(sa_request): ,
  (key eng. msg.) OUTBOUND local= 172.16.186.130, remote= 172.16.186.186,
    local_proxy= 10.12.130.1/255.255.255.255/0/0 (type=1),
    remote_proxy= 0.0.0.0/0.0.0.0/0/0 (type=4),
    protocol= ESP, transform= NONE  (Tunnel),
    lifedur= 2147483s and 4608000kb,
    spi= 0x2ED87C62(785939554), conn_id= 0, keysize= 256, flags= 0x2000
*Jun  3 06:02:46.522: IPSEC(sa_request): ,
  (key eng. msg.) OUTBOUND local= 172.16.186.130, remote= 172.16.186.186,
    local_proxy= 10.12.130.1/255.255.255.255/0/0 (type=1),
    remote_proxy= 0.0.0.0/0.0.0.0/0/0 (type=4),
    protocol= ESP, transform= NONE  (Tunnel),
    lifedur= 2147483s and 4608000kb,
    spi= 0x226A6FF3(577400819), conn_id= 0, keysize= 256, flags= 0x2000
*Jun  3 06:02:46.522: IPSEC(sa_request): ,
  (key eng. msg.) OUTBOUND local= 172.16.186.130, remote= 172.16.186.186,
    local_proxy= 10.12.130.1/255.255.255.255/0/0 (type=1),
    remote_proxy= 0.0.0.0/0.0.0.0/0/0 (type=4),
    protocol= ESP, transform= NONE  (Tunnel),
    lifedur= 2147483s and 4608000kb,
    spi= 0x29354010(691355664), conn_id= 0, keysize= 0, flags= 0x2000
*Jun  3 06:02:46.526: IPSEC(sa_request): ,
  (key eng. msg.) OUTBOUND local= 172.16.186.130, remote= 172.16.186.186,
    local_proxy= 10.12.130.1/255.255.255.255/0/0 (type=1),
    remote_proxy= 0.0.0.0/0.0.0.0/0/0 (type=4),
    protocol= ESP, transform= NONE  (Tunnel),
    lifedur= 2147483s and 4608000kb,
    spi= 0x12111E5C(303111772), conn_id= 0, keysize= 0, flags= 0x2000
*Jun  3 06:02:46.526: IPSEC(sa_request): ,
  (key eng. msg.) OUTBOUND local= 172.16.186.130, remote= 172.16.186.186,
    local_proxy= 10.12.130.1/255.255.255.255/0/0 (type=1),
    remote_proxy= 0.0.0.0/0.0.0.0/0/0 (type=4),
    protocol= ESP, transform= NONE  (Tunnel),
    lifedur= 2147483s and 4608000kb,
    spi= 0x98084B9A(2550680474), conn_id= 0, keysize= 0, flags= 0x2000
*Jun  3 06:02:46.526: IPSEC(sa_request): ,
  (key eng. msg.) OUTBOUND local= 172.16.186.130, remote= 172.16.186.186,
    local_proxy= 10.12.130.1/255.255.255.255/0/0 (type=1),
    remote_proxy= 0.0.0.0/0.0.0.0/0/0 (type=4),
    protocol= ESP, transform= NONE  (Tunnel),
    lifedur= 2147483s and 4608000kb,
    spi= 0x9442501B(2487373851), conn_id= 0, keysize= 0, flags= 0x0
*Jun  3 06:02:46.526: ISAKMP: set new node 0 to QM_IDLE
*Jun  3 06:02:46.526: ISAKMP:(2008): sitting IDLE. Starting QM immediately (QM_IDLE)
```

```
*Jun  3 06:02:46.526: ISAKMP:(2008):beginning Quick Mode exchange, M-ID of -1665883002
*Jun  3 06:02:46.526: ISAKMP:(2008):QM Initiator gets spi
*Jun  3 06:02:46.530: ISAKMP:(2008): sending packet to 172.16.186.186 my_port
                      500 peer_port 500 (I) QM_IDLE
*Jun  3 06:02:46.530: ISAKMP:(2008):Node -1665883002, Input = IKE_MESG_INTERNAL,
                      IKE_INIT_QM
*Jun  3 06:02:46.530: ISAKMP:(2008):Old State = IKE_QM_READY  New State = IKE_QM_I_QM1
*Jun  3 06:02:46.538: ISAKMP (0:2008): received packet from 172.16.186.186
                      dport 500 sport 500 Global (I) QM_IDLE
*Jun  3 06:02:46.538: ISAKMP:(2008): processing HASH payload. message ID = -1665883002
*Jun  3 06:02:46.538: ISAKMP:(2008): processing SA payload. message ID = -1665883002
*Jun  3 06:02:46.538: ISAKMP:(2008):Checking IPSec proposal 1
*Jun  3 06:02:46.538: ISAKMP: transform 1, ESP_3DES
*Jun  3 06:02:46.538: ISAKMP:   attributes in transform:
*Jun  3 06:02:46.538: ISAKMP:      encaps is 1 (Tunnel)
*Jun  3 06:02:46.538: ISAKMP:      SA life type in seconds
*Jun  3 06:02:46.538: ISAKMP:      SA life duration (VPI) of  0x0 0x20 0xC4 0x9B
*Jun  3 06:02:46.538: ISAKMP:      SA life type in kilobytes
*Jun  3 06:02:46.538: ISAKMP:      SA life duration (VPI) of  0x0 0x46 0x50 0x0
*Jun  3 06:02:46.542: ISAKMP:      authenticator is HMAC-SHA
*Jun  3 06:02:46.542: ISAKMP:(2008):atts are acceptable.
*Jun  3 06:02:46.542: IPSEC(validate_proposal_request): proposal part #1
*Jun  3 06:02:46.542: IPSEC(validate_proposal_request): proposal part #1,
  (key eng. msg.) INBOUND local= 172.16.186.130, remote= 172.16.186.186,
    local_proxy= 10.12.130.1/255.255.255.255/0/0 (type=1),
    remote_proxy= 0.0.0.0/0.0.0.0/0/0 (type=4),
    protocol= ESP, transform= esp-3des esp-sha-hmac  (Tunnel),
    lifedur= 0s and 0kb,
    spi= 0x0(0), conn_id= 0, keysize= 0, flags= 0x0
*Jun  3 06:02:46.542: Crypto mapdb : proxy_match
        src addr     : 10.12.130.1
        dst addr     : 0.0.0.0
        protocol     : 0
        src port     : 0
        dst port     : 0
*Jun  3 06:02:46.542: ISAKMP:(2008): processing NONCE payload. message ID = -1665883002
*Jun  3 06:02:46.542: ISAKMP:(2008): processing ID payload. message ID = -1665883002
*Jun  3 06:02:46.542: ISAKMP:(2008): processing ID payload. message ID = -1665883002
*Jun  3 06:02:46.542: ISAKMP:(2008): processing NOTIFY RESPONDER_LIFETIME protocol 3
        spi 1752561220, message ID = -1665883002, sa = 83BCC9DC
*Jun  3 06:02:46.542: ISAKMP:(2008):SA authentication status:
        authenticated
*Jun  3 06:02:46.542: ISAKMP:(2008): processing responder lifetime
*Jun  3 06:02:46.542: ISAKMP (2008): responder lifetime of 3600s
*Jun  3 06:02:46.542: ISAKMP:(2008): Creating IPSec SAs
*Jun  3 06:02:46.542:         inbound SA from 172.16.186.186 to 172.16.186.130 (f/i) 0/ 0
        (proxy 0.0.0.0 to 10.12.130.1)
*Jun  3 06:02:46.542:         has spi 0x29354010 and conn_id 0
*Jun  3 06:02:46.542:         lifetime of 3590 seconds
*Jun  3 06:02:46.542:         lifetime of 4608000 kilobytes
*Jun  3 06:02:46.546:         outbound SA from 172.16.186.130 to 172.16.186.186 (f/i) 0/0
        (proxy 10.12.130.1 to 0.0.0.0)
*Jun  3 06:02:46.546:         has spi  0x6875F644 and conn_id 0
*Jun  3 06:02:46.546:         lifetime of 3590 seconds
*Jun  3 06:02:46.546:         lifetime of 4608000 kilobytes
*Jun  3 06:02:46.546: ISAKMP:(2008): sending packet to 172.16.186.186
                      my_port 500 peer_port 500 (I) QM_IDLE
*Jun  3 06:02:46.546: ISAKMP:(2008):deleting node -1665883002 error FALSE
                      reason "No Error"
*Jun  3 06:02:46.546: ISAKMP:(2008):Node -1665883002, Input = IKE_MESG_FROM_PEER,
                      IKE_QM_EXCH
*Jun  3 06:02:46.546: ISAKMP:(2008):Old State = IKE_QM_I_QM1  New State =
                      IKE_QM_PHASE2_COMPLETE
*Jun  3 06:02:46.546: IPSEC(key_engine): got a queue event with 1 KMI message(s)
```

```
*Jun  3 06:02:46.546: Crypto mapdb : proxy_match
        src addr     : 10.12.130.1
        dst addr     : 0.0.0.0
        protocol     : 0
        src port     : 0
        dst port     : 0
*Jun  3 06:02:46.546: IPSEC(crypto_ipsec_sa_find_ident_head): reconnecting with
                      the same proxies and peer 172.16.186.186
*Jun  3 06:02:46.546: IPSEC(policy_db_add_ident): src 10.12.130.1, dest 0.0.0.0,
                      dest_port 0

*Jun  3 06:02:46.546: IPSEC(create_sa): sa created,
  (sa) sa_dest= 172.16.186.130, sa_proto= 50,
    sa_spi= 0x29354010(691355664),
    sa_trans= esp-3des esp-sha-hmac , sa_conn_id= 11
*Jun  3 06:02:46.546: IPSEC(create_sa): sa created,
  (sa) sa_dest= 172.16.186.186, sa_proto= 50,
    sa_spi= 0x6875F644(1752561220),
    sa_trans= esp-3des esp-sha-hmac , sa_conn_id= 12
*Jun  3 06:02:46.550: IPSEC(update_current_outbound_sa):
updated peer 172.16.186.186 current outbound sa to SPI 6875F644
*Jun  3 06:02:46.550: %CRYPTO-6-EZVPN_CONNECTION_UP: (Client)
User=  Group=vpngrp  Client_public_addr=172.16.186.130
Server_public_addr=172.16.186.186  NEM_Remote_Subnets=10.12.130.1/255.255.255.255
*Jun  3 06:02:47.130: ISAKMP: set new node -1866551769 to QM_IDLE
```

관련 정보

- Cisco Easy VPN 제품 지원
- IOS 라우터: 스플릿 터널링 컨피그레이션이 포함된 NEM(Network-Extension Mode)의 Easy VPN(EzVPN) 예
- Cisco VPN 클라이언트
- IPSec 협상/IKE 프로토콜
- 기술 지원 및 문서 – Cisco Systems