

在具有VPN 3000集中器的IOS路由器上使用NEM的EzVPN配置示例

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簡介

本檔案將說明將Cisco IOS®路由器設定為網路擴充模式(NEM)中的EzVPN，以連線到Cisco VPN 3000集中器的程式。新的EzVPN Phase II功能支援基本網路地址轉換(NAT)配置。EzVPN Phase II源自Unity協定 (VPN客戶端軟體)。遠端裝置始終是IPsec隧道的發起方。但是，EzVPN客戶端上無法配置網際網路金鑰交換(IKE)和IPsec提議。VPN客戶端與伺服器協商提議。

要使用Easy VPN在PIX/ASA 7.x和Cisco 871路由器之間配置IPsec，請參閱[將ASA 5500作為伺服器並將Cisco 871作為Easy VPN Remote配置示例的PIX/ASA 7.x Easy VPN](#)。

要在Cisco IOS® Easy VPN遠端硬體客戶端和PIX Easy VPN伺服器之間配置IPsec，請參閱[IOS Easy VPN遠端硬體客戶端到PIX Easy VPN伺服器配置示例](#)。

要將Cisco 7200路由器配置為EzVPN，將Cisco 871路由器配置為Easy VPN Remote，請參閱[7200 Easy VPN Server to 871 Easy VPN Remote配置示例](#)。

必要條件

[需求](#)

在嘗試此配置之前，請檢查Cisco IOS路由器是否支援[EzVPN Phase II](#)功能，並且是否具有用於建立IPsec隧道的端到端連線的IP連線。

[採用元件](#)

本文中的資訊係根據以下軟體和硬體版本：

- Cisco IOS軟體版本12.2(8)YJ (EzVPN階段II)
- VPN 3000集中器3.6.x
- 思科1700路由器

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。

注意：此配置最近在Cisco 3640路由器上進行了測試，該路由器採用Cisco IOS軟體版本12.4(8)和VPN 3000 Concentrator 4.7.x版本。

[慣例](#)

如需文件慣例的詳細資訊，請參閱[思科技術提示慣例](#)。

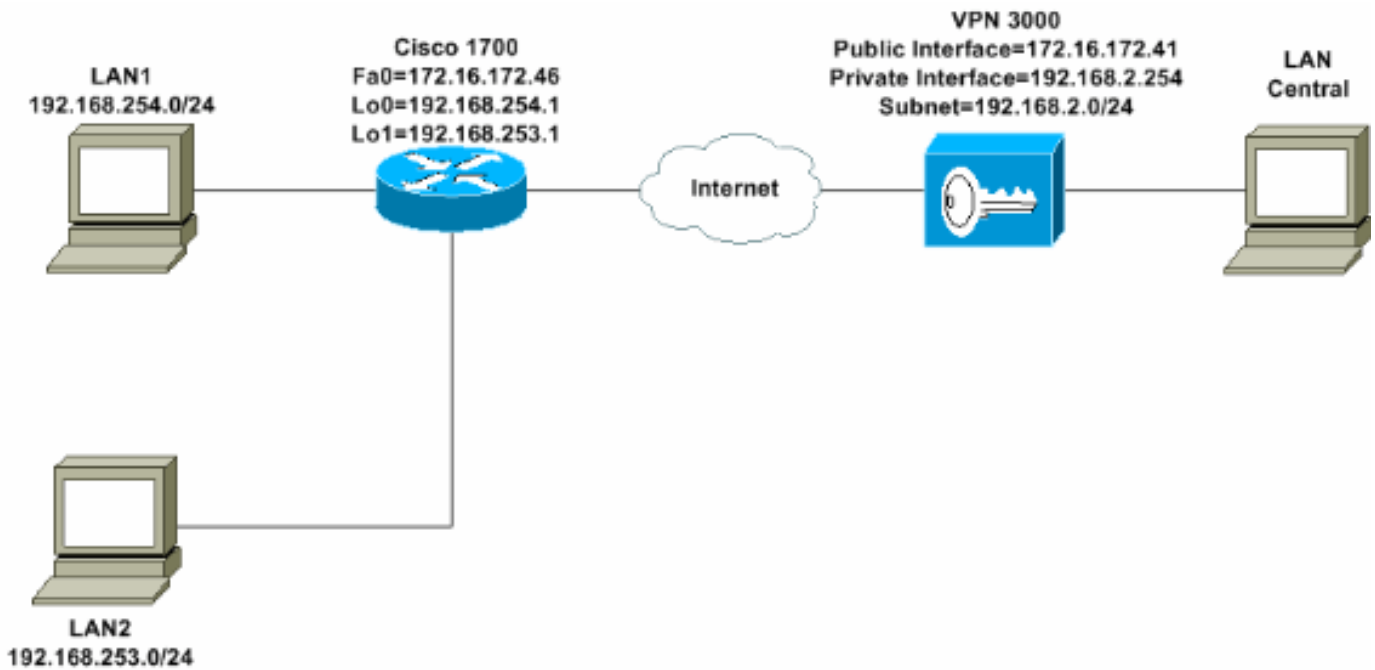
[配置VPN 3000 Concentrator](#)

[工作](#)

本節提供配置VPN 3000集中器的資訊。

[網路圖表](#)

本檔案會使用下圖中所示的網路設定。環回介面用作內部子網，而FastEthernet 0是Internet的預設子網。



逐步說明

請完成以下步驟：

1. 選擇 Configuration > User Management > Groups > Add 並定義組名稱和密碼，以便為使用者配置 IPsec 組。此示例使用組名 turaro 和密碼/驗證 tululo。

Configuration | User Management | Groups | Add

This section lets you add a group. Check the **Inherit?** box to set a field that you want to default to the base group value. Uncheck the **Inherit?** box and enter a new value to override base group values.

Identity Parameters		
Attribute	Value	Description
Group Name	turaro	Enter a unique name for the group.
Password	*****	Enter the password for the group.
Verify	*****	Verify the group's password.
Type	Internal	<i>External</i> groups are configured on an external authentication server (e.g. RADIUS). <i>Internal</i> groups are configured on the VPN 3000 Concentrator's Internal Database.

2. 選擇 Configuration > User Management > Groups > turaro > General 以啟用 IPsec 並禁用點對點隧道協定 (PPTP) 和第 2 層隧道協定 (L2TP)。進行選擇，然後按一下 Apply。

- [-] Configuration
 - Interfaces
 - [-] System
 - [-] User Management
 - Base Group
 - Groups
 - Users
 - [-] Policy Management
- [-] Administration
- [-] Monitoring

Identity
General
IPSec
Client FW
PPTP/L2TP

General Par

Attribute	Value	Inherit?	
Access Hours	-No Restrictions-	<input checked="" type="checkbox"/>	Sele
Simultaneous Logins	3	<input checked="" type="checkbox"/>	Ente
Minimum Password Length	8	<input checked="" type="checkbox"/>	Ente
Allow Alphabetic-Only Passwords	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Ente be a
Idle Timeout	30	<input checked="" type="checkbox"/>	(mir
Maximum Connect Time	0	<input checked="" type="checkbox"/>	(mir
Filter	-None-	<input checked="" type="checkbox"/>	Ente
Primary DNS		<input checked="" type="checkbox"/>	Ente
Secondary DNS		<input checked="" type="checkbox"/>	Ente
Primary WINS		<input checked="" type="checkbox"/>	Ente
Secondary WINS		<input checked="" type="checkbox"/>	Ente
SEP Card Assignment	<input checked="" type="checkbox"/> SEP 1 <input checked="" type="checkbox"/> SEP 2 <input checked="" type="checkbox"/> SEP 3 <input checked="" type="checkbox"/> SEP 4	<input checked="" type="checkbox"/>	Sele
Tunneling Protocols	<input type="checkbox"/> PPTP <input type="checkbox"/> L2TP <input checked="" type="checkbox"/> IPSec	<input type="checkbox"/>	Sele

3. 將Authentication設定為Internal for Extended Authentication(Xauth)並確保隧道型別為Remote Access,IPSec SA為ESP-3DES-MD5。

Configuration | User Management | Groups | Modify ADMINI

Check the **Inherit?** box to set a field that you want to default to the base group value to override base group values.

Identity General IPsec Client FW PPTP/L2TP

IPsec Parameters		
Attribute	Value	Inherit?
IPsec SA	ESP-3DES-MD5	<input checked="" type="checkbox"/>
IKE Peer Identity Validation	If supported by certificate	<input checked="" type="checkbox"/>
IKE Keepalives	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Reauthentication on Rekey	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Tunnel Type	Remote Access	<input checked="" type="checkbox"/>
Remote Access Parameters		
Group Lock	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Authentication	Internal	<input checked="" type="checkbox"/>

4. 選擇 Configuration > System > Tunneling Protocols > IPsec > IKE Proposals，以確保Cisco VPN客戶端(CiscoVPNClient-3DES-MD5)處於Active Proposals for IKE(Phase 1)中。注意：從VPN集中器4.1.x中，確保Cisco VPN客戶端位於IKE活動建議清單（第1階段）中的過程有所不同。選擇 Configuration > Tunneling and Security > IPsec > IKE Proposals。

Configuration | System | Tunneling Protocols | IPsec | IKE Proposals

Add, delete, prioritize, and configure IKE Proposals.

Select an **Inactive Proposal** and click **Activate** to make it **Active**, or click **Modify**, **Copy** or **Delete**. Select an **Active Proposal** and click **Deactivate** to make it **Inactive**, or click **Move Up** or **Move Down**. Click **Add** or **Copy** to add a new **Inactive Proposal**. IKE Proposals are used by **Security Association** parameters.

Active Proposals	Actions	Inactive Proposals
CiscoVPNClient-3DES-MD5 IKE-3DES-MD5 IKE-3DES-MD5-DH1 IKE-DES-MD5 IKE-3DES-MD5-DH7	<< Activate Deactivate >> Move Up Move Down Add	IKE-3DES-MD5-RSA IKE-3DES-SHA-DSA IKE-3DES-MD5-RSA-D IKE-DES-MD5-DH7 CiscoVPNClient-3DES CiscoVPNClient-3DES

5. 驗證IPsec安全關聯(SA)。在第3步中，您的IPsec SA是ESP-3DES-MD5。如果您願意，可以建立一個新的IPsec SA，但請確保在您的組上使用正確的IPsec SA。您應該為您使用的IPsec SA禁用完全轉發保密(PFS)。通過選擇 Configuration > Policy Management > Traffic Management > SA選擇Cisco VPN Client作為IKE建議。在文本框中鍵入SA名稱並進行適當的選擇，如下所示

:

Configuration | Policy Management | Traffic Management | Security Associations | Modify

Modify a configured Security Association.

SA Name Specify the name of this Security Association (SA).

Inheritance Select the granularity of this SA.

IPSec Parameters

Authentication Algorithm Select the packet authentication algorithm to use.

Encryption Algorithm Select the ESP encryption algorithm to use.

Encapsulation Mode Select the Encapsulation Mode for this SA.

Perfect Forward Secrecy Select the use of Perfect Forward Secrecy.

Lifetime Measurement Select the lifetime measurement of the IPSec key.

Data Lifetime Specify the data lifetime in kilobytes (KB).

Time Lifetime Specify the time lifetime in seconds.

IKE Parameters

IKE Peer Specify the IKE Peer for a LAN-to-LAN IPSec.

Negotiation Mode Select the IKE Negotiation mode to use.

Digital Certificate Select the Digital Certificate to use.

Certificate Transmission Entire certificate chain
 Identity certificate only Choose how to send the digital certificate to the peer.

IKE Proposal Select the IKE Proposal to use as IKE initiator.

注意：如果您更喜歡選擇預定義SA，則此步驟和下一步是可選的。如果您的客戶端具有動態分配的IP地址，請在IKE對等體文本框中使用0.0.0.0。確保將IKE建議設定為CiscoVPNClient-3DES-MD5，如下示例所示。

6. 不能按一下Allow the networks in the list以繞過通道。原因是支援拆分隧道，但EzVPN客戶端功能不支援旁路功能。

<ul style="list-style-type: none"> [-] Configuration <ul style="list-style-type: none"> Interfaces [-] System [-] User Management <ul style="list-style-type: none"> Base Group Groups Users [-] Policy Management [-] Administration [-] Monitoring 	Banner	<input type="text"/>	<input checked="" type="checkbox"/>
	Allow Password Storage on Client	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	Split Tunneling Policy	<input checked="" type="radio"/> Tunnel everything <input type="checkbox"/> Allow the networks in list to bypass the tunnel <input type="radio"/> Only tunnel networks in list	<input checked="" type="checkbox"/>
Split Tunneling Network List	<input type="text" value="-None-"/>	<input checked="" type="checkbox"/>	

7. 選擇Configuration > User Management > Users以新增使用者。定義使用者名稱和密碼，將其分配給組，然後按一下Add。


Configuration | User Management | Users | Add

This section lets you add a user. Uncheck the **Inherit?** box and enter a new value to override group values.

Identity | General | IPsec | PPTP/L2TP

Identity Parameters		
Attribute	Value	Description
Username	padma	Enter a unique username.
Password	XXXXXXXXXX	Enter the user's password. The password must satisfy the group password requirements.
Verify	XXXXXXXXXX	Verify the user's password.
Group	turaro	Enter the group to which this user belongs.
IP Address		Enter the IP address assigned to this user.
Subnet Mask		Enter the subnet mask assigned to this user.

Add Cancel



8. 選擇 **Administration > Admin Sessions**，然後檢查使用者是否已連線。在NEM中，VPN集中器不分配池中的IP地址。**注意**：如果您希望選擇預定義的SA，則此步驟是可選的。

LAN-to-LAN Sessions								[Remote Access Sessions Management Sessions]
Connection Name	IP Address	Protocol	Encryption	Login Time	Duration	Bytes Tx	Bytes Rx	Actions
No LAN-to-LAN Sessions								
Remote Access Sessions								[LAN-to-LAN Sessions Management Sessions]
Username	Assigned IP Address Public IP Address	Group	Protocol Encryption	Login Time Duration	Client Type Version	Bytes Tx Bytes Rx	Actions	
Cisco_MAE	192.168.253.0 172.16.172.46	turaro	IPsec 3DES-168	Mar 31 18:32:23 0:02:50	N/A N/A	301320 301320	[Logout Ping]	
Management Sessions								[LAN-to-LAN Sessions Remote Access Sessions]
Administrator	IP Address	Protocol	Encryption	Login Time	Duration	Actions		
admin	171.69.89.5	HTTP	None	Mar 31 18:35:01	0:00:12	[Logout Ping]		

9. 按一下「Save Needed」或「Save」圖示以儲存組態。

路由器配置

顯示版本輸出

show version

```
Cisco Internetwork Operating System Software
IOS (tm) C1700 Software (C1700-BK9NO3R2SY7-M), Version 12.2(8)YJ,
EARLY DEPLOYMENT RELEASE SOFTWARE (fc1)
```

```
1721-1(ADSL) uptime is 4 days, 5 hours, 33 minutes
System returned to ROM by reload
System image file is "flash:c1700-bk9no3r2sy7-mz.122-8.YJ.bin"
cisco 1721 (MPC860P) processor (revision 0x100) with 88474K/9830K bytes
```

1721-1

```

1721-1(ADSL)#show run
version 12.2
service timestamps debug uptime
service timestamps log uptime
no service password-encryption
!
hostname 1721-1(ADSL)
!
!--- Specify the configuration name !--- to be assigned
to the interface. crypto ipsec client ezvpn SJVPN
!--- Tunnel control; automatic is the default. connect
auto
!--- The group name and password should be the same as
given in the VPN Concentrator. group turaro key tululo
!--- The mode that is chosen as the network extension.
mode network-extension
!--- The tunnel peer end (VPN Concentrator public
interface IP address). peer 172.16.172.41
!
interface Loopback0
 ip address 192.168.254.1 255.255.255.0
!--- Configure the Loopback interface !--- as the inside
interface. ip nat inside
!--- Specifies the Cisco EzVPN Remote configuration name
!--- to be assigned to the inside interface.

crypto ipsec client ezvpn SJVPN inside
!
interface Loopback1
 ip address 192.168.253.1 255.255.255.0
ip nat inside
crypto ipsec client ezvpn SJVPN inside
!
interface FastEthernet0
 ip address 172.16.172.46 255.255.255.240
!--- Configure the FastEthernet interface !--- as the
outside interface. ip nat outside
!--- Specifies the Cisco EzVPN Remote configuration name
!--- to be assigned to the first outside interface,
because !--- outside is not specified for the interface.
!--- The default is outside.

crypto ipsec client ezvpn SJVPN
!
!--- Specify the overload option with the ip nat command
!--- in global configuration mode in order to enable !--
- Network Address Translation (NAT) of the inside source
address !--- so that multiple PCs can use the single IP
address.

ip nat inside source route-map EZVPN interface
FastEthernet0 overload
ip classless
ip route 0.0.0.0 0.0.0.0 172.16.172.41
!
access-list 177 deny ip 192.168.254.0 0.0.0.255
192.168.2.0 0.0.0.255
access-list 177 deny ip 192.168.253.0 0.0.0.255
192.168.2.0 0.0.0.255
access-list 177 permit ip 192.168.253.0 0.0.0.255 any

```



```
access-list 177 permit ip 192.168.254.0 0.0.0.255 any
!
route-map EZVPN permit 10
  match ip address 177
!
!
line con 0
line aux 0
line vty 0 4
  password cisco
  login
!
no scheduler allocate
end
```

驗證

使用本節內容，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。

配置兩台裝置後，Cisco 3640路由器會嘗試使用對等IP地址聯絡VPN集中器來設定VPN隧道。交換初始ISAKMP引數後，路由器會顯示以下訊息：

```
Pending XAuth Request, Please enter the
following command: crypto ipsec client ezvpn xauth
```

您必須輸入**crypto ipsec client ezvpn xauth**命令，該命令會提示您輸入使用者名稱和密碼。這應該與VPN集中器上配置的使用者名稱和密碼匹配（步驟7）。一旦兩個對等體同意使用者名稱和密碼，則同意其餘引數並啟動IPsec VPN隧道。

```
EZVPN(SJVPN): Pending XAuth Request, Please enter the following command:
```

```
EZVPN: crypto ipsec client ezvpn xauth
```

```
!--- Enter the crypto ipsec client ezvpn xauth command.
```

```
crypto ipsec client ezvpn xauth
```

```
Enter Username and Password.: padma
Password: : password
```

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[註冊](#)客戶使用)支援某些**show**命令，此工具可讓您檢視**show**命令輸出的分析。

註：發出debug指令之前，請先參閱有關Debug指令的重要資訊。

- **debug crypto ipsec client ezvpn** — 顯示顯示EzVPN客戶端功能的配置和實現的資訊。
- **debug crypto ipsec** — 顯示有關IPsec連線的調試資訊。
- **debug crypto isakmp** — 顯示有關IPsec連線的調試資訊，並顯示由於兩端的不相容性而被拒絕的第一組屬性。
- **show debug** — 顯示每個調試選項的狀態。

Debug命令的輸出

輸入**crypto ipsec client ezvpn SJVPN** 命令後，EzVPN Client會嘗試連線到伺服器。如果在組配置下更改**connect manual**命令，請輸入**crypto ipsec client ezvpn connect SJVPN**命令以啟動與伺服器的建議交換。

```
4d05h: ISAKMP (0:3): beginning Aggressive Mode exchange
4d05h: ISAKMP (0:3): sending packet to 172.16.172.41 (I) AG_INIT_EXCH
4d05h: ISAKMP (0:3): received packet from 172.16.172.41 (I) AG_INIT_EXCH
4d05h: ISAKMP (0:3): processing SA payload. message ID = 0
4d05h: ISAKMP (0:3): processing ID payload. message ID = 0
4d05h: ISAKMP (0:3): processing vendor id payload
4d05h: ISAKMP (0:3): vendor ID is Unity
4d05h: ISAKMP (0:3): processing vendor id payload
4d05h: ISAKMP (0:3): vendor ID seems Unity/DPD but bad major
4d05h: ISAKMP (0:3): vendor ID is XAUTH
4d05h: ISAKMP (0:3): processing vendor id payload
4d05h: ISAKMP (0:3): vendor ID is DPD
4d05h: ISAKMP (0:3) local preshared key found
4d05h: ISAKMP (0:3) Authentication by xauth preshared
4d05h: ISAKMP (0:3): Checking ISAKMP transform 6 against priority 65527 policy
4d05h: ISAKMP: encryption 3DES-CBC
4d05h: ISAKMP: hash MD5
4d05h: ISAKMP: default group 2
4d05h: ISAKMP: auth XAUTHInitPreShared
4d05h: ISAKMP: life type in seconds
4d05h: ISAKMP: life duration (VPI) of 0x0 0x20 0xC4 0x9B
4d05h: ISAKMP (0:3): Encryption algorithm offered does not match policy!
4d05h: ISAKMP (0:3): atts are not acceptable. Next payload is 0
4d05h: ISAKMP (0:3): Checking ISAKMP transform 6 against priority 65528 policy
4d05h: ISAKMP: encryption 3DES-CBC
4d05h: ISAKMP: hash MD5
4d05h: ISAKMP: default group 2
4d05h: ISAKMP: auth XAUTHInitPreShared
4d05h: ISAKMP: life type in seconds
4d05h: ISAKMP: life duration (VPI) of 0x0 0x20 0xC4 0x9B
4d05h: ISAKMP (0:3): Encryption algorithm offered does not match policy!
4d05h: ISAKMP (0:3): atts are not acceptable. Next payload is 0
4d05h: ISAKMP (0:3): Checking ISAKMP transform 6 against priority 65529 policy
4d05h: ISAKMP: encryption 3DES-CBC
4d05h: ISAKMP: hash MD5
4d05h: ISAKMP: default group 2
4d05h: ISAKMP: auth XAUTHInitPreShared
4d05h: ISAKMP: life type in seconds
4d05h: ISAKMP: life duration (VPI) of 0x0 0x20 0xC4 0x9B
4d05h: ISAKMP (0:3): Encryption algorithm offered does not match policy!
4d05h: ISAKMP (0:3): atts are not acceptable. Next payload is 0
4d05h: ISAKMP (0:3): Checking ISAKMP transform 6 against priority 65530 policy
4d05h: ISAKMP: encryption 3DES-CBC
4d05h: ISAKMP: hash MD5
```

```
4d05h: ISAKMP:      default group 2
4d05h: ISAKMP:      auth XAUTHInitPreShared
4d05h: ISAKMP:      life type in seconds
4d05h: ISAKMP:      life duration (VPI) of  0x0 0x20 0xC4 0x9B
4d05h: ISAKMP (0:3): Encryption algorithm offered does not match policy!
4d05h: ISAKMP (0:3): atts are not acceptable. Next payload is 0
4d05h: ISAKMP (0:3): Checking ISAKMP transform 6 against priority 65531 policy
4d05h: ISAKMP:      encryption 3DES-CBC
4d05h: ISAKMP:      hash MD5
4d05h: ISAKMP:      default group 2
4d05h: ISAKMP:      auth XAUTHInitPreShared
4d05h: ISAKMP:      life type in seconds
4d05h: ISAKMP:      life duration (VPI) of  0x0 0x20 0xC4 0x9B
4d05h: ISAKMP (0:3): Hash algorithm offered does not match policy!
4d05h: ISAKMP (0:3): atts are not acceptable. Next payload is 0
4d05h: ISAKMP (0:3): Checking ISAKMP transform 6 against priority 65532 policy
4d05h: ISAKMP:      encryption 3DES-CBC
4d05h: ISAKMP:      hash MD5
4d05h: ISAKMP:      default group 2
4d05h: ISAKMP:      auth XAUTHInitPreShared
4d05h: ISAKMP:      life type in seconds
4d05h: ISAKMP:      life duration (VPI) of  0x0 0x20 0xC4 0x9B
4d05h: ISAKMP (0:3): atts are acceptable. Next payload is 0
4d05h: ISAKMP (0:3): processing KE payload. message ID = 0
4d05h: ISAKMP (0:3): processing NONCE payload. message ID = 0
4d05h: ISAKMP (0:3): SKEYID state generated
4d05h: ISAKMP (0:3): processing HASH payload. message ID = 0
4d05h: ISAKMP (0:3): SA has been authenticated with 172.16.172.41
4d05h: ISAKMP (0:3): sending packet to 172.16.172.41 (I) AG_INIT_EXCH
4d05h: ISAKMP (0:3): Input = IKE_MSG_FROM_PEER, IKE_AM_EXCH
Old State = IKE_I_AM1  New State = IKE_P1_COMPLETE
```

```
4d05h: IPSEC(key_engine): got a queue event...
```

```
4d05h: IPsec: Key engine got KEYENG_IKMP_MORE_SAS message
```

```
4d05h: ISAKMP (0:3): Need XAUTH
```

```
4d05h: ISAKMP (0:3): Input = IKE_MSG_INTERNAL, IKE_PHASE1_COMPLETE
```

```
Old State = IKE_P1_COMPLETE  New State = IKE_P1_COMPLETE
```

```
!--- Phase 1 (ISAKMP) is complete. 4d05h: ISAKMP: received ke message (6/1) 4d05h: ISAKMP:
received KEYENG_IKMP_MORE_SAS message 4d05h: ISAKMP: set new node -857862190 to CONF_XAUTH !---
Initiate extended authentication. 4d05h: ISAKMP (0:3): sending packet to 172.16.172.41 (I)
CONF_XAUTH 4d05h: ISAKMP (0:3): purging node -857862190 4d05h: ISAKMP (0:3): Sending initial
contact. 4d05h: ISAKMP (0:3): received packet from 172.16.172.41 (I) CONF_XAUTH 4d05h: ISAKMP:
set new node -1898481791 to CONF_XAUTH 4d05h: ISAKMP (0:3): processing transaction payload from
172.16.172.41. message ID = -1898481791 4d05h: ISAKMP: Config payload REQUEST 4d05h: ISAKMP
(0:3): checking request: 4d05h: ISAKMP: XAUTH_TYPE_V2 4d05h: ISAKMP: XAUTH_USER_NAME_V2 4d05h:
ISAKMP: XAUTH_USER_PASSWORD_V2 4d05h: ISAKMP: XAUTH_MESSAGE_V2 4d05h: ISAKMP (0:3): Xauth
process request 4d05h: ISAKMP (0:3): Input = IKE_MSG_FROM_PEER, IKE_CFG_REQUEST Old State =
IKE_P1_COMPLETE New State = IKE_XAUTH_REPLY_AWAIT 4d05h: EZVPN(SJVPN): Current State: READY
4d05h: EZVPN(SJVPN): Event: XAUTH_REQUEST 4d05h: EZVPN(SJVPN): ezvpn_xauth_request 4d05h:
EZVPN(SJVPN): ezvpn_parse_xauth_msg 4d05h: EZVPN: Attributes sent in xauth request message:
4d05h: XAUTH_TYPE_V2(SJVPN): 0 4d05h: XAUTH_USER_NAME_V2(SJVPN): 4d05h:
XAUTH_USER_PASSWORD_V2(SJVPN): 4d05h: XAUTH_MESSAGE_V2(SJVPN) <Enter Username and Password.>
4d05h: EZVPN(SJVPN): New State: XAUTH_REQ 4d05h: ISAKMP (0:3): Input = IKE_MSG_INTERNAL,
IKE_PHASE1_COMPLETE Old State = IKE_XAUTH_REPLY_AWAIT New State = IKE_XAUTH_REPLY_AWAIT 4d05h:
EZVPN(SJVPN): Pending XAuth Request, Please enter the following command: 4d05h: EZVPN: crypto
ipsec client ezvpn xauth
```

```
!--- Enter the crypto ipsec client ezvpn xauth command.
```

crypto ipsec client ezvpn xauth

Enter Username and Password.: **padma**

Password: : **password**

!--- The router requests your username and password that is !--- configured on the server.

```
4d05h: EZVPN(SJVPN): Current State: XAUTH_REQ 4d05h: EZVPN(SJVPN): Event: XAUTH_PROMPTING 4d05h:
EZVPN(SJVPN): New State: XAUTH_PROMPT 1721-1(ADSL)# 4d05h: EZVPN(SJVPN): Current State:
XAUTH_PROMPT 4d05h: EZVPN(SJVPN): Event: XAUTH_REQ_INFO_READY 4d05h: EZVPN(SJVPN):
ezvpn_xauth_reply 4d05h: XAUTH_TYPE_V2(SJVPN): 0 4d05h: XAUTH_USER_NAME_V2(SJVPN): Cisco_MAE
4d05h: XAUTH_USER_PASSWORD_V2(SJVPN): <omitted> 4d05h: EZVPN(SJVPN): New State: XAUTH_REPLIED
4d05h: xauth-type: 0 4d05h: username: Cisco_MAE 4d05h: password: <omitted> 4d05h: message <Enter
Username and Password.> 4d05h: ISAKMP (0:3): responding to peer config from 172.16.172.41. ID =
-1898481791 4d05h: ISAKMP (0:3): sending packet to 172.16.172.41 (I) CONF_XAUTH 4d05h: ISAKMP
(0:3): deleting node -1898481791 error FALSE reason "done with xauth request/reply exchange"
4d05h: ISAKMP (0:3): Input = IKE_MSG_INTERNAL, IKE_XAUTH_REPLY_ATTR Old State =
IKE_XAUTH_REPLY_AWAIT New State = IKE_XAUTH_REPLY_SENT 4d05h: ISAKMP (0:3): received packet from
172.16.172.41 (I) CONF_XAUTH 4d05h: ISAKMP: set new node -1602220489 to CONF_XAUTH 4d05h: ISAKMP
(0:3): processing transaction payload from 172.16.172.41. message ID = -1602220489 4d05h:
ISAKMP: Config payload SET 4d05h: ISAKMP (0:3): Xauth process set, status = 1 4d05h: ISAKMP
(0:3): checking SET: 4d05h: ISAKMP: XAUTH_STATUS_V2 XAUTH-OK 4d05h: ISAKMP (0:3): attributes
sent in message: 4d05h: Status: 1 4d05h: ISAKMP (0:3): sending packet to 172.16.172.41 (I)
CONF_XAUTH 4d05h: ISAKMP (0:3): deleting node -1602220489 error FALSE reason "" 4d05h: ISAKMP
(0:3): Input = IKE_MSG_FROM_PEER, IKE_CFG_SET Old State = IKE_XAUTH_REPLY_SENT New State =
IKE_P1_COMPLETE 4d05h: EZVPN(SJVPN): Current State: XAUTH_REPLIED 4d05h: EZVPN(SJVPN): Event:
XAUTH_STATUS 4d05h: EZVPN(SJVPN): New State: READY 4d05h: ISAKMP (0:3): Need config/address
4d05h: ISAKMP (0:3): Need config/address 4d05h: ISAKMP: set new node 486952690 to CONF_ADDR
4d05h: ISAKMP (0:3): initiating peer config to 172.16.172.41. ID = 486952690 4d05h: ISAKMP
(0:3): sending packet to 172.16.172.41 (I) CONF_ADDR 4d05h: ISAKMP (0:3): Input =
IKE_MSG_INTERNAL, IKE_PHASE1_COMPLETE Old State = IKE_P1_COMPLETE New State =
IKE_CONFIG_MODE_REQ_SENT 4d05h: ISAKMP (0:3): received packet from 172.16.172.41 (I) CONF_ADDR
4d05h: ISAKMP (0:3): processing transaction payload from 172.16.172.41. message ID = 486952690
4d05h: ISAKMP: Config payload REPLY 4d05h: ISAKMP(0:3) process config reply 4d05h: ISAKMP (0:3):
deleting node 486952690 error FALSE reason "done with transaction" 4d05h: ISAKMP (0:3): Input =
IKE_MSG_FROM_PEER, IKE_CFG_REPLY Old State = IKE_CONFIG_MODE_REQ_SENT New State =
IKE_P1_COMPLETE 4d05h: EZVPN(SJVPN): Current State: READY 4d05h: EZVPN(SJVPN): Event:
MODE_CONFIG_REPLY 4d05h: EZVPN(SJVPN): ezvpn_mode_config 4d05h: EZVPN(SJVPN):
ezvpn_parse_mode_config_msg 4d05h: EZVPN: Attributes sent in message 4d05h: ip_ifnat_modified:
old_if 0, new_if 2 4d05h: ip_ifnat_modified: old_if 0, new_if 2 4d05h: ip_ifnat_modified: old_if
1, new_if 2 4d05h: EZVPN(SJVPN): New State: SS_OPEN 4d05h: ISAKMP (0:3): Input =
IKE_MSG_INTERNAL, IKE_PHASE1_COMPLETE Old State = IKE_P1_COMPLETE New State = IKE_P1_COMPLETE
4d05h: IPSEC(sa_request): , (key eng. msg.) OUTBOUND local= 172.16.172.46, remote=
172.16.172.41, local_proxy= 192.168.254.0/255.255.255.0/0/0 (type=4), remote_proxy=
0.0.0.0/0.0.0.0/0/0 (type=4), protocol= ESP, transform= esp-3des esp-sha-hmac , lifedur=
2147483s and 4608000kb, spi= 0xE6DB9372(3873149810), conn_id= 0, keysize= 0, flags= 0x400C
4d05h: IPSEC(sa_request): , (key eng. msg.) OUTBOUND local= 172.16.172.46, remote=
172.16.172.41, local_proxy= 192.168.254.0/255.255.255.0/0/0 (type=4), remote_proxy=
0.0.0.0/0.0.0.0/0/0 (type=4), protocol= ESP, transform= esp-3des esp-md5-hmac , lifedur=
2147483s and 4608000kb, spi= 0x3C77C53D(1014482237), conn_id= 0, keysize= 0, flags= 0x400C
4d05h: IPSEC(sa_request): , (key eng. msg.) OUTBOUND local= 172.16.172.46, remote=
172.16.172.41, local_proxy= 192.168.254.0/255.255.255.0/0/0 (type=4), remote_proxy=
0.0.0.0/0.0.0.0/0/0 (type=4), protocol= ESP, transform= esp-des esp-sha-hmac , lifedur= 2147483s
and 4608000kb, spi= 0x79BB8DF4(2042334708), conn_id= 0, keysize= 0, flags= 0x400C 4d05h:
IPSEC(sa_request): , (key eng. msg.) OUTBOUND local= 172.16.172.46, remote= 172.16.172.41,
local_proxy= 192.168.254.0/255.255.255.0/0/0 (type=4), remote_proxy= 0.0.0.0/0.0.0.0/0/0
(type=4), protocol= ESP, transform= esp-des esp-md5-hmac , lifedur= 2147483s and 4608000kb, spi=
0x19C3A5B2(432252338), conn_id= 0, keysize= 0, flags= 0x400C 4d05h: ISAKMP: received ke message
(1/4) 4d05h: ISAKMP: set new node 0 to QM_IDLE 4d05h: EZVPN(SJVPN): Current State: SS_OPEN
4d05h: EZVPN(SJVPN): Event: SOCKET_READY 4d05h: EZVPN(SJVPN): No state change 4d05h: ISAKMP
(0:3): sitting IDLE. Starting QM immediately (QM_IDLE ) 4d05h: ISAKMP (0:3): beginning Quick
Mode exchange, M-ID of -1494477527 4d05h: IPSEC(sa_request): , (key eng. msg.) OUTBOUND local=
172.16.172.46, remote= 172.16.172.41, local_proxy= 192.168.253.0/255.255.255.0/0/0 (type=4),
remote_proxy= 0.0.0.0/0.0.0.0/0/0 (type=4), protocol= ESP, transform= esp-3des esp-sha-hmac ,
```

lifedur= 2147483s and 4608000kb, spi= 0xB18CF11E(2978803998), conn_id= 0, keysize= 0, flags= 0x400C 4d05h: IPSEC(sa_request): , (key eng. msg.) OUTBOUND local= 172.16.172.46, remote= 172.16.172.41, local_proxy= 192.168.253.0/255.255.255.0/0/0 (type=4), remote_proxy= 0.0.0.0/0.0.0.0/0/0 (type=4), protocol= ESP, transform= esp-3des esp-md5-hmac , lifedur= 2147483s and 4608000kb, spi= 0xA8C469EC(2831444460), conn_id= 0, keysize= 0, flags= 0x400C 4d05h: IPSEC(sa_request): , (key eng. msg.) OUTBOUND local= 172.16.172.46, remote= 172.16.172.41, local_proxy= 192.168.253.0/255.255.255.0/0/0 (type=4), remote_proxy= 0.0.0.0/0.0.0.0/0/0 (type=4), protocol= ESP, transform= esp-des esp-sha-hmac , lifedur= 2147483s and 4608000kb, spi= 0xBC5AD5EE(3160069614), conn_id= 0, keysize= 0, flags= 0x400C 4d05h: IPSEC(sa_request): , (key eng. msg.) OUTBOUND local= 172.16.172.46, remote= 172.16.172.41, local_proxy= 192.168.253.0/255.255.255.0/0/0 (type=4), remote_proxy= 0.0.0.0/0.0.0.0/0/0 (type=4), protocol= ESP, transform= esp-des esp-md5-hmac , lifedur= 2147483s and 4608000kb, spi= 0x8C34C692(2352268946), conn_id= 0, keysize= 0, flags= 0x400C 4d05h: ISAKMP (0:3): sending packet to 172.16.172.41 (I) QM_IDLE 4d05h: ISAKMP (0:3): Node -1494477527, Input = IKE_MSG_INTERNAL, IKE_INIT_QM Old State = IKE_QM_READY New State = IKE_QM_I_QM1 4d05h: ISAKMP: received ke message (1/4) 4d05h: ISAKMP: set new node 0 to QM_IDLE 4d05h: ISAKMP (0:3): sitting IDLE. Starting QM immediately (QM_IDLE) 4d05h: ISAKMP (0:3): beginning Quick Mode exchange, M-ID of -1102788797 4d05h: EZVPN(SJVPN): Current State: SS_OPEN 4d05h: EZVPN(SJVPN): Event: SOCKET_READY 4d05h: EZVPN(SJVPN): No state change 4d05h: ISAKMP (0:3): sending packet to 172.16.172.41 (I) QM_IDLE 4d05h: ISAKMP (0:3): Node -1102788797, Input = IKE_MSG_INTERNAL, IKE_INIT_QM Old State = IKE_QM_READY New State = IKE_QM_I_QM1 4d05h: ISAKMP (0:3): received packet from 172.16.172.41 (I) QM_IDLE 4d05h: ISAKMP: set new node 733055375 to QM_IDLE 4d05h: ISAKMP (0:3): processing HASH payload. message ID = 733055375 4d05h: ISAKMP (0:3): processing NOTIFY RESPONDER_LIFETIME protocol 1 spi 0, message ID = 733055375, sa = 820ABFA0 4d05h: ISAKMP (0:3): processing responder lifetime 4d05h: ISAKMP (0:3): start processing isakmp responder lifetime 4d05h: ISAKMP (0:3): restart ike sa timer to 86400 secs 4d05h: ISAKMP (0:3): deleting node 733055375 error FALSE reason "informational (in) state 1" 4d05h: ISAKMP (0:3): Input = IKE_MSG_FROM_PEER, IKE_INFO_NOTIFY Old State = IKE_P1_COMPLETE New State = IKE_P1_COMPLETE 4d05h: ISAKMP (0:3): received packet from 172.16.172.41 (I) QM_IDLE 4d05h: ISAKMP (0:3): processing HASH payload. message ID = -1494477527 4d05h: ISAKMP (0:3): processing SA payload. message ID = -1494477527 4d05h: ISAKMP (0:3): Checking IPsec proposal 1 4d05h: ISAKMP: transform 1, ESP_3DES 4d05h: ISAKMP: attributes in transform: 4d05h: ISAKMP: SA life type in seconds 4d05h: ISAKMP: SA life duration (VPI) of 0x0 0x20 0xc4 0x9B 4d05h: ISAKMP: SA life type in kilobytes 4d05h: ISAKMP: SA life duration (VPI) of 0x0 0x46 0x50 0x0 4d05h: ISAKMP: encaps is 1 4d05h: ISAKMP: authenticator is HMAC-MD5 4d05h: ISAKMP (0:3): atts are acceptable. 4d05h: IPSEC(validate_proposal_request): proposal part #1, (key eng. msg.) INBOUND local= 172.16.172.46, remote= 172.16.172.41, local_proxy= 192.168.254.0/255.255.255.0/0/0 (type=4), remote_proxy= 0.0.0.0/0.0.0.0/0/0 (type=4), protocol= ESP, transform= esp-3des esp-md5-hmac , lifedur= 0s and 0kb, spi= 0x0(0), conn_id= 0, keysize= 0, flags= 0x4 4d05h: ISAKMP (0:3): processing NONCE payload. message ID = -1494477527 4d05h: ISAKMP (0:3): processing ID payload. message ID = -1494477527 4d05h: ISAKMP (0:3): processing ID payload. message ID = -1494477527 4d05h: ISAKMP (0:3): processing NOTIFY RESPONDER_LIFETIME protocol 3 spi 1344958901, message ID = -1494477527, sa = 820ABFA0 4d05h: ISAKMP (0:3): processing responder lifetime 4d05h: ISAKMP (3): responder lifetime of 28800s 4d05h: ISAKMP (3): responder lifetime of 0kb 4d05h: ISAKMP (0:3): Creating IPsec SAs 4d05h: inbound SA from 172.16.172.41 to 172.16.172.46 (proxy 0.0.0.0 to 192.168.254.0) 4d05h: has spi 0x3C77C53D and conn_id 2000 and flags 4 4d05h: lifetime of 28800 seconds 4d05h: outbound SA from 172.16.172.46 to 172.16.172.41 (proxy 192.168.254.0 to 0.0.0.0) 4d05h: has spi 1344958901 and conn_id 2001 and flags C 4d05h: lifetime of 28800 seconds 4d05h: ISAKMP (0:3): sending packet to 172.16.172.41 (I) QM_IDLE 4d05h: ISAKMP (0:3): deleting node -1494477527 error FALSE reason "" 4d05h: ISAKMP (0:3): Node -1494477527, Input = IKE_MSG_FROM_PEER, IKE_QM_EXCH Old State = IKE_QM_I_QM1 New State = IKE_QM_PHASE2_COMPLETE 4d05h: ISAKMP (0:3): received packet from 172.16.172.41 (I) QM_IDLE 4d05h: ISAKMP (0:3): processing HASH payload. message ID = -1102788797 4d05h: ISAKMP (0:3): processing SA payload. message ID = -1102788797 4d05h: ISAKMP (0:3): Checking IPsec proposal 1 4d05h: ISAKMP: transform 1, ESP_3DES 4d05h: ISAKMP: attributes in transform: 4d05h: ISAKMP: SA life type in seconds 4d05h: ISAKMP: SA life duration (VPI) of 0x0 0x20 0xc4 0x9B 4d05h: ISAKMP: SA life type in kilobytes 4d05h: ISAKMP: SA life duration (VPI) of 0x0 0x46 0x50 0x0 4d05h: ISAKMP: encaps is 1 4d05h: ISAKMP: authenticator is HMAC-MD5 4d05h: ISAKMP (0:3): atts are acceptable. 4d05h: IPSEC(validate_proposal_request): proposal part #1, (key eng. msg.) INBOUND local= 172.16.172.46, remote= 172.16.172.41, local_proxy= 192.168.253.0/255.255.255.0/0/0 (type=4), remote_proxy= 0.0.0.0/0.0.0.0/0/0 (type=4), protocol= ESP, transform= esp-3des esp-md5-hmac , lifedur= 0s and 0kb, spi= 0x0(0), conn_id= 0, keysize= 0, flags= 0x4 4d05h: ISAKMP (0:3): processing NONCE payload. message ID = -1102788797 4d05h: ISAKMP (0:3): processing ID payload. message ID = -1102788797 4d05h: ISAKMP (0:3): processing ID payload. message ID = -1102788797

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4d05h: ISAKMP (0:3): processing NOTIFY RESPONDER_LIFETIME protocol 3 spi 653862918, message ID =
-1102788797, sa = 820ABFA0 4d05h: ISAKMP (0:3): processing responder lifetime 4d05h: ISAKMP (3):
responder lifetime of 28800s 4d05h: ISAKMP (3): responder lifetime of 0kb 4d05h:
IPSEC(key_engine): got a queue event... 4d05h: IPSEC(initialize_sas): , (key eng. msg.) INBOUND
local= 172.16.172.46, remote= 172.16.172.41, local_proxy= 192.168.254.0/255.255.255.0/0/0
(type=4), remote_proxy= 0.0.0.0/0.0.0.0/0/0 (type=4), protocol= ESP, transform= esp-3des esp-
md5-hmac , lifedur= 28800s and 0kb, spi= 0x3C77C53D(1014482237), conn_id= 2000, keysize= 0,
flags= 0x4 4d05h: IPSEC(initialize_sas): , (key eng. msg.) OUTBOUND local= 172.16.172.46,
remote= 172.16.172.41, local_proxy= 192.168.254.0/255.255.255.0/0/0 (type=4),
remote_proxy= 0.0.0.0/0.0.0.0/0/0 (type=4),
    protocol= ESP, transform= esp-3des esp-md5-hmac ,
    lifedur= 28800s and 0kb,
    spi= 0x502A71B5(1344958901), conn_id= 2001, keysize= 0, flags= 0xC
4d05h: IPSEC(create_sa): sa created,
    (sa) sa_dest= 172.16.172.46, sa_prot= 50,
    sa_spi= 0x3C77C53D(1014482237),
!--- SPI that is used on inbound SA. sa_trans= esp-3des esp-md5-hmac , sa_conn_id= 2000 4d05h:
IPSEC(create_sa): sa created, (sa) sa_dest= 172.16.172.41, sa_prot= 50, sa_spi=
0x502A71B5(1344958901),
!--- SPI that is used on outbound SA. sa_trans= esp-3des esp-md5-hmac , sa_conn_id= 2001 4d05h:
ISAKMP (0:3): Creating IPsec SAs 4d05h: inbound SA from 172.16.172.41 to 172.16.172.46 (proxy
0.0.0.0 to 192.168.253.0) 4d05h: has spi 0xA8C469EC and conn_id 2002 and flags 4 4d05h: lifetime
of 28800 seconds 4d05h: outbound SA from 172.16.172.46 to 172.16.172.41 (proxy 192.168.253.0 to
0.0.0.0 ) 4d05h: has spi 653862918 and conn_id 2003 and flags C 4d05h: lifetime of 28800 seconds
4d05h: ISAKMP (0:3): sending packet to 172.16.172.41 (I) QM_IDLE 4d05h: ISAKMP (0:3): deleting
node -1102788797 error FALSE reason "" 4d05h: ISAKMP (0:3): Node -1102788797, Input =
IKE_MSG_FROM_PEER, IKE_QM_EXCH Old State = IKE_QM_I_QM1 New State = IKE_QM_PHASE2_COMPLETE
4d05h: ISAKMP: received ke message (4/1) 4d05h: ISAKMP: Locking CONFIG struct 0x81F433A4 for
crypto_ikmp_config_handle_kei_mess, count 3 4d05h: EZVPN(SJVPN): Current State: SS_OPEN 4d05h:
EZVPN(SJVPN): Event: MTU_CHANGED 4d05h: EZVPN(SJVPN): No state change 4d05h: IPSEC(key_engine):
got a queue event... 4d05h: IPSEC(initialize_sas): , (key eng. msg.) INBOUND local=
172.16.172.46, remote= 172.16.172.41, local_proxy= 192.168.253.0/255.255.255.0/0/0 (type=4),
remote_proxy= 0.0.0.0/0.0.0.0/0/0 (type=4), protocol= ESP, transform= esp-3des esp-md5-hmac ,
lifedur= 28800s and 0kb, spi= 0xA8C469EC(2831444460), conn_id= 2002, keysize= 0, flags= 0x4
4d05h: IPSEC(initialize_sas): , (key eng. msg.) OUTBOUND local= 172.16.172.46, remote=
172.16.172.41, local_proxy= 192.168.253.0/255.255.255.0/0/0 (type=4),
remote_proxy= 0.0.0.0/0.0.0.0/0/0 (type=4),
    protocol= ESP, transform= esp-3des esp-md5-hmac ,
    lifedur= 28800s and 0kb,
    spi= 0x26F92806(653862918), conn_id= 2003, keysize= 0, flags= 0xC
4d05h: IPSEC(create_sa): sa created,
    (sa) sa_dest= 172.16.172.46, sa_prot= 50,
    sa_spi= 0xA8C469EC(2831444460),
sa_trans= esp-3des esp-md5-hmac , sa_conn_id= 2002
4d05h: IPSEC(create_sa): sa created,
    (sa) sa_dest= 172.16.172.41, sa_prot= 50,
    sa_spi= 0x26F92806(653862918),
sa_trans= esp-3des esp-md5-hmac , sa_conn_id= 2003
4d05h: ISAKMP: received ke message (4/1)
4d05h: ISAKMP: Locking CONFIG struct 0x81F433A4 for
    crypto_ikmp_config_handle_kei_mess, count 4
4d05h: EZVPN(SJVPN): Current State: SS_OPEN
4d05h: EZVPN(SJVPN): Event: SOCKET_UP
4d05h: ezvpn_socket_up
4d05h: EZVPN(SJVPN): New State: IPSEC_ACTIVE
4d05h: EZVPN(SJVPN): Current State: IPSEC_ACTIVE
4d05h: EZVPN(SJVPN): Event: MTU_CHANGED
4d05h: EZVPN(SJVPN): No state change
4d05h: EZVPN(SJVPN): Current State: IPSEC_ACTIVE
4d05h: EZVPN(SJVPN): Event: SOCKET_UP
4d05h: ezvpn_socket_up
4d05h: EZVPN(SJVPN): No state change

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[用於故障排除的相關思科IOS show命令](#)

1721-1(ADSL)#show crypto ipsec client ezvpn

Tunnel name : SJVPN
Inside interface list: Loopback0, Loopback1,
Outside interface: FastEthernet0
Current State: **IPSEC_ACTIVE**
Last Event: **SOCKET_UP**

1721-1(ADSL)#show crypto isakmp sa

dst	src	state	conn-id	slot
172.16.172.41	172.16.172.46	QM_IDLE	3	0

1721-1(ADSL)#show crypto ipsec sa

interface: FastEthernet0

Crypto map tag: FastEthernet0-head-0, local addr. **172.16.172.46**
local ident (addr/mask/prot/port): (**192.168.253.0**/255.255.255.0/0/0)
remote ident (addr/mask/prot/port): (0.0.0.0/0.0.0.0/0/0)

current_peer: **172.16.172.41**

PERMIT, flags={origin_is_acl,}
#pkts encaps: 100, #pkts **encrypt: 100**, #pkts digest 100
#pkts decaps: 100, #pkts **decrypt: 100**, #pkts verify 100
#pkts compressed: 0, #pkts decompressed: 0
#pkts not compressed: 0, #pkts compr. failed: 0, #pkts decompress failed: 0
#send errors 0, #recv errors 0

local crypto endpt.: 172.16.172.46, remote crypto endpt.: 172.16.172.41
path mtu 1500, media mtu 1500
current outbound spi: 26F92806

inbound esp sas:

spi: **0xA8C469EC(2831444460)**
transform: esp-3des esp-md5-hmac ,
in use settings ={Tunnel, }
slot: 0, conn id: 2002, flow_id: 3, crypto map: FastEthernet0-head-0
sa timing: remaining key lifetime (k/sec): (4607848/28656)
IV size: 8 bytes
replay detection support: Y

inbound ah sas:

inbound pcp sas:

outbound esp sas:

spi: **0x26F92806(653862918)**
transform: esp-3des esp-md5-hmac ,
in use settings ={Tunnel, }
slot: 0, conn id: 2003, flow_id: 4, crypto map: FastEthernet0-head-0
sa timing: remaining key lifetime (k/sec): (4607848/28647)
IV size: 8 bytes
replay detection support: Y

outbound ah sas:

outbound pcp sas:

local ident (addr/mask/prot/port): (**192.168.254.0**/255.255.255.0/0/0)
remote ident (addr/mask/prot/port): (0.0.0.0/0.0.0.0/0/0)
current_peer: **172.16.172.41**

```
PERMIT, flags={origin_is_acl,}
#pkts encaps: 105, #pkts encrypt: 105, #pkts digest 105
#pkts decaps: 105, #pkts decrypt: 105, #pkts verify 105
#pkts compressed: 0, #pkts decompressed: 0
#pkts not compressed: 0, #pkts compr. failed: 0, #pkts decompress failed: 0
#send errors 0, #recv errors 0
local crypto endpt.: 172.16.172.46, remote crypto endpt.: 172.16.172.41
path mtu 1500, media mtu 1500
current outbound spi: 502A71B5
```

inbound esp sas:

```
spi: 0x3C77C53D(1014482237)
transform: esp-3des esp-md5-hmac ,
in use settings = {Tunnel, }
slot: 0, conn id: 2000, flow_id: 1, crypto map: FastEthernet0-head-0
sa timing: remaining key lifetime (k/sec): (4607847/28644)
IV size: 8 bytes
replay detection support: Y
```

inbound ah sas:

inbound pcp sas:

outbound esp sas:

```
spi: 0x502A71B5(1344958901)
transform: esp-3des esp-md5-hmac ,
in use settings = {Tunnel, }
slot: 0, conn id: 2001, flow_id: 2, crypto map: FastEthernet0-head-0
sa timing: remaining key lifetime (k/sec): (4607847/28644)
IV size: 8 bytes
replay detection support: Y
```

outbound ah sas:

outbound pcp sas:

[清除作用中通道](#)

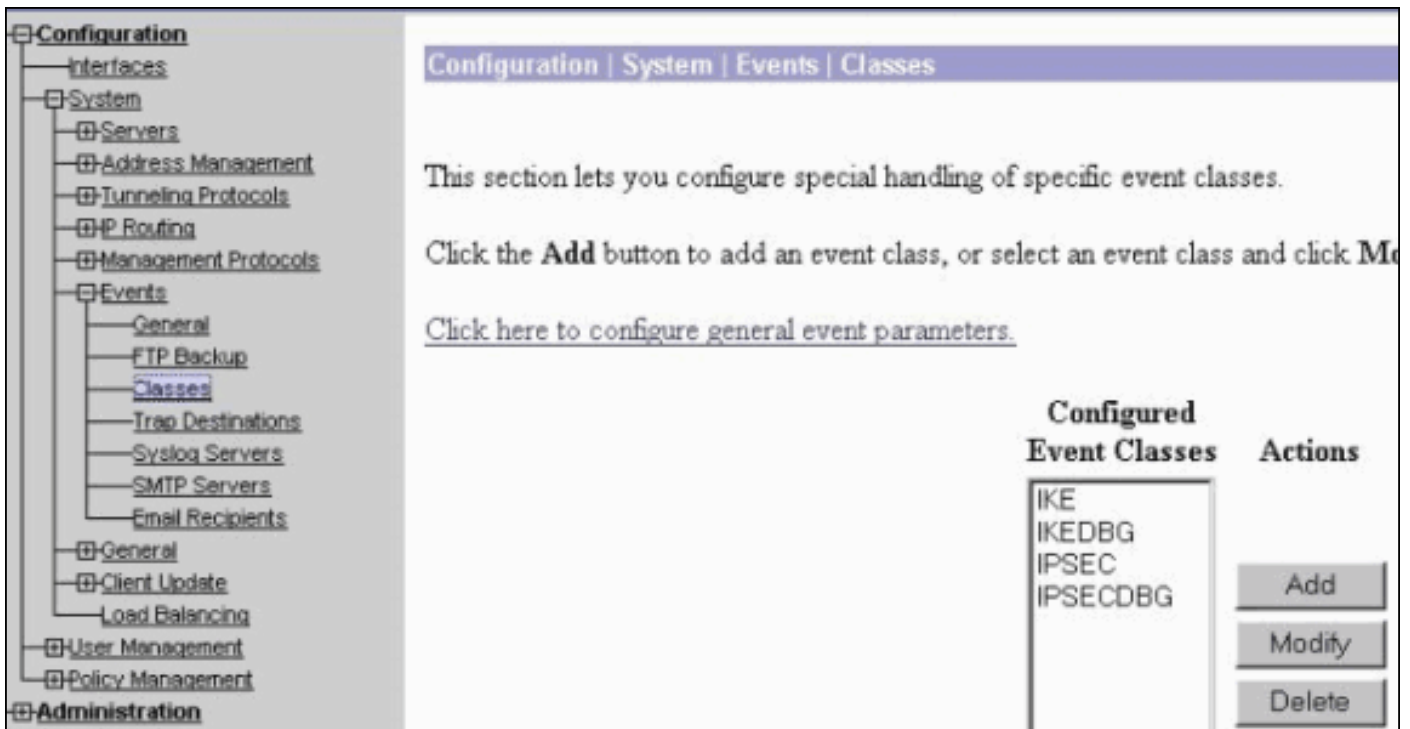
您可以使用以下指令清除通道：

- **clear crypto isakmp**
- **clear crypto sa**
- **clear crypto ipsec client ezvpn**

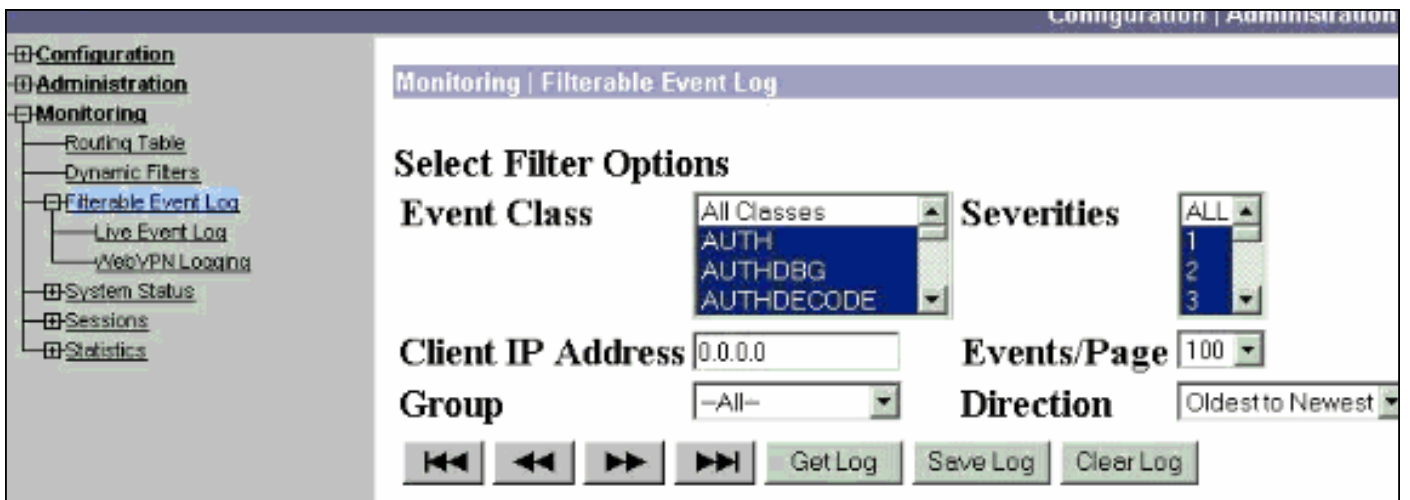
注意：在選擇Administration > Admin Sessions時，可以使用VPN Concentrator註銷會話，在Remote Access Session中選擇使用者，然後單擊logout。

[VPN 3000集中器調試](#)

選擇Configuration > System > Events > Classes，以在發生事件連線失敗時啟用此調試。如果顯示的類不能幫助您識別問題，則您始終可以新增更多類。



要檢視記憶體中的當前事件日誌（可按事件類、嚴重性、IP地址等進行過濾），請選擇 **Monitoring > Filterable Event log**。



要檢視IPsec協定的統計資訊，請選擇 **Monitoring > Statistics > IPsec**。此視窗顯示自上次引導或重置以來VPN集中器上的IPsec活動的統計資訊，包括當前IPsec隧道。這些統計資訊符合IPsec流量監控MIB的IETF草案。**Monitoring > Sessions > Detail**視窗也顯示IPsec資料。

IKE (Phase 1) Statistics		IPSec (Phase 2) Statistics	
Active Tunnels	1	Active Tunnels	2
Total Tunnels	122	Total Tunnels	362
Received Bytes	2057442	Received Bytes	0
Sent Bytes	332256	Sent Bytes	1400
Received Packets	3041	Received Packets	0
Sent Packets	2128	Sent Packets	5
Received Packets Dropped	1334	Received Packets Dropped	0
Sent Packets Dropped	0	Received Packets Dropped (Anti-Replay)	0
Received Notifies	15	Sent Packets Dropped	0
Sent Notifies	254	Inbound Authentications	0
Received Phase-2 Exchanges	362		

可能出錯的地方

- Cisco IOS路由器停滯在AG_INIT_EXCH狀態。進行故障排除時，請使用以下命令開啟IPsec和ISAKMP調試：`debug crypto ipsecdebug crypto isakmpdebug crypto ezvpn`在Cisco IOS路由器上，您會看到：

```

5d16h: ISAKMP (0:9): beginning Aggressive Mode exchange
5d16h: ISAKMP (0:9): sending packet to 10.48.66.115 (I) AG_INIT_EXCH
5d16h: ISAKMP (0:9): retransmitting phase 1 AG_INIT_EXCH...
5d16h: ISAKMP (0:9): incrementing error counter on sa: retransmit phase 1
5d16h: ISAKMP (0:9): retransmitting phase 1 AG_INIT_EXCH
5d16h: ISAKMP (0:9): sending packet to 10.48.66.115 (I) AG_INIT_EXCH
5d16h: ISAKMP (0:9): retransmitting phase 1 AG_INIT_EXCH...
5d16h: ISAKMP (0:9): incrementing error counter on sa: retransmit phase 1
5d16h: ISAKMP (0:9): retransmitting phase 1 AG_INIT_EXCH
5d16h: ISAKMP (0:9): sending packet to 10.48.66.115 (I) AG_INIT_EXCH
5d16h: ISAKMP (0:9): retransmitting phase 1 AG_INIT_EXCH...
5d16h: ISAKMP (0:9): incrementing error counter on sa: retransmit phase 1
5d16h: ISAKMP (0:9): retransmitting phase 1 AG_INIT_EXCH
5d16h: ISAKMP (0:9): sending packet to 10.48.66.115 (I) AG_INIT_EXCH

```

在VPN 3000 Concentrator上需要Xauth。但是，所選建議不支援Xauth。驗證是否指定了Xauth的內部驗證。啟用內部身份驗證，並確保IKE建議的身份驗證模式設定為預共用金鑰(Xauth)，如前面的螢幕截圖所示。按一下Modify以編輯建議。

- 密碼不正確。在Cisco IOS路由器上未看到Invalid Password消息。在VPN集中器上，您可能看到Received unexpected event EV_ACTIVATE_NEW_SA in state AM_TM_INIT_XAUTH。確保您的密碼正確。
- 使用者名稱不正確。如果您有錯誤的密碼，在Cisco IOS路由器上，您會看到類似以下的調試。在VPN集中器上，您會看到Authentication rejected:原因=未找到使用者。

相關資訊

- [Cisco VPN 3000系列集中器支援頁面](#)

- [Cisco Easy VPN Remote階段II](#)
- [Cisco VPN 3000系列使用者端支援頁面](#)
- [IPsec協商/IKE通訊協定支援頁面](#)
- [技術支援與文件 - Cisco Systems](#)