Exemplo de configuração de EzVPN com NEM no roteador IOS com VPN 3000 Concentrator

Contents

Introduction

Este documento explica o procedimento que você deve utilizar para configurar um roteador Cisco IOS® como um EzVPN no Network Extension Mode (NEM) para se conectar a um Cisco VPN 3000 Concentrator. Um novo recurso da Fase II de EzVPN é o suporte de uma configuração básica de Network Address Translation (NAT). A Fase II do EzVPN é derivada do Unity Protocol (software do VPN Client). O dispositivo remoto é sempre o iniciador do túnel IPsec. No entanto, as propostas de Internet Key Exchange (IKE) e IPsec não são configuráveis no EzVPN Client. O VPN Client negocia propostas com o servidor.

Para configurar o IPsec entre um PIX/ASA 7.x e um roteador Cisco 871 utilizando o Easy VPN, consulte Exemplo de Configuração Remota de um PIX/ASA 7.x Easy VPN com um ASA 5500 como Servidor e um Cisco 871 como o Easy VPN.

Para configurar o IPsec entre o Cisco IOS® Easy VPN Remote Hardware Client e o PIX Easy VPN Server, consulte Exemplo de Configuração de um IOS Easy VPN Remote Hardware Client para um PIX Easy VPN Server.

Para configurar um Cisco 7200 Router como um EzVPN e o Cisco 871 Router como o Easy VPN

Remote, consulte Exemplo de Configuração Remota de um 7200 Easy VPN Server para 871 Easy VPN.

Prerequisites

Requirements

Antes de tentar esta configuração, verifique se o roteador Cisco IOS oferece suporte ao recurso EzVPN Fase II e possui conectividade IP fim a fim para estabelecer o túnel IPsec.

Componentes Utilizados

As informações neste documento são baseadas nestas versões de software e hardware:

- Software Cisco IOS versão 12.2(8)YJ (EzVPN Fase II)
- VPN 3000 Concentrator 3.6.x
- Cisco 1700 Router

The information in this document was created from the devices in a specific lab environment. All of the devices used in this document started with a cleared (default) configuration. If your network is live, make sure that you understand the potential impact of any command.

Nota:Esta configuração foi recentemente testada com um Cisco 3640 Router com Cisco IOS Software Release 12.4(8) e o VPN 3000 Concentrator versão 4.7.x..

Conventions

Consulte as Convenções de Dicas Técnicas da Cisco para obter mais informações sobre convenções de documentos.

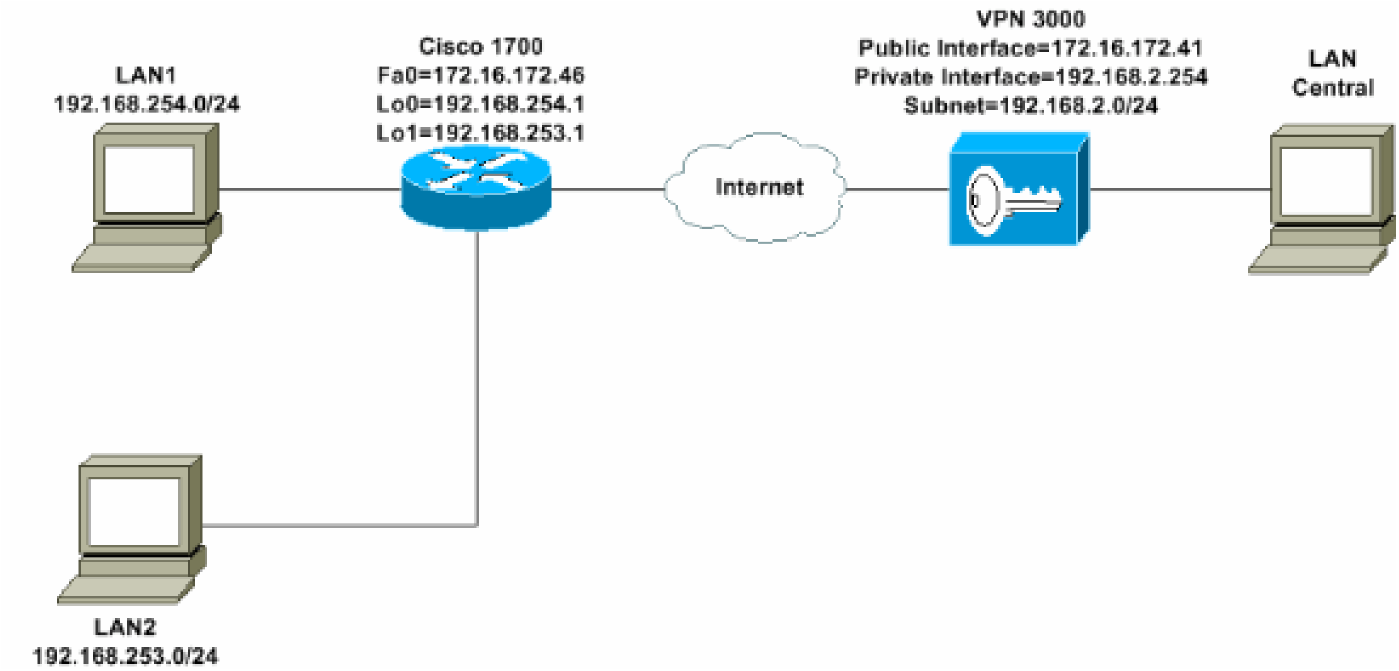
Configurar o VPN 3000 Concentrator

Tarefa

Nesta seção, você recebe as informações para configurar o VPN 3000 Concentrator.

Diagrama de Rede

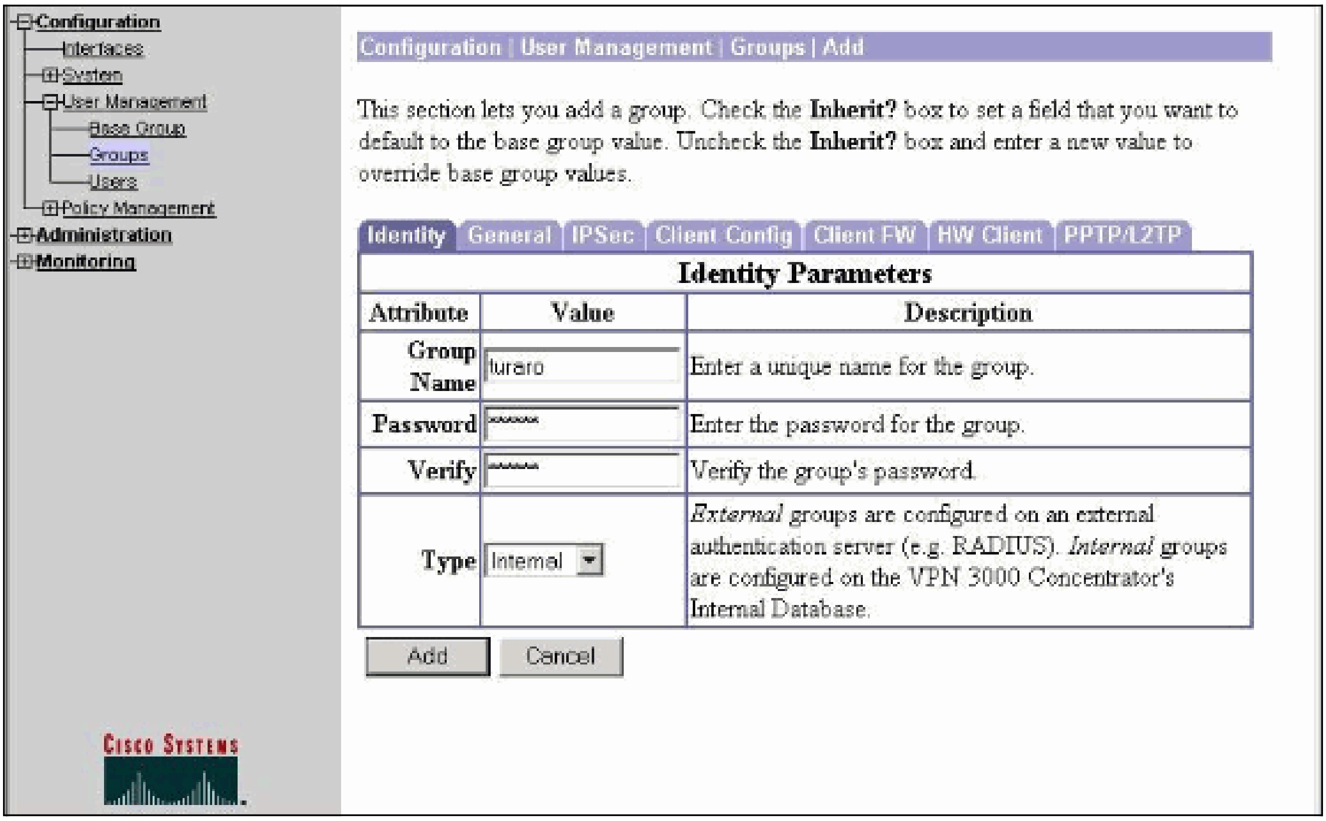
Este documento utiliza a configuração de rede mostrada neste diagrama. As interfaces de loopback são usadas como sub-redes internas e FastEthernet 0 é o padrão para a Internet.



Instruções passo a passo

Conclua estes passos:

1. Selecione **Configuration** > **User Management** > **Groups** > **Add** e defina um nome e uma senha de grupo para configurar um grupo de IPsec para os usuários.Este exemplo usa o nome de grupo **turaro** com senha/verificação **tululo**.

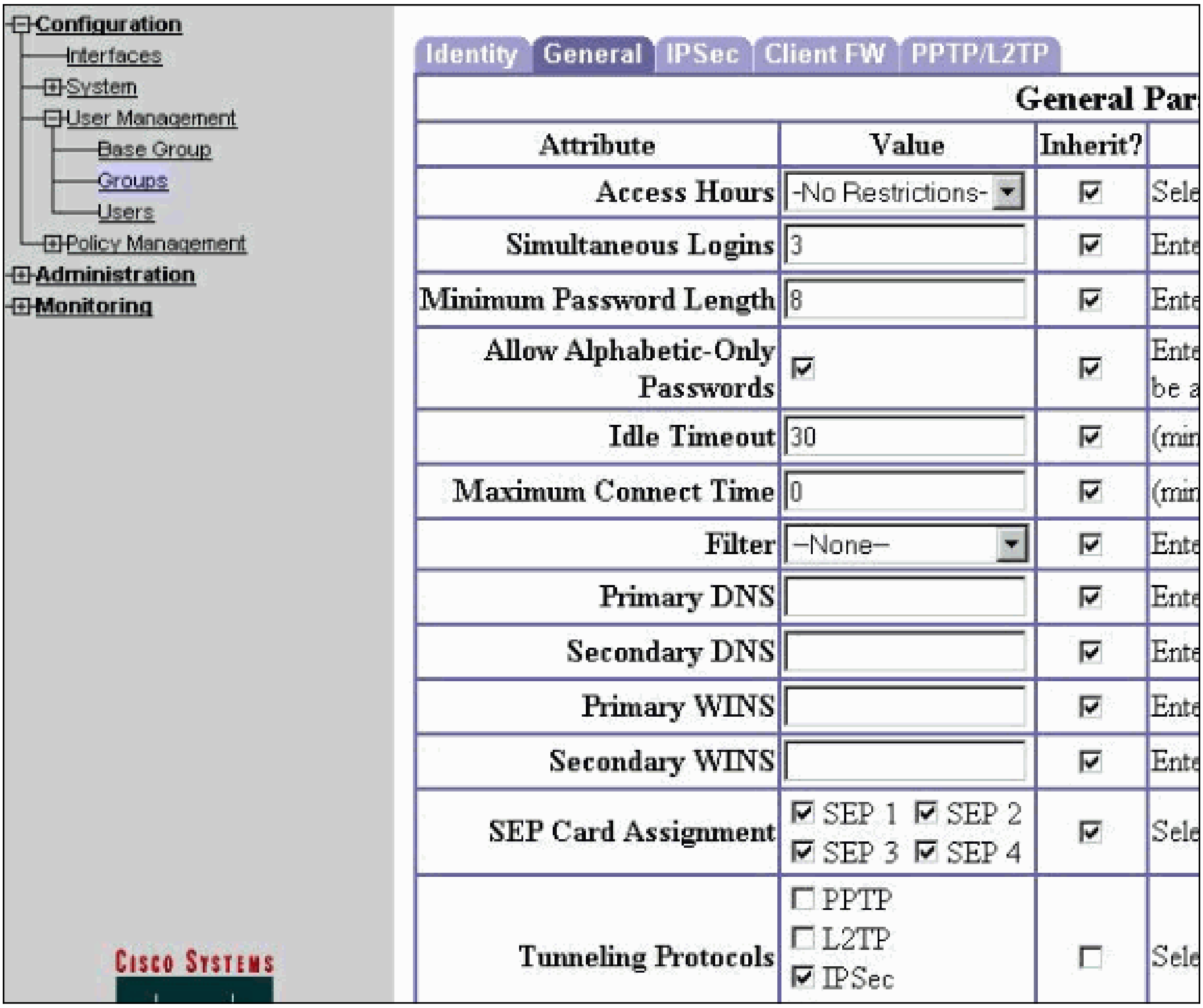


Configuration | User Management | Groups | Add

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	*External* groups are configured on an external authentication server (e.g. RADIUS). *Internal* groups are configured on the VPN 3000 Concentrator's Internal Database.

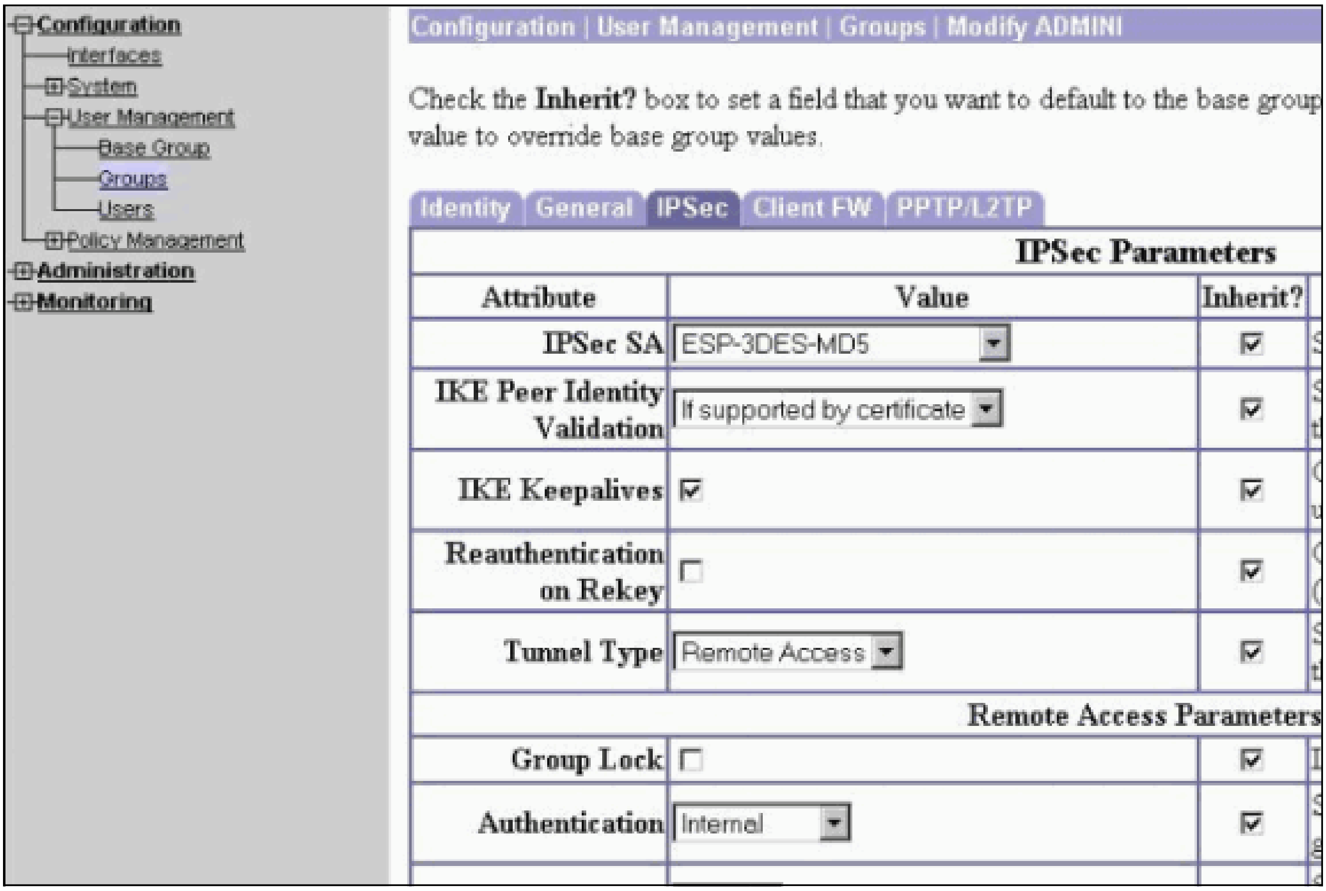
2. Selecione **Configuration** > **User Management** > **Groups** > **turaro** > **General** para habilitar o **IPSec** e desabilitar o Point-to-Point Tunneling Protocol (PPTP) e o Layer 2 Tunnel Protocol (L2TP).Faça suas seleções e clique em **Apply**.



General Par

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

3. Defina Authentication como **Internal** para Extended Authentication (Xauth) e certifique-se de que Tunnel Type seja **Remote Access** e IPSec SA seja **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.

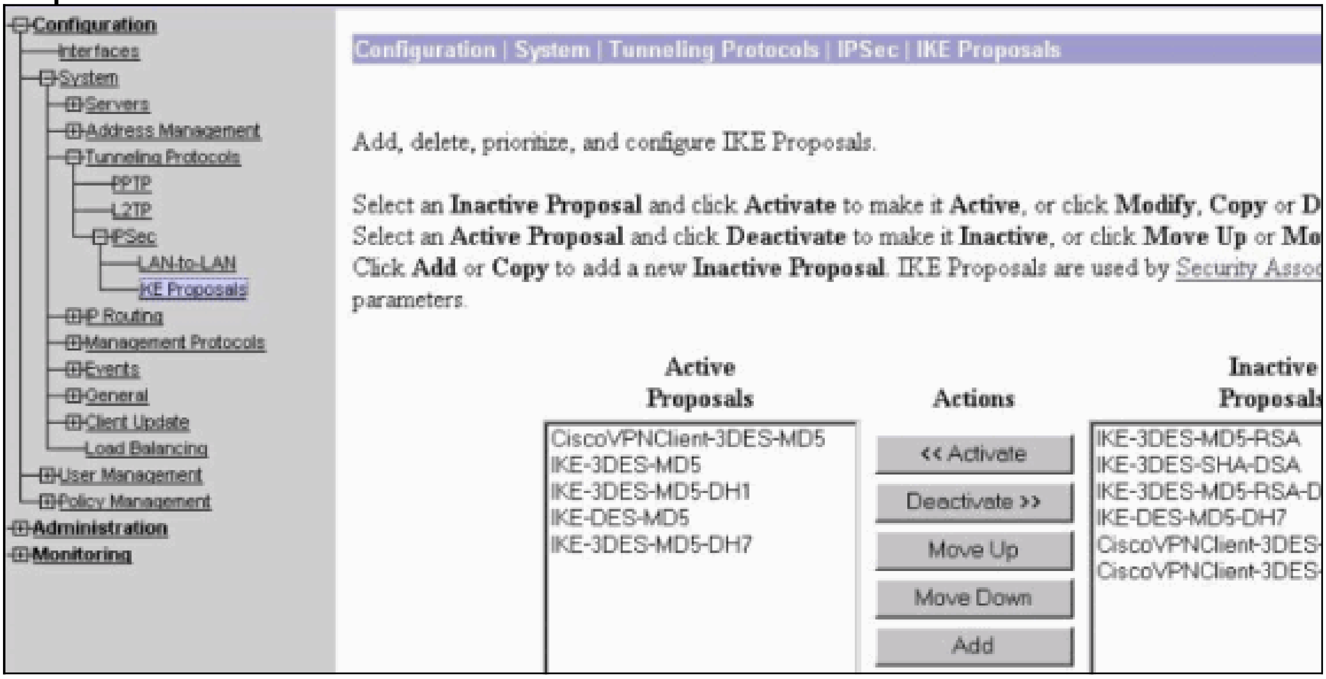
IPSec Parameters

Attribute	Value	Inherit?
IPSec SA	ESP-3DES-MD5	☑
IKE Peer Identity Validation	If supported by certificate	☑
IKE Keepalives	☑	☑
Reauthentication on Rekey	□	☑
Tunnel Type	Remote Access	☑

Remote Access Parameters

Attribute	Value	Inherit?
Group Lock	□	☑
Authentication	Internal	☑

4. Selecione **Configuration > System > Tunneling Protocols > IPSec > IKE Proposals** para se certificar de que o Cisco VPN Client (CiscoVPNClient-3DES-MD5) esteja em Active Proposals for IKE (Fase 1).**Observação:** no VPN Concentrator 4.1.x, o procedimento é diferente para garantir que o Cisco VPN Client esteja na lista de propostas ativas para IKE (fase 1). Selecione **Configuration > Tunneling and Security > IPSec > IKE Proposals.**



Configuration | System | Tunneling Protocols | IPSec | IKE Proposals

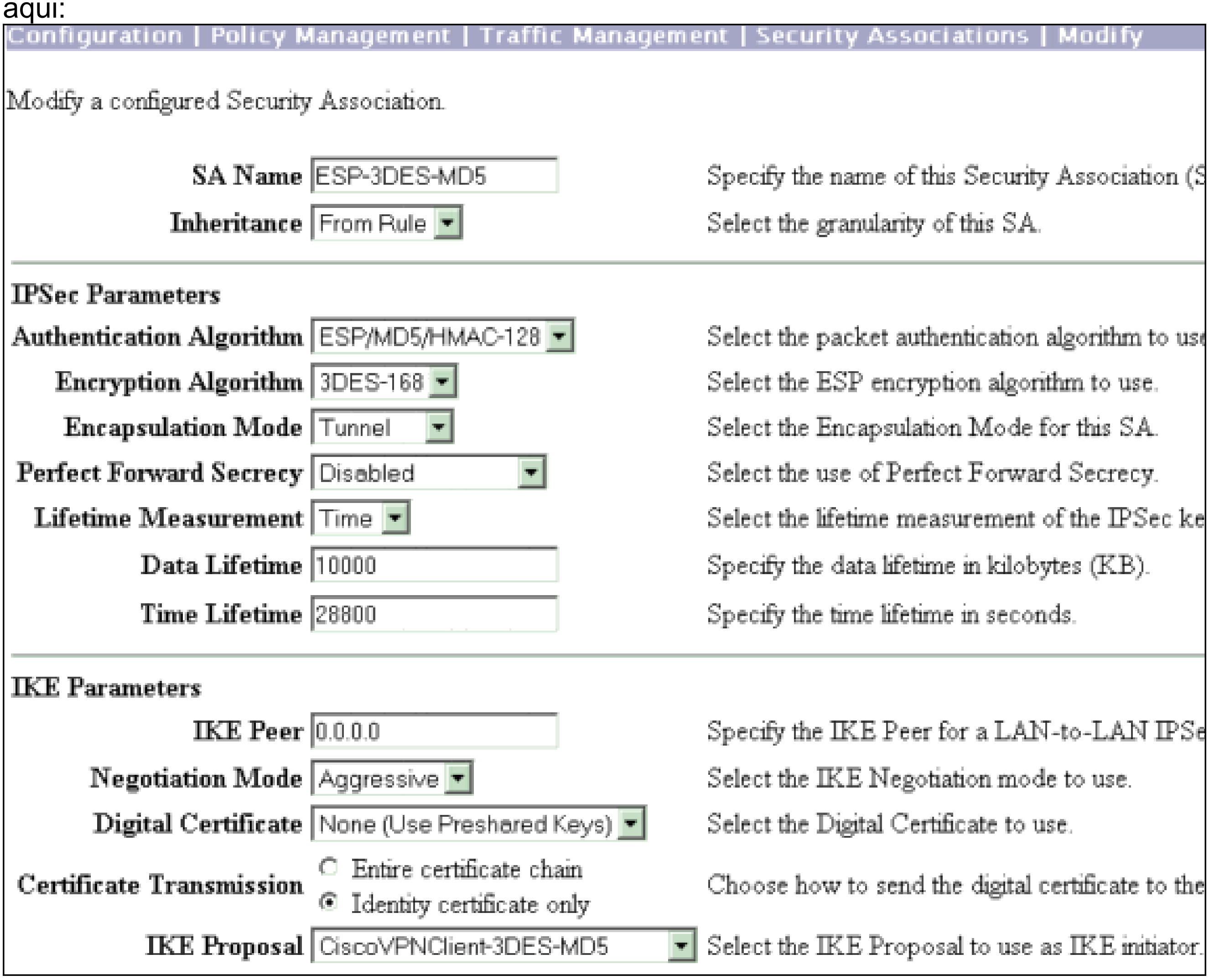
Add, delete, prioritize, and configure IKE Proposals.

Select an **Inactive Proposal** and click **Activate** to make it **Active**, or click **Modify**, **Copy** or D
Select an **Active Proposal** and click **Deactivate** to make it **Inactive**, or click **Move Up** or Mo
Click **Add** or **Copy** to add a new **Inactive Proposal**. IKE Proposals are used by Security Asso
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. Verifique sua associação de segurança (SA) IPsec.No passo 3, sua IPsec SA é ESP-3DES-MD5. Você pode criar uma nova se desejar, mas certifique-se de utilizar a IPsec SA correta no seu grupo. Você deve desabilitar o Perfect Forward Secsecret (PFS) para o SA IPsec que você usa. Selecione o Cisco VPN Client como a proposta para o IKE ao escolher **Configuration** > **Policy Management** > **Traffic Management** > **SAs**. Digite o nome SA na caixa

de texto e faça as seleções apropriadas conforme mostrado
aqui:



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

Modify a configured Security Association.

SA Name	ESP-3DES-MD5	Specify the name of this Security Association (S
Inheritance	From Rule	Select the granularity of this SA.

IPSec Parameters

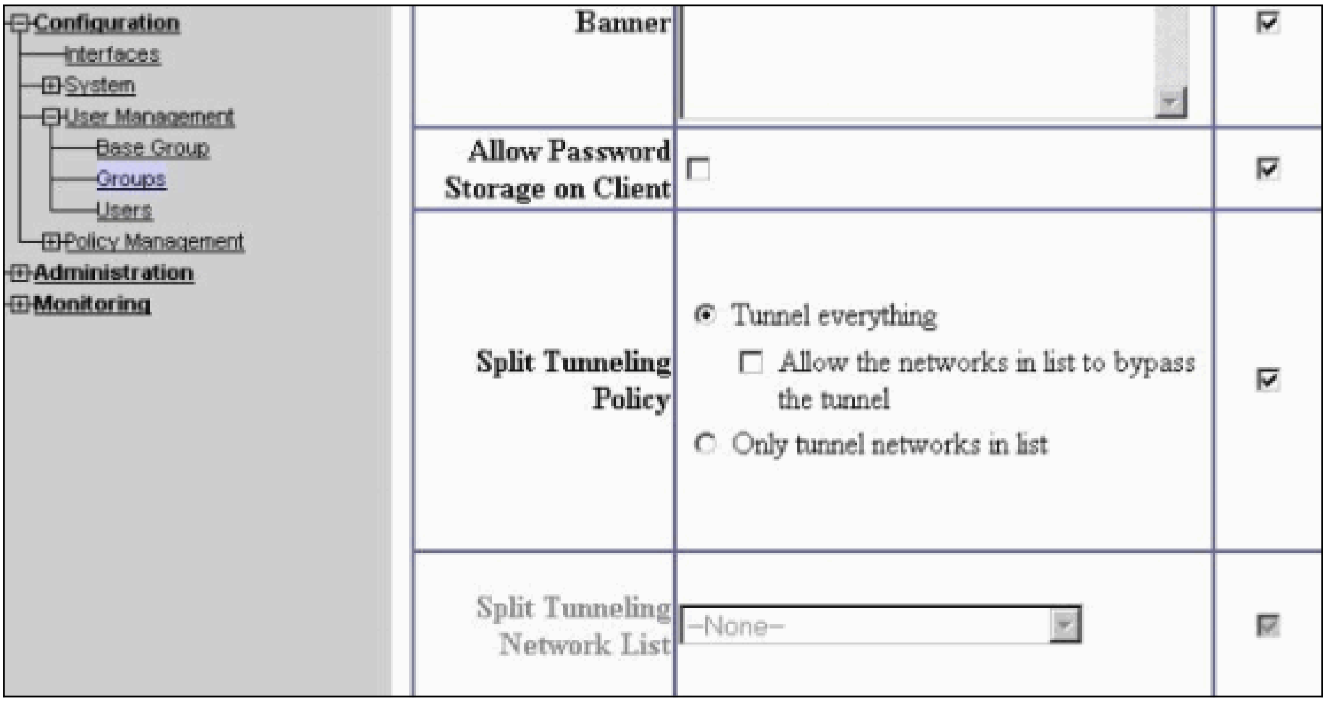
Authentication Algorithm	ESP/MD5/HMAC-128	Select the packet authentication algorithm to use
Encryption Algorithm	3DES-168	Select the ESP encryption algorithm to use.
Encapsulation Mode	Tunnel	Select the Encapsulation Mode for this SA.
Perfect Forward Secrecy	Disabled	Select the use of Perfect Forward Secrecy.
Lifetime Measurement	Time	Select the lifetime measurement of the IPSec ke
Data Lifetime	10000	Specify the data lifetime in kilobytes (KB).
Time Lifetime	28800	Specify the time lifetime in seconds.

IKE Parameters

IKE Peer	0.0.0.0	Specify the IKE Peer for a LAN-to-LAN IPSe
Negotiation Mode	Aggressive	Select the IKE Negotiation mode to use.
Digital Certificate	None (Use Preshared Keys)	Select the Digital Certificate to use.
Certificate Transmission	○ Entire certificate chain ● Identity certificate only	Choose how to send the digital certificate to the
IKE Proposal	CiscoVPNClient-3DES-MD5	Select the IKE Proposal to use as IKE initiator.

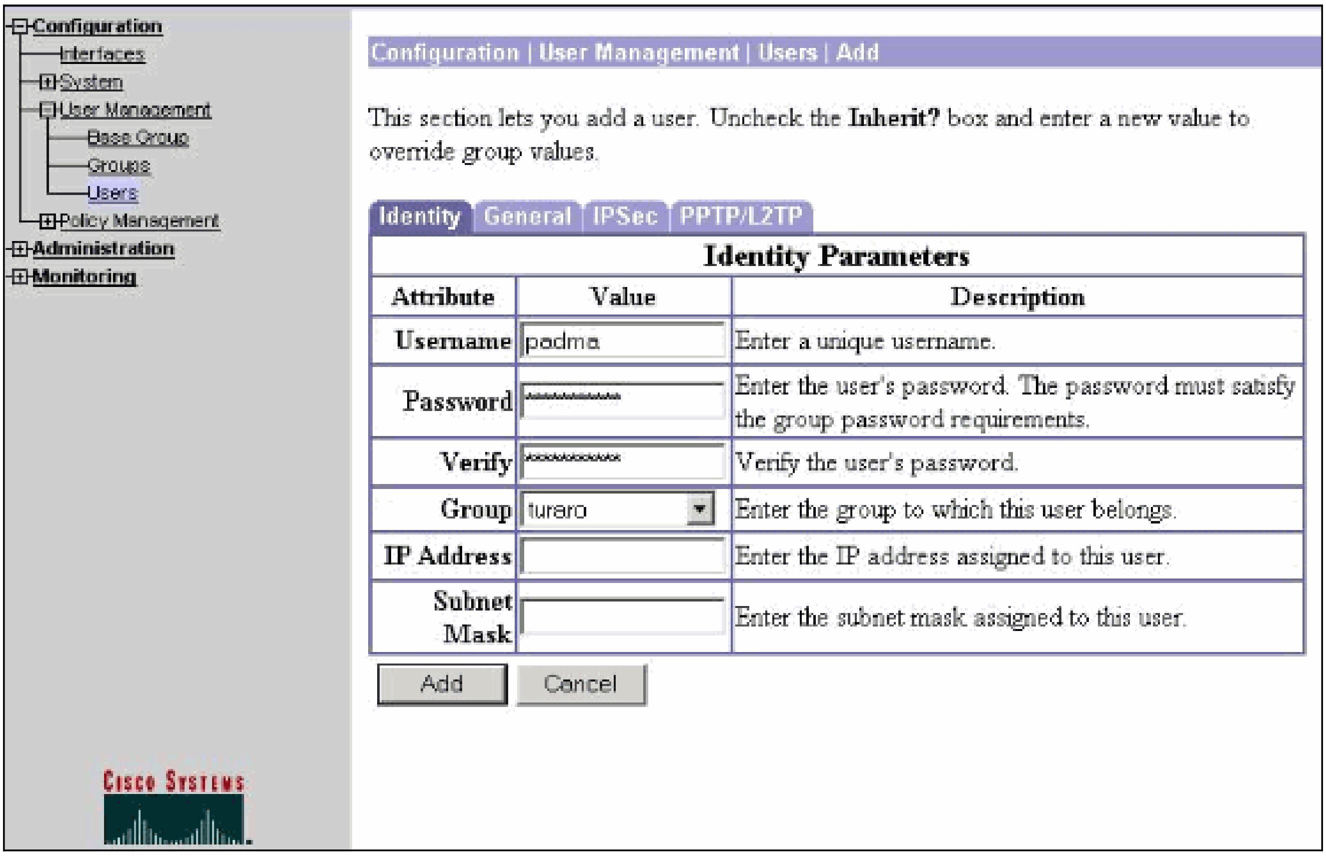
Observação: esta etapa e a próxima etapa são opcionais se você preferir escolher uma SA predefinida. Se o seu cliente tiver um endereço IP atribuído dinamicamente, use 0.0.0.0 na caixa de texto do peer IKE. Certifique-se de que a IKE Proposal esteja configurada como **CiscoVPNClient-3DES-MD5** conforme mostrado neste exemplo.

6. Você **não** deve clicar em *Allow the networks in the list to bypass the tunnel*. O motivo é que o tunelamento dividido é suportado, mas o recurso bypass não é suportado com o recurso EzVPN
Client.



Banner		☑
Allow Password Storage on Client	☐	☑
Split Tunneling Policy	● Tunnel everything ☐ Allow the networks in list to bypass the tunnel ○ Only tunnel networks in list	☑
Split Tunneling Network List	--None--	☑

7. Selecione **Configuration** > **User Management** > **Users** para adicionar um usuário. Defina um nome de usuário e a senha, atribua a um grupo e clique em **Add**.

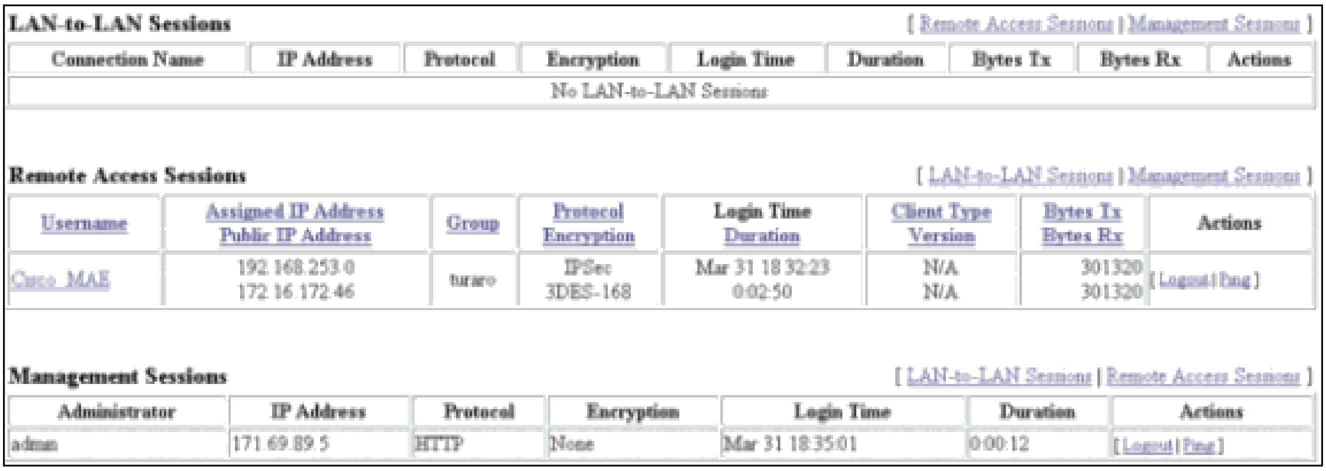


Configuration | User Management | Users | Add

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

Identity Parameters		
Attribute	**Value**	**Description**
Username	padma	Enter a unique username.
Password	**********	Enter the user's password. The password must satisfy the group password requirements.
Verify	**********	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.

8. Selecione **Administration > Admin Sessions** e verifique se o usuário está conectado. No NEM, o VPN Concentrator não atribui um endereço IP do pool.**Observação:** esta etapa é opcional se você preferir escolher uma SA predefinida.



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. Clique nos ícones **Save Needed** ou **Save** para salvar a configuração.

Configuração do roteador

show version Output

```
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
16384K bytes of processor board System flash (Read/Write)
```

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
```

Verificar

Use esta seção para confirmar se a sua configuração funciona corretamente.

A Output Interpreter Tool (somente clientes registrados) (OIT) oferece suporte a determinados comandos show. Use a OIT para exibir uma análise da saída do comando show.

Quando você configura ambos os dispositivos, o roteador Cisco 3640 tenta configurar o túnel VPN entrando em contato com o VPN Concentrator automaticamente usando o endereço IP do peer. Depois que os parâmetros ISAKMP iniciais são trocados, o roteador exibe esta mensagem:

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

Énecessário inserir o comando **crypto ipsec client ezvpn xauth**, o qual solicitará um nome de usuário e uma senha. Isso deve corresponder ao nome de usuário e à senha configurados no VPN Concentrator (etapa 7). Depois que o nome de usuário e a senha são acordados por ambos os peers, o restante dos parâmetros são acordados e o túnel VPN IPsec é ativado.

```
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
```

Troubleshoot

Esta seção fornece informações que podem ser usadas para o troubleshooting da sua configuração.

Comandos para Troubleshooting

A Output Interpreter Tool (somente clientes registrados) oferece suporte a determinados comandos show, o que permite exibir uma análise da saída do comando show.

Nota:Consulte Informações Importantes sobre Comandos de Depuração antes de usar os comandos debug.

- **debug crypto ipsec client ezvpn** — Exibe informações que mostram a configuração e a implementação do recurso EzVPN Client.
- **debug crypto ipsec** — Exibe informações de depuração sobre conexões de IPSec.
- **debug crypto isakmp** — Exibe informações de depuração sobre conexões de IPSec e mostra o primeiro conjunto de atributos negados devido a incompatibilidades em ambas as extremidades.
- **show debug** — Exibe o estado de cada opção de depuração.

Saída dos comandos debug

Assim que você digita o comando **crypto ipsec client ezvpn SJVPN**, o EzVPN Client tenta se conectar ao servidor. Se você alterar o comando **connect manual** na configuração de grupo, insira o comando **crypto ipsec client ezvpn connect SJVPN** para iniciar a troca de propostas com o servidor.

```
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_MESG_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_MESG_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_MESG_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_MESG_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_MESG_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_MESG_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_MESG_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_MESG_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_MESG_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_MESG_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_MESG_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_MESG_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_MESG_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
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_MESG_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
```

Comandos show relacionados do Cisco IOS para solução de problemas

```
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:
```

Limpar um túnel ativo

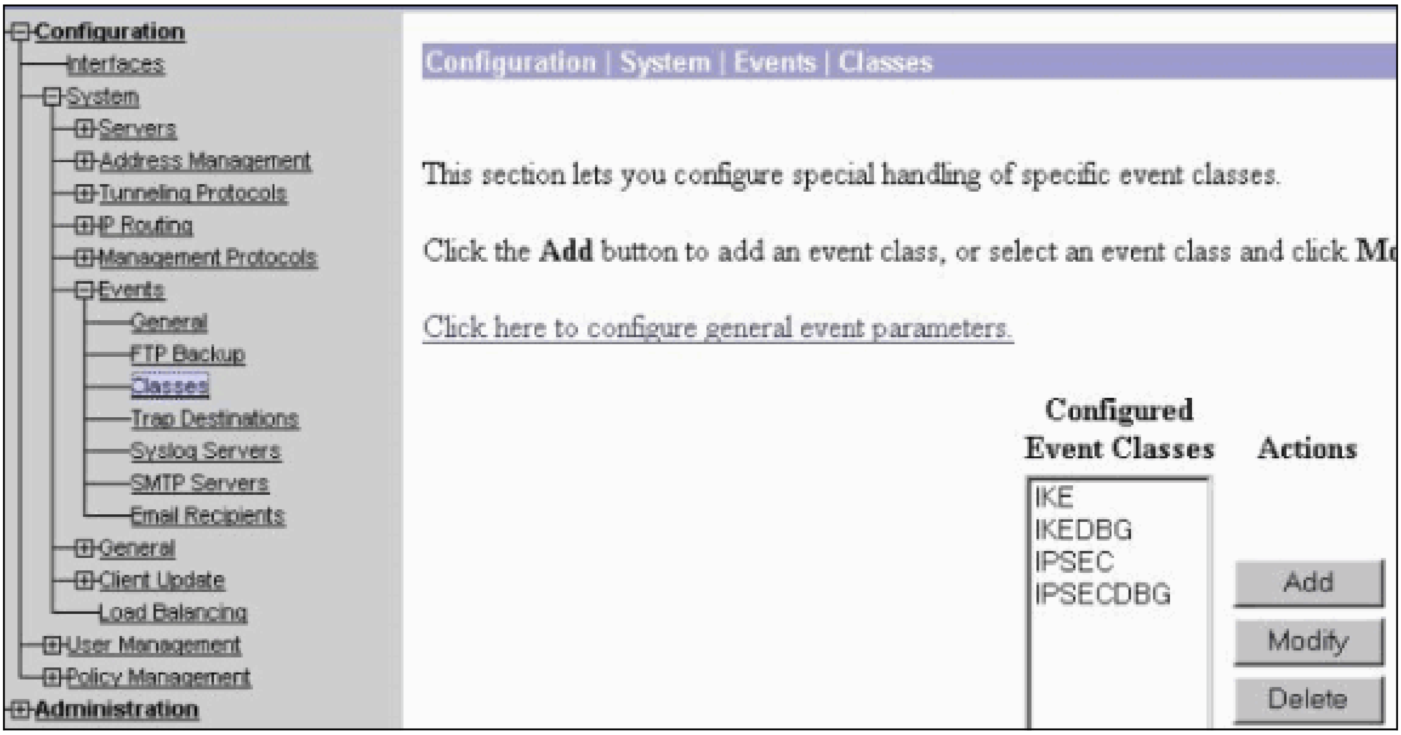
Você pode limpar os túneis com estes comandos:

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

Nota:Você pode usar o VPN Concentrator para fazer logout da sessão ao selecionar Administration > Admin Sessions, selecionar o usuário em Remote Access Session e clicar em logout.

Debug de VPN 3000 Concentrator

Selecione **Configuration > System > Events > Classes** para habilitar essa depuração caso haja falhas de eventos de conexão. Você sempre pode adicionar mais classes se as mostradas não ajudarem a identificar o problema.



Configuration | System | Events | Classes

This section lets you configure special handling of specific event classes.

Click the **Add** button to add an event class, or select an event class and click **Mo**

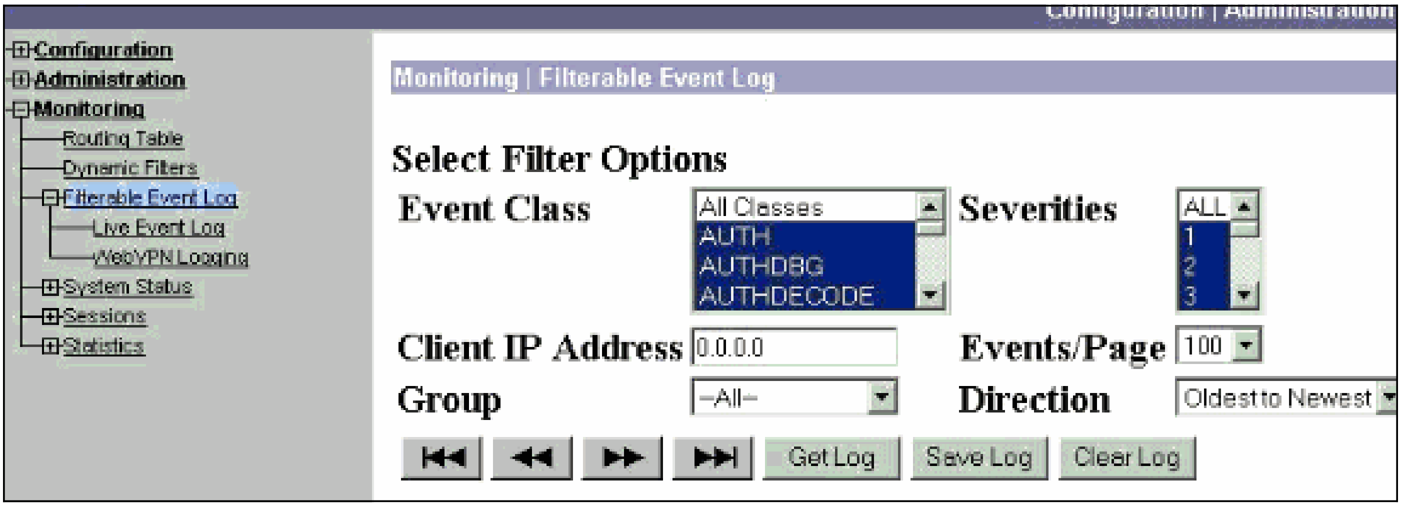
Click here to configure general event parameters.

Configured Event Classes

IKE
IKEDBG
IPSEC
IPSECDBG

Actions

Para acessar o log de eventos atual na memória, o qual pode ser filtrado por classe de eventos, severidade, endereço IP e assim por diante, selecione **Monitoring > Filterable Event log**.



Monitoring | Filterable Event Log

Select Filter Options

Event Class: All Classes, AUTH, AUTHDBG, AUTHDECODE

Severities: ALL, 1, 2, 3

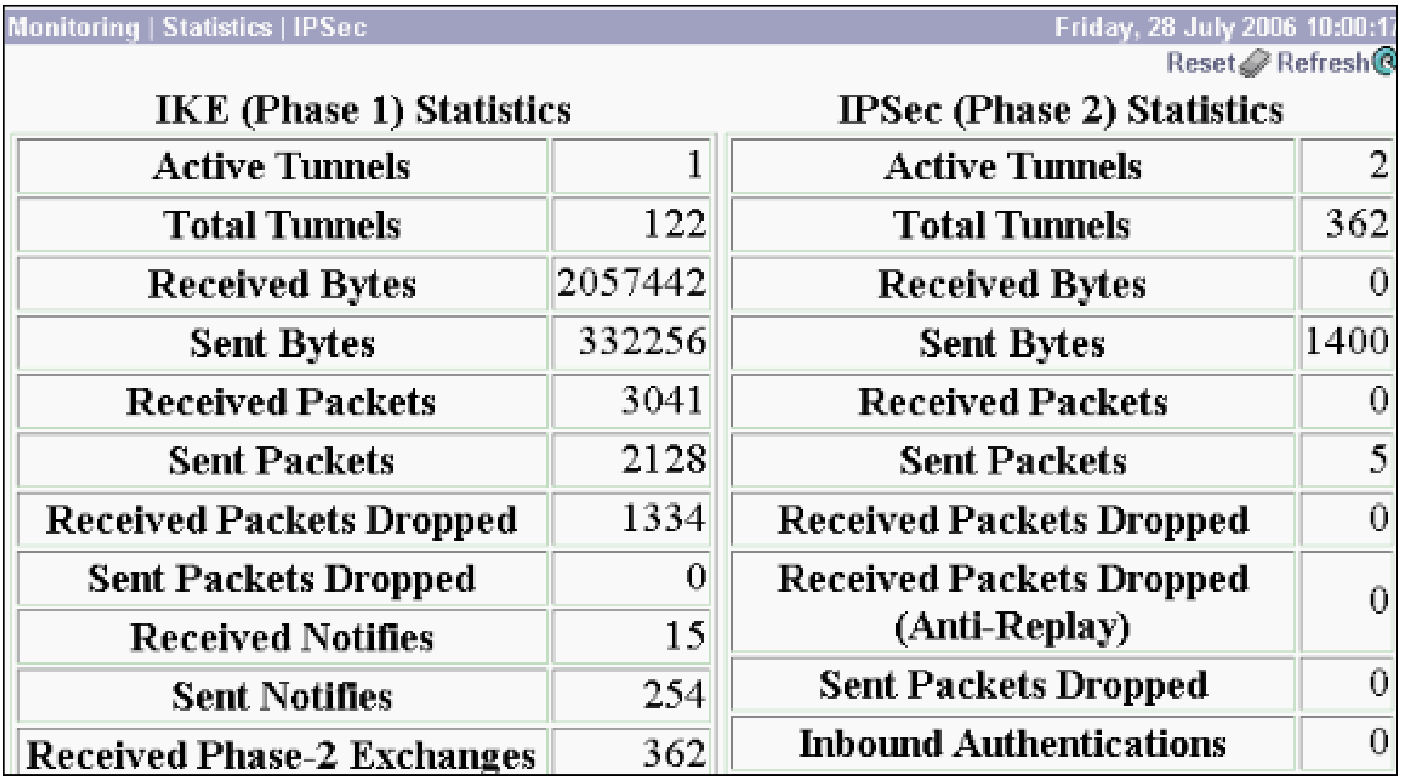
Client IP Address: 0.0.0.0

Events/Page: 100

Group: -All-

Direction: Oldest to Newest

Para exibir as estatísticas do protocolo IPsec, selecione **Monitoring > Statistics > IPSec.** Essa janela exibe estatísticas da atividade do IPsec (incluindo os túneis IPsec atuais) no VPN Concentrator desde que ele foi reinicializado ou redefinido pela última vez. Essas estatísticas estão de acordo com o rascunho da IETF para o MIB de monitoramento de fluxo de IPsec. A janela **Monitoring > Sessions > Detail** também exibe dados do IPsec.


Monitoring | Statistics | IPSec
Friday, 28 July 2006 10:00:17
Reset
Refresh

IKE (Phase 1) Statistics

Active Tunnels	1
Total Tunnels	122
Received Bytes	2057442
Sent Bytes	332256
Received Packets	3041
Sent Packets	2128
Received Packets Dropped	1334
Sent Packets Dropped	0
Received Notifies	15
Sent Notifies	254
Received Phase-2 Exchanges	362

IPSec (Phase 2) Statistics

Active Tunnels	2
Total Tunnels	362
Received Bytes	0
Sent Bytes	1400
Received Packets	0
Sent Packets	5
Received Packets Dropped	0
Received Packets Dropped (Anti-Replay)	0
Sent Packets Dropped	0
Inbound Authentications	0

que pode dar errado

- O roteador Cisco IOS fica preso no estado AG_INIT_EXCH. Durante a solução de problemas, ative as depurações IPsec e ISAKMP com estes comandos:**debug crypto ipsecdebug crypto isakmpdebug crypto ezvpn**No roteador Cisco IOS, você vê isto:

```
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
```

  No VPN 3000 Concentrator, Xauth é necessário. No entanto, a proposta selecionada não apoia Xauth. Verifique se internal authentication for Xauth foi especificado. Habilite a autenticação interna e certifique-se que as propostas IKE tenham o modo de autenticação configurado para **Preshared Keys (Xauth)**, como na captura de tela anterior. Clique em **Modify** para editar a proposta.
- A senha está incorreta.Você não verá a mensagem **Invalid Password** no roteador Cisco IOS. No VPN Concentrator, você deverá ver **Received unexpected event EV_ACTIVATE_NEW_SA in state AM_TM_INIT_XAUTH**.Verifique se a senha está correta.
- O nome de usuário está incorreto.No roteador Cisco IOS, você verá uma depuração semelhante a esta se tiver a senha errada. No VPN Concentrator você verá **Authentication rejected: Reason = User was not found**.

Informações Relacionadas

- Página de suporte do Cisco VPN 3000 Series Concentrator
- Cisco Easy VPN Remote Fase II
- Página de suporte ao cliente do Cisco VPN 3000 Series
- Página de Suporte de Negociação IPSec/Protocolos IKE
- Suporte Técnico e Documentação - Cisco Systems