# Cómo agregar la Autenticación AAA (Xauth) a PIX IPSec 5.2 y posteriores.

## Contenido

# Introducción

La autenticación y contabilización, y hasta cierto punto la autorización, de RADIUS y TACACS+ se hace para los túneles de Cisco Secure VPN Client 1.1 y Cisco VPN 3000 2.5 Hardware Client que terminan en el PIX. Cambia en el Autenticación ampliada (Xauth) PIX 5.2 y posterior sobre el de las versiones anteriores que incluyen el soporte de lista de acceso del Authentication, Authorization, and Accounting (AAA) para controlar qué usuarios autenticados pueden acceder y soportar para la terminación Xauth del Cliente Cisco VPN 3000 2.5. **El comando vpn group split-tunneling** permite al VPN 3000 Client para conectar con la red dentro del PIX así como de otras redes (por ejemplo, Internet) al mismo tiempo. En PIX 5.3 y posterior, el cambio AAA sobre las versiones de código anterior es que los puertos RADIUS son configurables. En PIX 6.0, el soporte para el cliente VPN 3.x se agrega. Esto requiere el grupo Diffie-Hellman 2.

# prerrequisitos

## Requisitos

No hay requisitos específicos para este documento.

## Componentes Utilizados

La información que contiene este documento se basa en las siguientes versiones de software y hardware.

- Software PIX versión 5.2.1
- Secure VPN Client 1.1 de Cisco
- VPN 3000 2.5 Client o VPN Client 3.x de Cisco**Nota:** La versión de Cliente Cisco VPN 3.0.x no funciona con las versiones de PIX anterior de 6.0. Refiera al Cisco Hardware y a los clientes VPN que soportan IPsec/PPTP/L2TP para más información.

La información que contiene este documento se creó a partir de los dispositivos en un ambiente de laboratorio específico. Todos los dispositivos que se utilizan en este documento se pusieron en funcionamiento con una configuración verificada (predeterminada). Si la red está funcionando, asegúrese de haber comprendido el impacto que puede tener cualquier comando.

## Convenciones

Consulte Convenciones de Consejos TécnicosCisco para obtener más información sobre las convenciones del documento.

# Antecedentes

La versión de Software PIX Firewall 6.2 soporta la descarga del Listas de control de acceso (ACL) al firewall PIX de un Access Control Server (ACS). Esto permite a la configuración por usuario de los ACL en un servidor de AAA para proporcionar por usuario la autorización de ACL. Es entonces transferible con el ACS al firewall PIX. Esta característica se soporta para los servidores de RADIUS solamente. No se soporta para los servidores TACACS+.

# Pasos del debug

Complete estos pasos del debug:

1. Aseegurese los trabajos de la configuración del Xauth PIX antes de que usted agregue la autenticación AAA.Si usted no puede pasar el tráfico antes de que usted implemente el AAA, usted no puede hacerlo luego.
2. Habilite algún tipo de registro en el PIX:No publique el **comando logging console debugging** en un sistema muy cargado.**El comando logging buffered debugging** puede ser publicado. Entonces publique el **comando show logging**.El registro puede también ser enviado a un servidor del registro de mensajes del sistema (Syslog) y ser examinado.
3. Activar la depuración en los servidores TACACS+ o RADIUS. Todos los servidores tienen esta opción.

## Comandos debug en PIX

- **debug crypto ipsec sa** — Este comando debug visualiza los eventos del IPSec.
- **debug crypto isakmp sa** — Este comando debug visualiza los mensajes sobre los eventos del Internet Key Exchange (IKE).
- **debug crypto isakmp engine** — Este comando debug visualiza los mensajes sobre los eventos IKE.

## Depuración del lado del cliente

Permita al Log Viewer para ver que los client-side debug en Cisco aseguran 1.1 o el VPN 3000 Client 2.5.

# Perfiles de servidor AAA

## Cisco UNIX seguro TACACS+

```
user = noacl{
password = clear "********"
service=shell {
}
}
user = pixb{
  password = clear "********"
  service=shell {
  set acl=115
  }
  }
user = 3000full{
  password = clear "********"
  service=shell {
  }
  }
user = 3000partial{
  password = clear "********"
  service=shell {
  }
  }
```

## Cisco Secure ACS for Windows TACACS+

El noacl, la necesidad de usuarios 3000full, y 3000partial solamente un nombre de usuario y una contraseña en el Cisco Secure ACS for Windows. Las necesidades de usuario del pixb un nombre de usuario, una contraseña, un shell/adentro grupo marcado ejecutivo, un ACL marcaron, y 115 en el cuadro.

## Cisco Secure UNIX RADIUS

```
user = noacl{
password = clear "********"
}
user = pixb{
  password = clear "********"
  radius=Cisco {
  reply_attributes= {
  9,1="acl=115"
  }
  }
  }
user = 3000full{
  password = clear "********"
  }
user = 3000partial{
  password = clear "********"
  }
```

## Cisco Secure ACS for Windows RADIUS

El tipo de dispositivo es RADIUS/Cisco El noacl, la necesidad de usuarios 3000full, y 3000partial solamente un nombre de usuario y una contraseña en el Cisco Secure ACS for Windows. Las necesidades de usuario del pixb un nombre de usuario, una contraseña, y un control y acl=115 en cuadro rectangular de Cisco/RADIUS donde dice el Par AV 009\001 (específico del vendedor).

**Nota:** Usted necesita el Atributo del vendedor para el ACL. El atributo 11, filtro-identificación, es inválido. Este problema se asigna el Id. de bug Cisco CSCdt50422 (clientes registrados solamente). Se repara en el software PIX versión 6.0.1.

## Merit RADIUS (Soporte de pares AV de Cisco)

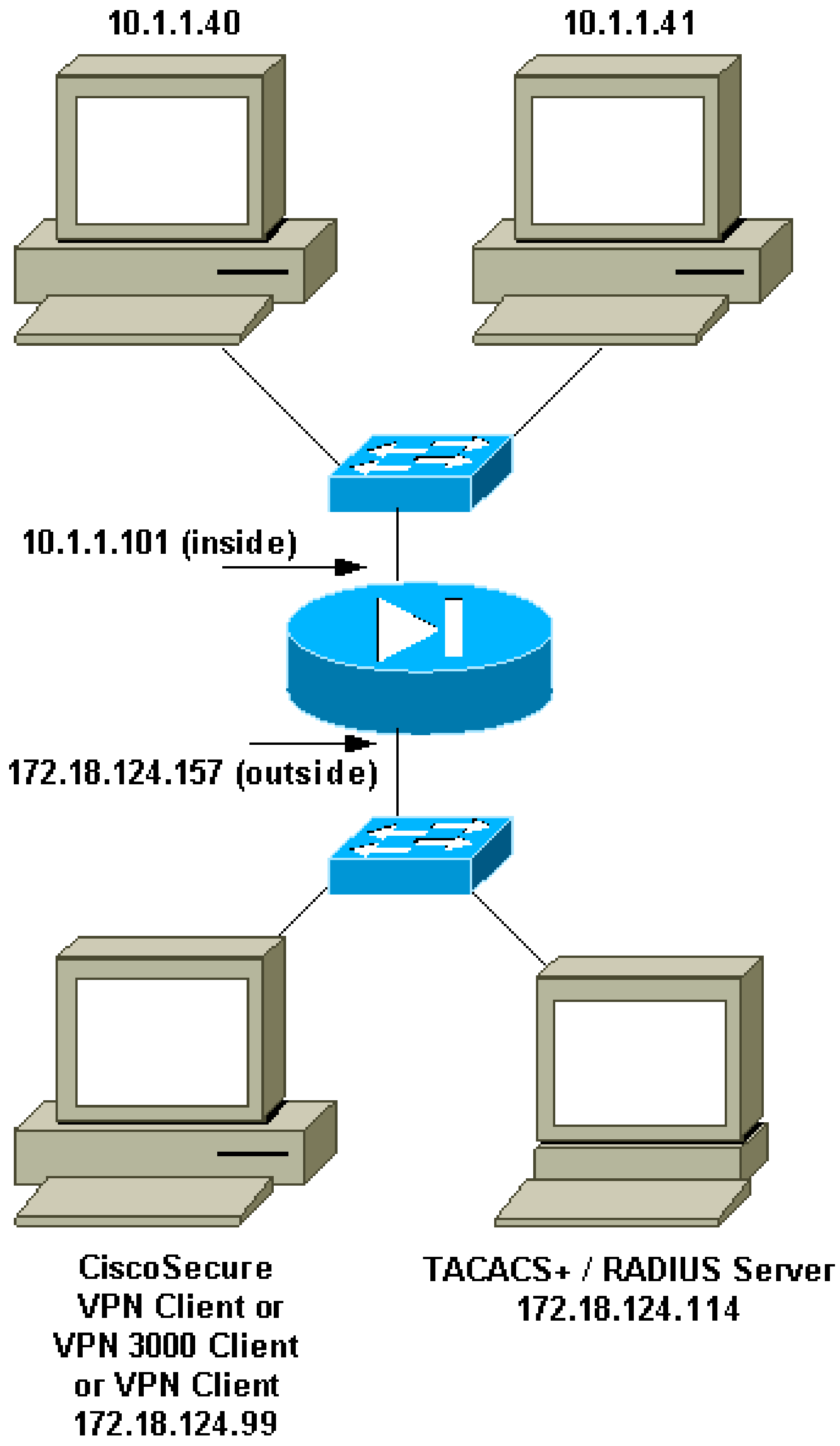
```
noacl Password= "noacl"

pixb Password= "pixb"
cisco-avpair = "acl=115"

3000full Password= "3000full"

3000partial Password= "3000partial"
```

# Diagrama de la red


10.1.1.40
10.1.1.41
10.1.1.101 (inside)
172.18.124.157 (outside)
CiscoSecure VPN Client or VPN 3000 Client or VPN Client 172.18.124.99
TACACS+ / RADIUS Server 172.18.124.114

## Puertos RADIUS configurables (5.3 y posteriores)

Algunos servidores RADIUS utilizan puertos RADIUS diferentes a 1645/1646 (generalmente 1812/1813). En PIX 5.3 y posterior, la autenticación de RADIUS y los puertos de contabilidad se pueden cambiar a los puertos con excepción del 1645/1646 predeterminado con estos comandos:

- **aaa-server radius-authport**
- **aaa-server radius-acctport #**

# Cómo autenticar con el Xauth sin los grupos VPN

En este ejemplo, autentican a los tres clientes VPN con el Xauth. Sin embargo, los clientes VPN pueden acceder solamente la red dentro del PIX, pues el Túnel dividido es parado. Vea cómo autenticar el Xauth con grupo de VPN para más información sobre el Túnel dividido. Los ACL pasajeros abajo del servidor de AAA se aplican a cualquier cliente VPN. En este ejemplo, la meta está para que el noacl del usuario conecte y consiga a todos los recursos dentro del PIX. El usuario que el pixb conecta, pero porque el ACL 115 se pasa abajo del servidor de AAA durante el proceso del Xauth, el usuario puede conseguir solamente a 10.1.1.40. El acceso a 10.1.1.41 y al resto de interior de los IP Addresses se niega.

**Nota:** Se requiere el software PIX versión 6.0 para apoyo de VPN Client 3.0.

## Cliente Cisco Secure VPN 1.1 puesto - Xauth sin los grupos VPN

```
Name of connection:
Remote party address = IP_Subnet = 10.1.1.0, Mask 255.255.255.0
Connect using Secure Gateway Tunnel to 172.18.124.157
My Identity:
Select certificate = None
ID_Type = ip address, pre-shared key and fill in key
('cisco1234') - matches that of pix in 'isakmp key' command
Security policy = defaults
Proposal 1 (Authen) = DES, MD5
Proposal 2 (Key Exchange) = DES, MD5, Tunnel
```

Abra una ventana de la negación de servicio (DOS) y publique el **comando ping - t - - - -**. Cuando aparece la ventana xauth, teclee el nombre de usuario y contraseña que está de acuerdo con el que está con el servidor de AAA.

## VPN 3000 Client 2.5 o cliente VPN 3.x puesto - Xauth sin los grupos VPN

Complete estos pasos:

1. Seleccione el **Option (Opciones) > Properties (Propiedades) > Group Name (Nombre de grupo)**.
2. El nombre del grupo es no hace _care y la contraseña está de acuerdo con la que está con el PIX en el **comando isakmp key**. El nombre de la computadora principal es 172.18.124.157.
3. Haga clic en Connect (Conectar)
4. Cuando sube la ventana xauth, teclee el nombre de usuario y contraseña que está de acuerdo con el que está con el servidor de AAA.

## Xauth sin los grupos VPN - Configuración de PIX

```
PIX Version 5.2(1)
nameif ethernet0 outside security0
nameif ethernet1 inside security100
enable password 8Ry2YjIyt7RRXU24 encrypted
passwd 2KFQnbNIdI.2KYOU encrypted
hostname goss-pixb
fixup protocol ftp 21
fixup protocol http 80
fixup protocol h323 1720
fixup protocol rsh 514
fixup protocol smtp 25
fixup protocol sqlnet 1521
fixup protocol sip 5060
names
access-list 108 permit ip 10.1.1.0 255.255.255.0
192.168.1.0 255.255.255.0
access-list 115 deny ip any host 10.1.1.41
access-list 115 permit ip any host 10.1.1.40
pager lines 24
logging on
no logging timestamp
no logging standby
logging console debugging
no logging monitor
no logging buffered
logging trap debugging
no logging history
logging facility 20
logging queue 512
interface ethernet0 auto
interface ethernet1 auto
mtu outside 1500
mtu inside 1500
ip address outside 172.18.124.157 255.255.255.0
ip address inside 10.1.1.101 255.255.255.0
ip audit info action alarm
ip audit attack action alarm
ip local pool test 192.168.1.1-192.168.1.5
no failover
failover timeout 0:00:00
failover poll 15
failover ip address outside 0.0.0.0
failover ip address inside 0.0.0.0
arp timeout 14400
global (outside) 1 172.18.124.154
nat (inside) 0 access-list 108
Nat (inside) 1 10.1.1.0 255.255.255.0 0 0
timeout xlate 3:00:00
timeout conn 1:00:00 half-closed 0:10:00 udp 0:02:00
rpc 0:10:00 h323 0:05:00
sip 0:30:00 sip_media 0:02:00
timeout uauth 0:05:00 absolute
AAA-server TACACS+ protocol tacacs+
AAA-server RADIUS protocol radius
AAA-server AuthInbound protocol tacacs+
AAA-server AuthInbound (outside) host 172.18.124.114 cisco timeout 5
no snmp-server location
no snmp-server contact
snmp-server community public
no snmp-server enable traps
floodguard enable
sysopt connection permit-ipsec
no sysopt route dnat
crypto ipsec transform-set myset esp-des esp-md5-hmac
crypto dynamic-map dynmap 10 set transform-set myset
crypto map mymap 10 ipsec-isakmp dynamic dynmap
crypto map mymap client configuration address initiate
crypto map mymap client configuration address respond
crypto map mymap client authentication AuthInbound
crypto map mymap interface outside
isakmp enable outside
isakmp key ******** address 0.0.0.0 netmask 0.0.0.0
isakmp identity address
isakmp client configuration address-pool local test outside
!--- Internet Security Association and Key Management Protocol (ISAKMP) !--- Policy for Cisco
VPN Client 2.5 or !--- Cisco Secure VPN Client 1.1. isakmp policy 10 authentication pre-share
isakmp policy 10 encryption des
isakmp policy 10 hash md5
!--- The 1.1 and 2.5 VPN Clients use Diffie-Hellman (D-H) !--- group 1 policy (PIX default).
isakmp policy 10 group 1
isakmp policy 10 lifetime 86400
!
!--- ISAKMP Policy for VPN Client 3.0 isakmp policy 20 authentication pre-share
isakmp policy 20 encryption des
isakmp policy 20 hash md5
!--- The VPN 3.0 Clients use D-H group 2 policy !--- and PIX 6.0 code. isakmp policy 20 group 2
isakmp policy 20 lifetime 86400
telnet timeout 5
ssh timeout 5
terminal width 80
Cryptochecksum:05c6a2f3a7d187162c4408503b55affa
: end
[OK]
```

## Cómo autenticar con el Xauth con grupo de VPN

En este ejemplo, el 3.0 del VPN 3000 Client 2.5 o del cliente VPN se puede autenticar con el Xauth, y el Túnel dividido está en efecto. En virtud de la calidad de miembro de grupo VPN, un ACL se pasa del PIX al VPN 3000 Client. Especifica que solamente la red dentro del PIX tiene un túnel encriptado. El otro tráfico (quizás a Internet) no se cifra.

En este ejemplo, un cliente VPN, con el nombre de usuario 3000full (en el servidor de AAA), en el grupo vpn3000-all (en el PIX) accede la red entera 10.1.1.X dentro del PIX al mismo tiempo que Internet. El cliente VPN recibe el triunfo-servidor, el dns-servidor, y la información sobre el nombre del dominio. El otro cliente VPN, con el nombre de usuario 3000partial (en el AAA-servidor), en el grupo vpn3000-41 (en el PIX) accede solamente una dirección IP dentro de la red (10.1.1.40) en virtud del perfil del grupo. Este cliente VPN no recibe la información de los triunfos y del dns-servidor, sino todavía hace el Túnel dividido.

**Nota:** Se requiere el software PIX versión 6.0 para apoyo de VPN Client 3.0.

### Cliente VPN 2.5 o 3.0 puesto - Xauth con grupo de VPN

Complete estos pasos:

**Nota:** El VPN 2.5 o la configuración del cliente del 3.0 depende del usuario implicado.

1. Seleccione Opciones > Propiedades > Autenticación.
2. El nombre del grupo y el group password hacen juego el nombre del grupo en el PIX como en: ******** de la contraseña del vpngroup vpn3000-all o ******** de la contraseña del vpngroup vpn3000-41. El nombre de la computadora principal es 172.18.124.157.
3. Haga clic en Connect (Conectar)
4. Cuando aparezca la ventana Xauth, ingrese el nombre de usuario y la contraseña que correspondan con los valores que figuran en el servidor de AAA.

En este ejemplo, una vez que autentican al usuario 3000full, coge la información del grupo vpn3000-all. El usuario 3000partial coge la información del grupo vpn3000-41. La ventana muestra que la **negociación de los perfiles de seguridad** y **su link es segura ahora**.

El usuario 3000full utiliza la contraseña para el grupo vpn3000-all. La lista de acceso 108 se asocia a ese grupo para los fines de tunelización dividida. El túnel se forma a la red 10.1.1.x. Flujos de tráfico unencrypted a los dispositivos no en la lista de acceso 108 (por ejemplo, Internet). Éste es Túnel dividido.

Ésta es la salida para la ventana de estado de la conexión de cliente VPN para el usuario 3000full:

```
        Network         Mask
key     10.1.1.0        255.255.255.0
key     172.18.124.157  255.255.255.255
```

El usuario 3000partial utiliza la contraseña para el grupo vpn3000-41. La lista de acceso 125 se asocia a ese grupo para los fines de tunelización dividida. El túnel se forma al dispositivo de 10.1.1.41. Flujos de tráfico unencrypted a los dispositivos no en la lista de acceso 125 (por ejemplo, Internet). Sin embargo, el tráfico no fluye al dispositivo de 10.1.1.40 porque este tráfico es unroutable. No se especifica en la lista de túneles de encripción.

Ésta es la salida para la ventana de estado de la conexión de cliente VPN para el usuario 3000partial:

```
        Network         Mask
key     10.1.1.41       255.255.255.255
key     172.18.124.157  255.255.255.255
```

## Xauth con grupo de VPN - Configuración de PIX

**Nota:** El Cliente Cisco Secure VPN 1.1 no trabaja con esto porque no hay clave del Internet Security Association and Key Management Protocol (ISAKMP). Agregue el comando de **0.0.0.0 del netmask de 0.0.0.0 del direccionamiento del ******** de la clave del isakmp** de hacer que todos los clientes VPN trabajan.

```
PIX Version 5.2(1)
nameif ethernet0 outside security0
nameif ethernet1 inside security100
enable password 8Ry2YjIyt7RRXU24 encrypted
passwd OnTrBUG1Tp0edmkr encrypted
hostname goss-pixb
fixup protocol ftp 21
fixup protocol http 80
fixup protocol h323 1720
fixup protocol rsh 514
fixup protocol smtp 25
fixup protocol sqlnet 1521
fixup protocol sip 5060
names
access-list 108 permit ip 10.1.1.0 255.255.255.0
192.168.1.0 255.255.255.0
access-list 125 permit ip host 10.1.1.41 any
pager lines 24
logging on
no logging timestamp
no logging standby
logging console debugging
```

```
no logging monitor
no logging buffered
logging trap debugging
no logging history
logging facility 20
logging queue 512
interface ethernet0 auto
interface ethernet1 auto
mtu outside 1500
mtu inside 1500
ip address outside 172.18.124.157 255.255.255.0
ip address inside 10.1.1.1 255.255.255.0
ip audit info action alarm
ip audit attack action alarm
ip local pool test 192.168.1.1-192.168.1.5
no failover
failover timeout 0:00:00
failover poll 15
failover ip address outside 0.0.0.0
failover ip address inside 0.0.0.0
arp timeout 14400
global (outside) 1 172.18.124.154
Nat (inside) 0 access-list 108
Nat (inside) 1 10.1.1.0 255.255.255.0 0 0
route outside 0.0.0.0 0.0.0.0 172.18.124.1 1
timeout xlate 3:00:00
timeout conn 1:00:00 half-closed 0:10:00 udp 0:02:00
rpc 0:10:00 h323 0:05:00
sip 0:30:00 sip_media 0:02:00
timeout uauth 0:05:00 absolute
AAA-server TACACS+ protocol tacacs+
AAA-server RADIUS protocol radius
AAA-server AuthInbound protocol tacacs+
AAA-server AuthInbound (outside) host 172.18.124.111
cisco timeout 5
no snmp-server location
no snmp-server contact
snmp-server community public
no snmp-server enable traps
floodguard enable
sysopt connection permit-ipsec
no sysopt route dnat
crypto ipsec transform-set myset ESP-Des esp-md5-hmac
crypto dynamic-map dynmap 10 set transform-set myset
crypto map mymap 10 ipsec-isakmp dynamic dynmap
crypto map mymap client configuration address initiate
crypto map mymap client configuration address respond
crypto map mymap client authentication AuthInbound
crypto map mymap interface outside
isakmp enable outside
isakmp identity address
isakmp client configuration address-pool local test outside
!--- ISAKMP Policy for Cisco VPN Client 2.5 or !--- Cisco Secure VPN Client 1.1. isakmp policy
10 authentication pre-share
isakmp policy 10 encryption des
isakmp policy 10 hash md5
!--- The 1.1 and 2.5 VPN Clients use Diffie-Hellman (D-H) !--- group 1 policy (PIX default).
isakmp policy 10 group 1
isakmp policy 10 lifetime 86400
!
!--- ISAKMP Policy for VPN Client 3.0 isakmp policy 20 authentication pre-share
isakmp policy 20 encryption des
isakmp policy 20 hash md5
!--- The VPN 3.0 Clients use D-H group 2 policy !--- and PIX 6.0 code. isakmp policy 20 group 2
```

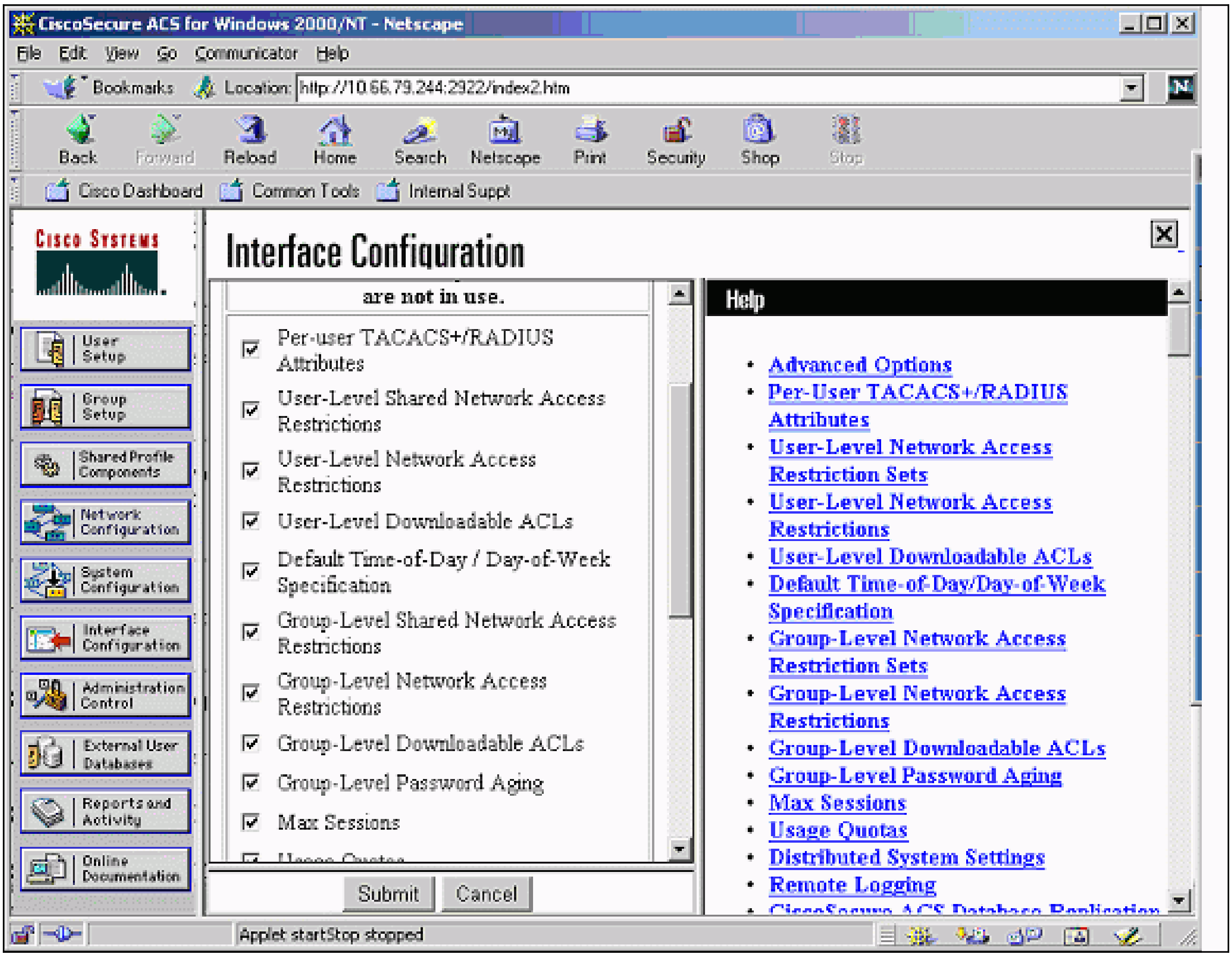
```
isakmp policy 20 lifetime 86400
vpngroup vpn3000-all address-pool test
vpngroup vpn3000-all dns-server 10.1.1.40
vpngroup vpn3000-all wins-server 10.1.1.40
vpngroup vpn3000-all default-domain rtp.cisco.com
vpngroup vpn3000-all split-tunnel 108
vpngroup vpn3000-all idle-time 1800
vpngroup vpn3000-all password ********
vpngroup vpn3000-41 address-pool test
vpngroup vpn3000-41 split-tunnel 125
vpngroup vpn3000-41 idle-time 1800
vpngroup vpn3000-41 password ********
telnet timeout 5
ssh timeout 5
terminal width 80
Cryptochecksum:429db0e7d20451fc28074f4d6f990d25
: end
```

## Xauth con grupo de VPN y ACL por usuario transferibles - Configuración ACS

### Configure el Cisco Secure ACS

Complete estos pasos:

1. Haga clic en Configuración de la interfaz y seleccione la opción para las ACL descargables a nivel del usuario.



CiscoSecure ACS for Windows 2000/NT - Netscape
File Edit View Go Communicator Help
Bookmarks Location: http://10.66.79.244:2922/index2.htm
Back Forward Reload Home Search Netscape Print Security Shop Stop
Cisco Dashboard Common Tools Internal Suppt
CISCO SYSTEMS
User Setup
Group Setup
Shared Profile Components
Network Configuration
System Configuration
Interface Configuration
Administration Control
External User Databases
Reports and Activity
Online Documentation
Submit Cancel
Applet startStop stopped

Interface Configuration

are not in use.

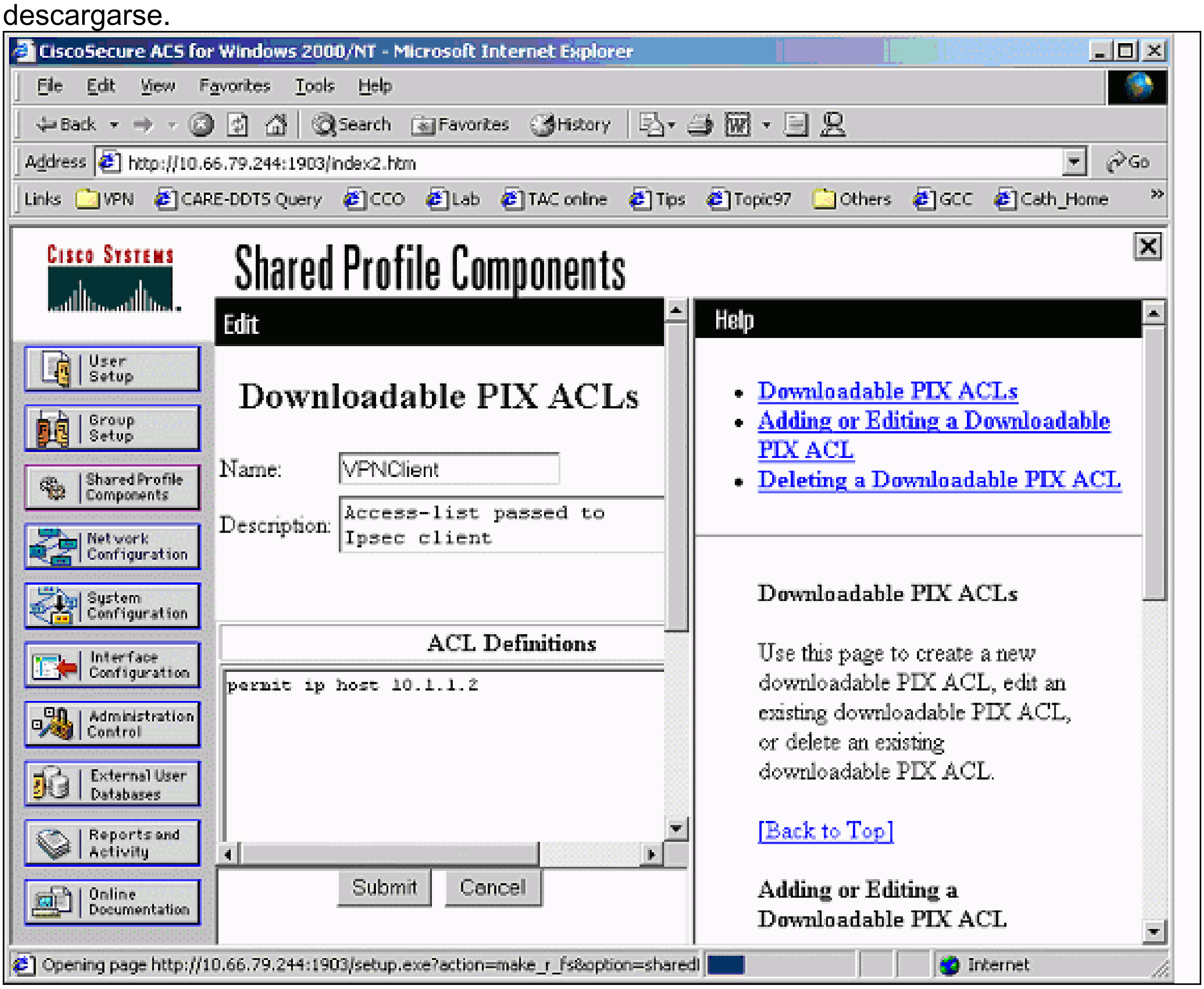
- ☑ Per-user TACACS+/RADIUS Attributes
- ☑ User-Level Shared Network Access Restrictions
- ☑ User-Level Network Access Restrictions
- ☑ User-Level Downloadable ACLs
- ☑ Default Time-of-Day / Day-of-Week Specification
- ☑ Group-Level Shared Network Access Restrictions
- ☑ Group-Level Network Access Restrictions
- ☑ Group-Level Downloadable ACLs
- ☑ Group-Level Password Aging
- ☑ Max Sessions
- ☑ Usage Quotas

Help

- Advanced Options
- Per-User TACACS+/RADIUS Attributes
- User-Level Network Access Restriction Sets
- User-Level Network Access Restrictions
- User-Level Downloadable ACLs
- Default Time-of-Day/Day-of-Week Specification
- Group-Level Network Access Restriction Sets
- Group-Level Network Access Restrictions
- Group-Level Downloadable ACLs
- Group-Level Password Aging
- Max Sessions
- Usage Quotas
- Distributed System Settings
- Remote Logging
- CiscoSecure ACS Database Replication

2. Haga clic en Shared Profile Components (Componentes de perfil compartidos) y defina un

ACL que pueda
descargarse.


CiscoSecure ACS for Windows 2000/NT - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back Search Favorites History
Address http://10.66.79.244:1903/index2.htm
Go
Links VPN CARE-DDTS Query CCO Lab TAC online Tips Topic97 Others GCC Cath_Home
Cisco Systems
Shared Profile Components
User Setup
Group Setup
Shared Profile Components
Network Configuration
System Configuration
Interface Configuration
Administration Control
External User Databases
Reports and Activity
Online Documentation
Edit
Help
Downloadable PIX ACLs
Adding or Editing a Downloadable PIX ACL
Deleting a Downloadable PIX ACL
Submit
Cancel
Internet

Downloadable PIX ACLs

Name: VPNClient

Description: Access-list passed to Ipsec client

ACL Definitions

```
permit ip host 10.1.1.2
```

Downloadable PIX ACLs

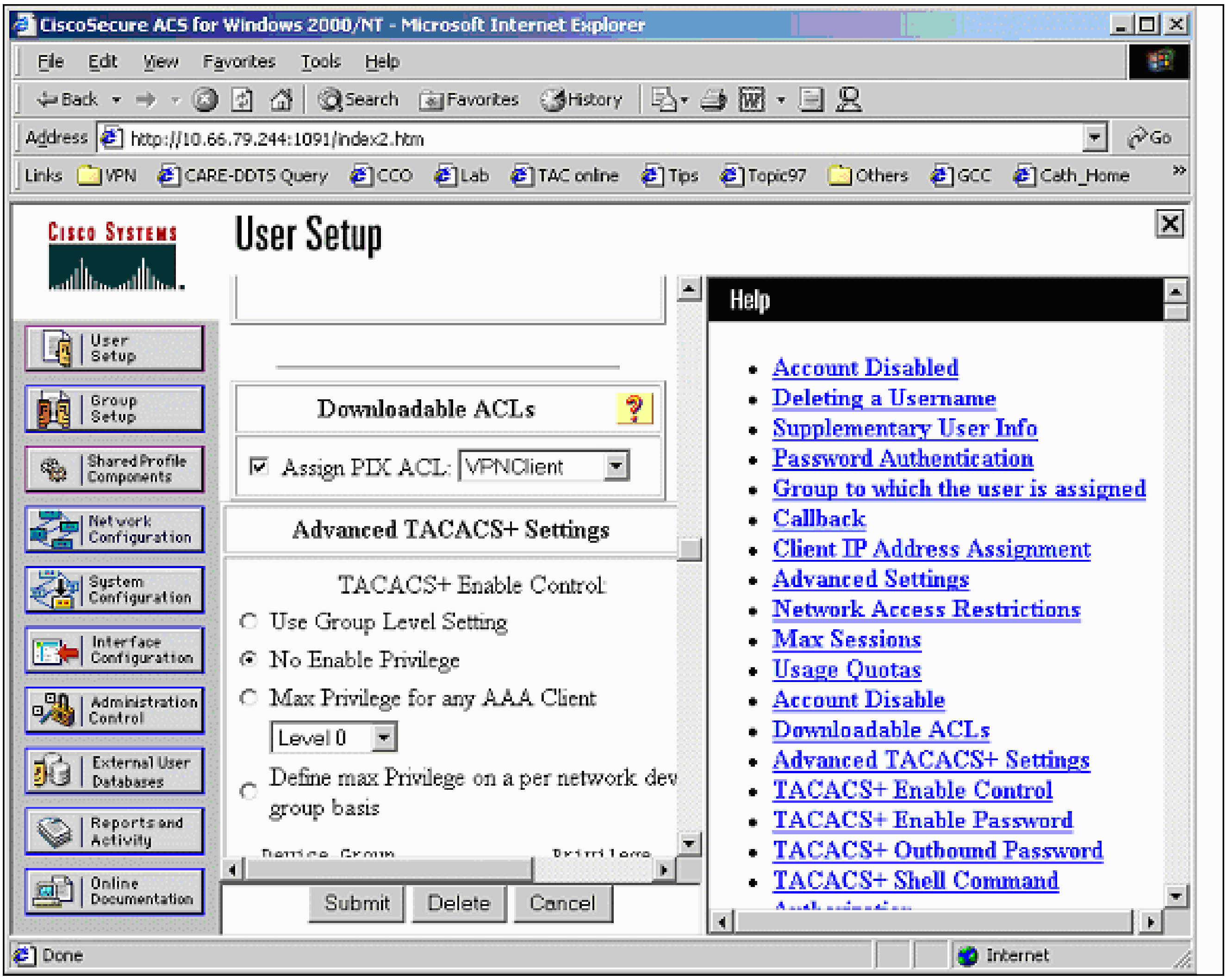
Use this page to create a new downloadable PIX ACL, edit an existing downloadable PIX ACL, or delete an existing downloadable PIX ACL.

[Back to Top]

Adding or Editing a Downloadable PIX ACL

Opening page http://10.66.79.244:1903/setup.exe?action=make_r_fs&option=sharedl

3. Haga clic en User Setup (Configuración de usuario). Seleccione la opción **para asignar PIX ACL**. Elija el ACL correcto de la lista desplegable.



User Setup

Downloadable ACLs

☑ Assign PIX ACL: VPNClient

Advanced TACACS+ Settings

TACACS+ Enable Control:

○ Use Group Level Setting

● No Enable Privilege

○ Max Privilege for any AAA Client

Level 0

○ Define max Privilege on a per network device group basis

## Xauth con grupo de VPN y ACL por usuario transferibles - Configuración PIX 6.x

Si usted quiere conducir un ACL descargable por usuario del usuario para la autorización, utilice la versión 6.2(2) del Software PIX Firewall. Refiera al Id. de bug Cisco CSCdx47975 (clientes registrados solamente).

```
PIX Version 6.2(2)
nameif ethernet0 outside security0
nameif ethernet1 inside security100
enable password 8Ry2YjIyt7RRXU24 encrypted
passwd 2KFQnbNIdI.2KYOU encrypted
hostname sv2-4
fixup protocol ftp 21
fixup protocol http 80
fixup protocol h323 h225 1720
fixup protocol h323 ras 1718-1719
fixup protocol ils 389
fixup protocol rsh 514
fixup protocol rtsp 554
fixup protocol smtp 25
fixup protocol sqlnet 1521
fixup protocol sip 5060
fixup protocol skinny 2000
names
access-list 108 permit ip 10.1.1.0 255.255.255.0
192.168.1.0 255.255.255.0
pager lines 24
```

```
logging buffered debugging
interface ethernet0 auto
interface ethernet1 auto
mtu outside 1500
mtu inside 1500
ip address outside 10.66.79.69 255.255.255.224
ip address inside 10.1.1.1 255.255.255.0
ip audit info action alarm
ip audit attack action alarm
ip local pool test 192.168.1.1-192.168.1.5
pdm history enable
arp timeout 14400
nat (inside) 0 access-list 108
conduit permit icmp any any
route outside 0.0.0.0 0.0.0.0 10.66.79.65 1
timeout xlate 3:00:00
timeout conn 1:00:00 half-closed 0:10:00 udp 0:02:00
rpc 0:10:00 h323 0:05:00 sip
0:30:00 sip_media 0:02:00
timeout uauth 0:05:00 absolute
aaa-server TACACS+ protocol tacacs+
aaa-server RADIUS protocol radius
aaa-server LOCAL protocol local
aaa-server AuthInbound protocol radius
aaa-server AuthInbound (outside) host 10.66.79.244 cisco123 timeout 10
no snmp-server location
no snmp-server contact
snmp-server community public
no snmp-server enable traps
floodguard enable
sysopt connection permit-ipsec
no sysopt route dnat
crypto ipsec transform-set myset esp-des esp-md5-hmac
crypto dynamic-map dynmap 10 set transform-set myset
crypto map mymap 10 ipsec-isakmp dynamic dynmap
!--- This commands the router to respond to the VPN 3.x Client. crypto map mymap client
configuration address respond
!--- This tells the router to expect Xauth for the VPN 3.x Client. crypto map mymap client
authentication AuthInbound
crypto map mymap interface outside
isakmp enable outside
isakmp policy 20 authentication pre-share
isakmp policy 20 encryption des
isakmp policy 20 hash md5
isakmp policy 20 group 2
isakmp policy 20 lifetime 86400
!
!--- This is the VPN group configuration. vpngroup vpn3000-all address-pool test
vpngroup vpn3000-all default-domain apt.cisco.com
!--- The split-tunnel mode-config is not used, !--- which enforces authorization on a per-user
basis. vpngroup vpn3000-all idle-time 1800
vpngroup vpn3000-all password ********
!
telnet timeout 5
ssh timeout 5
terminal width 80
Cryptochecksum:7c3d067232f427e7522f4a679e963c58
end:
```

## Xauth con grupo de VPN y ACL por usuario transferibles - ASA/PIX configuración 7.x

```
PIX Version 7.1(1)
!
hostname PIX
domain-name cisco.com
enable password 9jNfZuG3TC5tCVH0 encrypted
names
!
interface Ethernet0
 nameif outside
 security-level 0
 ip address 10.66.79.69 255.255.255.224
!
interface Ethernet1
 nameif inside
 security-level 100
 ip address 10.1.1.1 255.255.255.0
!
passwd 2KFQnbNIdI.2KYOU encrypted
ftp mode passive
dns domain-lookup inside
dns server-group DefaultDNS
 timeout 30

access-list 108 permit ip 10.1.1.0 255.255.255.0 192.168.1.0 255.255.255.0
pager lines 24
logging buffer-size 500000
logging console debugging
logging monitor errors
mtu outside 1500
mtu inside 1500
ip local pool test 192.168.1.1-192.168.1.5
no failover
icmp permit any outside
icmp permit any inside
no asdm history enable
arp timeout 14400

nat (inside) 0 access-list 108
route outside 0.0.0.0 0.0.0.0 10.66.79.65 1
timeout xlate 3:00:00
timeout conn 1:00:00 half-closed 0:10:00 udp 0:02:00 icmp 0:00:02
timeout sunrpc 0:10:00 h323 0:05:00 h225 1:00:00 mgcp 0:05:00
timeout mgcp-pat 0:05:00 sip 0:30:00 sip_media 0:02:00
timeout uauth 0:05:00 absolute

aaa-server AuthInbound protocol radius
aaa-server AuthInbound host 10.66.79.244 key cisco123

group-policy vpn3000 internal
group-policy vpn3000 attributes
 dns-server value 172.16.1.1
 default-domain value cisco.com

username vpn3000 password nPtKy7KDCerzhKeX encrypted
no snmp-server location
no snmp-server contact
snmp-server enable traps snmp authentication linkup linkdown coldstart

crypto ipsec transform-set my-set esp-des esp-md5-hmac

crypto dynamic-map dynmap 10 set transform-set my-set

crypto dynamic-map dynmap 10 set reverse-route
crypto map mymap 10 ipsec-isakmp dynamic dynmap

crypto map mymap interface outside

isakmp enable outside
isakmp policy 10 authentication pre-share
isakmp policy 10 encryption des
isakmp policy 10 hash md5
isakmp policy 10 group 2
isakmp policy 10 lifetime 1000

isakmp policy 65535 authentication pre-share
isakmp policy 65535 encryption 3des
isakmp policy 65535 hash sha
isakmp policy 65535 group 2
isakmp policy 65535 lifetime 86400


tunnel-group DefaultRAGroup general-attributes
 authentication-server-group (outside) vpn

tunnel-group vpn3000 type ipsec-ra

tunnel-group vpn3000 general-attributes
 address-pool test
 authentication-server-group vpn


tunnel-group vpn3000 ipsec-attributes
 pre-shared-key *

telnet timeout 5
ssh timeout 5
console timeout 0
!
class-map inspection_default
 match default-inspection-traffic
!
!
policy-map global_policy
 class inspection_default
  inspect dns maximum-length 512
  inspect ftp
  inspect h323 h225
  inspect h323 ras
  inspect netbios
  inspect rsh
  inspect rtsp
  inspect skinny
  inspect esmtp
  inspect sqlnet
  inspect sunrpc
  inspect tftp
  inspect sip
  inspect xdmcp
!
service-policy global_policy global
Cryptochecksum:ecb58c5d8ce805b3610b198c73a3d0cf
: end
```

## Cómo configurar el Xauth local para la conexión de cliente VPN

Estos comandos se requieren configurar el Xauth local para la conexión de cliente VPN:

- **protocol local de la servidor-*etiqueta del AAA*-servidor**
- *AAA-servidor-nombre de la* **autenticación de cliente del** *nombre de asignación de la* ***correspondencia de criptografía***

Publique el **comando username** de definir a los usuarios locales en el PIX.

Para utilizar la base de datos de autenticación de usuario del escudo de protección de PIX local, ingrese el **LOCAL** para el parámetro de la servidor-*etiqueta* para el **comando aaa-server**. Publican el **comando aaa-server** con el **comando crypto map** de establecer una asociación de autenticación para autenticar los clientes VPN cuando acceden el firewall PIX.

## Cómo agregar contabilidad

Éste es el sintaxis del comando de agregar las estadísticas:

- *acctg_service de las* ***estadísticas aaa|excepto de entrada|saliente|if_name local_ip local_mask foreign_ip foreign_mask tacacs+|radio***;

o (nuevo en 5.2):

- **las estadísticas aaa incluyen el *acctg_service* entrante|*server_tag* saliente de la coincidencia**

En la configuración PIX, esto es el comando agregado:

- **las estadísticas aaa incluyen cualquier AuthInbound entrante de 0.0.0.0 0.0.0.0 0.0.0.0 0.0.0.0**;

o (nuevo en 5.2):

- **access-list 150 permit ip any any aaa accounting match 150 outside AuthInbound**

**Nota:** El comando sysopt connection permit-ipsec, no el sysopt ipsec pl-compatible, es necesario para que la contabilidad Xauth funcione. La cuenta Xauth no funciona sólo con el comando sysopt ipsec pl-compatible. La contabilidad de Xauth es válida para las conexiones TCP. Es inválida para el Internet Control Message Protocol (ICMP) o el User Datagram Protocol (UDP).

### Ejemplo de contabilidad de TACACS+

```
Fri Sep 8 03:48:40 2000 172.18.124.157
pixc PIX 192.168.1.1 start task_id=0x17 foreign_ip=192.168.1.1
    local_ip=10.1.1.40 cmd=telnet
Fri Sep 8 03:48:44 2000 172.18.124.157 pixc PIX 192.168.1.1
    stop task_id=0x17 foreign_ip=192.168.1.1 local_ip=10.1.1.40
    cmd=telnet elapsed_time=4 bytes_in=42 bytes_out=103
Fri Sep 8 03:49:31 2000 172.18.124.157 pixc PIX 192.168.1.1
    start task_id=0x18
foreign_ip=192.168.1.1 local_ip=10.1.1.40 cmd=http
Fri Sep 8 03:49:35 2000 172.18.124.157 pixc PIX 192.168.1.1
    stop task_id=0x18 foreign_ip=192.168.1.1 local_ip=10.1.1.40
    cmd=http elapsed_time=4 bytes_in=242 bytes_out=338
```

### Ejemplo de contabilidad RADIUS

```
Acct-Status-Type = Start
NAS-IP-Address = 172.18.124.157
Login-IP-Host = 10.1.1.40
```

```
Login-TCP-Port = 23
Acct-Session-Id = 0x00000003
User-Name = noacl
Vendor-Specific = Source-IP=192.168.1.1
Vendor-Specific = Source-Port=1141
Vendor-Specific = Destination-IP=10.1.1.40
Vendor-Specific = Destination-Port=23

Acct-Status-Type = Start
NAS-IP-Address = 172.18.124.157
Login-IP-Host = 10.1.1.40
Login-TCP-Port = 80
Acct-Session-Id = 0x00000004
User-Name = noacl
Vendor-Specific = Source-IP=192.168.1.1
Vendor-Specific = Source-Port=1168
Vendor-Specific = Destination-IP=10.1.1.40
Vendor-Specific = Destination-Port=80

Acct-Status-Type = Stop
NAS-IP-Address = 172.18.124.157
Login-IP-Host = 10.1.1.41
Login-TCP-Port = 80
Acct-Session-Id = 0x00000008
User-Name = noacl
Acct-Session-Time = 4
Acct-Input-Octets = 242
Acct-Output-Octets = 338
Vendor-Specific = Source-IP=192.168.1.1
Vendor-Specific = Source-Port=1182
Vendor-Specific = Destination-IP=10.1.1.41
Vendor-Specific = Destination-Port=80

Acct-Status-Type = Stop
NAS-IP-Address = 172.18.124.157
Login-IP-Host = 10.1.1.40
Login-TCP-Port = 23
Acct-Session-Id = 0x00000015
User-Name = noacl
Acct-Session-Time = 33
Acct-Input-Octets = 43
Acct-Output-Octets = 103
Vendor-Specific = Source-IP=192.168.1.1
Vendor-Specific = Source-Port=1257
Vendor-Specific = Destination-IP=10.1.1.40
Vendor-Specific = Destination-Port=23
```

## debug and show - Xauth sin grupos VPN

```
goss-pixb#show debug
debug crypto ipsec 1
debug crypto isakmp 1
debug crypto engine
debug fover status
tx Off
rx Off
open Off
cable Off
txdmp Off
rxdmp Off
ifc Off
rxip Off
```

```
txip Off
get Off
put Off
verify Off
switch Off
fail Off
fmsg Off
goss-pixb#terminal monitor
goss-pixb#

crypto_isakmp_process_block: src 172.18.124.99, dest 172.18.124.157
OAK_MM exchange
ISAKMP (0): processing SA payload. message ID = 0

ISAKMP (0): Checking ISAKMP transform 1 against priority 10 policy
ISAKMP: encryption DES-CBC
ISAKMP: hash MD5
ISAKMP: default group 1
ISAKMP: auth pre-share
ISAKMP (0): atts are acceptable. Next payload is 0
ISAKMP (0): SA is doing pre-shared key authentication
using id type ID_IPV4_ADDR
return status is IKMP_NO_ERROR
crypto_isakmp_process_block: src 172.18.124.99, dest 172.18.124.157
OAK_MM exchange
ISAKMP (0): processing KE payload. Message ID = 0

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

ISAKMP (0): processing vendor id payload

ISAKMP (0): processing vendor id payload

return status is IKMP_NO_ERROR
crypto_isakmp_process_block: src 172.18.124.99, dest 172.18.124.157
OAK_MM exchange
ISAKMP (0): processing ID payload. Message ID = 0
ISAKMP (0): processing HASH payload. Message ID = 0
ISAKMP (0): processing NOTIFY payload 24578 protocol 1
spi 0, message ID = 0
ISAKMP (0): processing notify INITIAL_CONTACTIPSEC(key_engine):
got a queue event...
IPSEC(key_engine_delete_sas): rec'd delete notify from ISAKMP
IPSEC(key_engine_delete_sas): delete all SAs shared with 172.18.124.99

ISAKMP (0): SA has been authenticated

ISAKMP (0): ID payload
next-payload : 8
type : 1
protocol : 17
port : 500
length : 8
ISAKMP (0): Total payload length: 12
return status is IKMP_NO_ERROR
crypto_isakmp_process_block: src 172.18.124.99, dest 172.18.124.157
OAK_QM exchange
ISAKMP (0:0): Need XAUTH
ISAKMP/xauth: request attribute XAUTH_TYPE
ISAKMP/xauth: request attribute XAUTH_USER_NAME
ISAKMP/xauth: request attribute XAUTH_USER_PASSWORD
ISAKMP (0:0): initiating peer config to 172.18.124.99.
ID = 2218162690 (0x84367a02)
return status is IKMP_NO_ERROR
```

```
crypto_isakmp_process_block: src 172.18.124.99, dest 172.18.124.157
ISAKMP_TRANSACTION exchange
ISAKMP (0:0): processing transaction payload from 172.18.124.99.
Message ID = 2156074032
ISAKMP: Config payload CFG_REPLY
return status is IKMP_ERR_NO_RETRANS109005: Authentication succeeded
for user 'pixb' from 172.18.124.99/0 to 0.0.0.0/0 on
interface IKE-XAUTH
ISAKMP (0:0): initiating peer config to 172.18.124.99.
ID = 2218162690 (0x84367a02)
109005: Authentication succeeded for user 'pixb' from 172.18.124.157
crypto_isakmp_process_block: src 172.18.124.99, dest 172.18.124.157
ISAKMP_TRANSACTION exchange
ISAKMP (0:0): processing transaction payload from 172.18.124.99.
Message ID = 2156497080
ISAKMP: Config payload CFG_ACK
ISAKMP (0:0): initiating peer config to 172.18.124.99.
ID = 393799466 (0x1778e72a)
return status is IKMP_NO_ERROR
crypto_isakmp_process_block: src 172.18.124.99, dest 172.18.124.157
ISAKMP_TRANSACTION exchange
ISAKMP (0:0): processing transaction payload from 172.18.124.99.
Message ID = 2156156112
ISAKMP: Config payload CFG_ACK
ISAKMP (0:0): peer accepted the address!
return status is IKMP_NO_ERROR.99/0 to 0.0.0.0/0 on
interface IKE-XAUTH

crypto_isakmp_process_block: src 172.18.124.99, dest 172.18.124.157
OAK_QM exchange
oakley_process_quick_mode:
OAK_QM_IDLE
ISAKMP (0): processing SA payload. Message ID = 2323118710

ISAKMP : Checking IPSec proposal 1

ISAKMP: transform 1, ESP_DES
ISAKMP: attributes in transform:
ISAKMP: authenticator is HMAC-MD5
ISAKMP: encaps is 1
ISAKMP (0): atts are acceptable.IPSEC(validate_proposal_request):
proposal part #1,
(key eng. msg.) dest= 172.18.124.157, src= 172.18.124.99,
dest_proxy= 10.1.1.0/255.255.255.0/0/0 (type=4),
src_proxy= 192.168.1.1/255.255.255.255/0/0 (type=1),
protocol= ESP, transform= ESP-Des esp-md5-hmac ,
lifedur= 0s and 0kb,
spi= 0x0(0), conn_id= 0, keysize= 0, flags= 0x4

ISAKMP (0): processing NONCE payload. Message ID = 2323118710

ISAKMP (0): processing ID payload. Message ID = 2323118710
ISAKMP (0): ID_IPV4_ADDR src 192.168.1.1 prot 0 port 0
ISAKMP (0): processing ID payload. Message ID = 2323118710
ISAKMP (0): ID_IPV4_ADDR_SUBNET dst 10.1.1.0/255.255.255.0
prot 0 port 0
IPSEC(key_engine): got a queue event...
IPSEC(spi_response): getting spi 0xeeae8930(4004415792) for SA
from 172.18.124.99 to 172.18.124.157 for prot 3

return status is IKMP_NO_ERROR4
crypto_isakmp_process_block: src 172.18.124.99, dest 172.18.124.157
OAK_QM exchange
oakley_process_quick_mode:
```

```
OAK_QM_AUTH_AWAITmap_alloc_entry: allocating entry 1
map_alloc_entry: allocating entry 2

ISAKMP (0): Creating IPSec SAs
inbound SA from 172.18.124.99 to 172.18.124.157
(proxy 192.168.1.1 to 10.1.1.0)
has spi 4004415792 and conn_id 1 and flags 4
outbound SA from 172.18.124.157 to 172.18.124.99
(proxy 10.1.1.0 to 192.168.1.1)
has spi 1281287211 and conn_id 2 and flags 4
IPSEC(key_engine): got a queue event...
IPSEC(initialize_sas): ,
(key eng. msg.) dest= 172.18.124.157, src= 172.18.124.99,
dest_proxy= 10.1.1.0/255.255.255.0/0/0 (type=4),
src_proxy= 192.168.1.1/0.0.0.0/0/0 (type=1),
protocol= ESP, transform= esp-des esp-md5-hmac ,
lifedur= 0s and 0kb,
spi= 0xeeae8930(4004415792), conn_id= 1, keysize= 0, flags= 0x4
IPSEC(initialize_sas): ,
(key eng. msg.) src= 172.18.124.157, dest= 172.18.124.99,
src_proxy= 10.1.1.0/255.255.255.0/0/0 (type=4),
dest_proxy= 192.168.1.1/0.0.0.0/0/0 (type=1),
protocol= ESP, transform= esp-des esp-md5-hmac ,
lifedur= 0s and 0kb,
spi= 0x4c5ee42b(1281287211), conn_id= 2, keysize= 0, flags= 0x4

return status is IKMP_NO_ERROR02101: decaps: rec'd
IPSEC packet has invalid spi for destaddr=172.18.124.157,
prot=esp, spi=0xeeae8930(0)
602301: sa created, (sa) sa_dest= 172.18.124.157, sa_prot= 50,
sa_spi= 0xeeae8930(4004415792), sa_trans= esp-des esp-md5-hmac,
 sa_conn_id= 1

602301: sa created, (sa) sa_dest= 172.18.124.99, sa_prot= 50,
sa_spi= 0x4c5ee42b(1281287211), sa_trans= esp-des esp-md5-hmac,
 sa_conn_id= 2

109011: Authen Session Start: user 'pixb', sid 5
109015: Authorization denied (acl=115) for user 'pixb' from
192.168.1.1/0 to 10.1.1.40/8 on interface outside
109015: Authorization denied (acl=115) for user 'pixb' from
192.168.1.1/0 to 10.1.1.40/8 on interface outside
109015: Authorization denied (acl=115) for user 'pixb' from
192.168.1.1/0 to 10.1.1.40/8 on interface outside
109015: Authorization denied (acl=115) for user 'pixb' from
192.168.1.1/0 to 10.1.1.40/8 on interface outside

goss-pixb#
goss-pixb#show uauth
Current Most Seen
Authenticated Users 1 1
Authen In Progress 0 1
ipsec user 'pixb' at 192.168.1.1, authenticated
access-list 115
goss-pixb#show access-list
access-list 108 permit ip 10.1.1.0 255.255.255.0 192.168.1.0
255.255.255.0 (hitcnt=18)
access-list 125 permit ip host 10.1.1.41 any (hitcnt=0)
access-list dynacl4 permit ip 10.1.1.0 255.255.255.0 host
192.168.1.1 (hitcnt=0)
access-list 115 permit ip any host 10.1.1.41 (hitcnt=0)
access-list 115 deny ip any host 10.1.1.42 (hitcnt=0)
```

## Debug y show - Xauth con grupo de VPN

```
crypto_isakmp_process_block: src 172.18.124.96,
dest 172.18.124.157
goss-pixb#show debug
debug crypto ipsec 1
debug crypto isakmp 1
debug crypto engine
debug fover status
tx Off
rx Off
open Off
cable Off
txdmp Off
rxdmp Off
ifc Off
rxip Off
txip Off
get Off
put Off
verify Off
switch Off
fail Off
fmsg Off
goss-pixb#
crypto_isakmp_process_block: src 172.18.124.99, dest 172.18.124.157
OAK_AG exchange
ISAKMP (0): processing SA payload. message ID = 0

ISAKMP (0): Checking ISAKMP transform 1 against priority 10 policy
ISAKMP: encryption DES-CBC
ISAKMP: hash MD5
ISAKMP: default group 1
ISAKMP: auth pre-share
ISAKMP (0): atts are acceptable. Next payload is 3
ISAKMP (0): processing KE payload. message ID = 0

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

ISAKMP (0): processing ID payload. message ID = 0
ISAKMP (0): processing vendor id payload

ISAKMP (0): speaking to a VPN3000 client

ISAKMP (0): ID payload
next-payload : 10
type : 1
protocol : 17
port : 500
length : 8
ISAKMP (0): Total payload length: 12
return status is IKMP_NO_ERROR
crypto_isakmp_process_block: src 172.18.124.99, dest 172.18.124.157
OAK_AG exchange
ISAKMP (0): processing HASH payload. message ID = 0
ISAKMP (0): SA has been authenticated
return status is IKMP_NO_ERROR
crypto_isakmp_process_block: src 172.18.124.99, dest 172.18.124.157
OAK_QM exchange
ISAKMP (0:0): Need XAUTH
ISAKMP/xauth: request attribute XAUTH_TYPE
ISAKMP/xauth: request attribute XAUTH_USER_NAME
ISAKMP/xauth: request attribute XAUTH_USER_PASSWORD
ISAKMP (0:0): initiating peer config to 172.18.124.99.
```

```
ID = 1396280702 (0x53398d7e)
return status is IKMP_NO_ERROR
crypto_isakmp_process_block: src 172.18.124.99, dest 172.18.124.157
ISAKMP_TRANSACTION exchange
ISAKMP (0:0): processing transaction payload from 172.18.124.99.
message ID = 2156608344
ISAKMP: Config payload CFG_REPLY
return status is IKMP_ERR_NO_RETRANS10
ISAKMP (0:0): initiating peer config to 172.18.124.99.
ID = 1396280702 (0x53398d7e)9
crypto_isakmp_process_block: src 172.18.124.99, dest 172.18.124.157
ISAKMP_TRANSACTION exchange
ISAKMP (0:0): processing transaction payload from 172.18.124.99.
message ID = 2156115984
ISAKMP: Config payload CFG_ACK
ISAKMP (0:0): peer accepted the address!
ISAKMP (0:0): processing saved QM.
oakley_process_quick_mode:
OAK_QM_IDLE
ISAKMP (0): processing SA payload. message ID = 1697984837

ISAKMP : Checking IPSec proposal 1

ISAKMP: transform 1, ESP_DES
ISAKMP: attributes in transform:
ISAKMP: authenticator is HMAC-MD5
ISAKMP: encaps is 1
ISAKMP (0): atts are acceptable.
IPSEC(validate_proposal_request): proposal part #1,
(key eng. msg.) dest= 172.18.124.157, src= 172.18.124.99,
dest_proxy= 172.18.124.157/255.255.255.255/0/0 (type=1),
src_proxy= 192.168.1.1/255.255.255.255/0/0 (type=1),
protocol= ESP, transform= esp-des esp-md5-hmac ,
lifedur= 0s and 0kb,
spi= 0x0(0), conn_id= 0, keysize= 0, flags= 0x4

ISAKMP (0): processing NONCE payload. message ID = 1697984837

ISAKMP (0): processing ID payload. message ID = 1697984837
ISAKMP (0): ID_IPV4_ADDR src 192.168.1.1 prot 0 port 0
ISAKMP (0): processing ID payload. message ID = 1697984837
ISAKMP (0): ID_IPV4_ADDR dst 172.18.124.157 prot 0 port 0
ISAKMP (0): processing NOTIFY payload 24578 protocol 1
spi 0, message ID = 1697984837
ISAKMP (0): processing notify INITIAL_CONTACTIPSEC(key_engine):
got a queue event...
IPSEC(key_engine_delete_sas): rec'd delete notify from ISAKMP
IPSEC(key_engine_delete_sas): delete all SAs shared with 172.18.124.99
IPSEC(key_engine): got a queue event...
IPSEC(spi_response): getting spi 0x6a9d3f79(1788690297) for SA
from 172.18.124.99 to 172.18.124.157 for prot 3

return status is IKMP_NO_ERROR0
crypto_isakmp_process_block: src 172.18.124.99, dest 172.18.124.157
OAK_QM exchange
oakley_process_quick_mode:
OAK_QM_AUTH_AWAITmap_alloc_entry: allocating entry 1
map_alloc_entry: allocating entry 2

ISAKMP (0): Creating IPSec SAs
inbound SA from 172.18.124.99 to 172.18.124.157
(proxy 192.168.1.1 to 172.18.124.157)
has spi 1788690297 and conn_id 1 and flags 4
outbound SA from 172.18.124.157 to 172.18.124.99
```

```
(proxy 172.18.124.157 to 192.168.1.1)
has spi 2854452814 and conn_id 2 and flags 4
IPSEC(key_engine): got a queue event...
IPSEC(initialize_sas): ,
(key eng. msg.) dest= 172.18.124.157, src= 172.18.124.99,
dest_proxy= 172.18.124.157/0.0.0.0/0/0 (type=1),
src_proxy= 192.168.1.1/0.0.0.0/0/0 (type=1),
protocol= ESP, transform= esp-des esp-md5-hmac ,
lifedur= 0s and 0kb,
spi= 0x6a9d3f79(1788690297), conn_id= 1, keysize= 0, flags= 0x4
IPSEC(initialize_sas): ,
(key eng. msg.) src= 172.18.124.157, dest= 172.18.124.99,
src_proxy= 172.18.124.157/0.0.0.0/0/0 (type=1),
dest_proxy= 192.168.1.1/0.0.0.0/0/0 (type=1),
protocol= ESP, transform= esp-des esp-md5-hmac ,
lifedur= 0s and 0kb,
spi= 0xaa237e4e(2854452814), conn_id= 2, keysize= 0, flags= 0x4

return status is IKMP_NO_ERROR05: Authentication succeeded
for user 'pixc' from 172.18.124.99/0 to 0.0.0.0/0 on interface IKE-XAUTH
602301: sa created, (sa) sa_dest= 172.18.124.157, sa_prot= 50,
sa_spi= 0x6a9d3f79(1788690297), sa_trans= esp-des esp-md5-hmac ,
sa_conn_id= 1

602301: sa created, (sa) sa_dest= 172.18.124.99, sa_prot= 50,
sa_spi= 0xaa237e4e(2854452814), sa_trans= esp-des esp-md5-hmac ,
sa_conn_id= 2

109011: Authen Session Start: user 'pixc', sid 19

crypto_isakmp_process_block: src 172.18.124.99, dest 172.18.124.157
OAK_QM exchange
oakley_process_quick_mode:
OAK_QM_IDLE
ISAKMP (0): processing SA payload. message ID = 3361949217

ISAKMP : Checking IPSec proposal 1

ISAKMP: transform 1, ESP_DES
ISAKMP: attributes in transform:
ISAKMP: authenticator is HMAC-MD5
ISAKMP: encaps is 1
ISAKMP (0): atts are acceptable.
IPSEC(validate_proposal_request): proposal part #1,
(key eng. msg.) dest= 172.18.124.157, src= 172.18.124.99,
dest_proxy= 10.1.1.0/255.255.255.0/0/0 (type=4),
src_proxy= 192.168.1.1/255.255.255.255/0/0 (type=1),
protocol= ESP, transform= esp-des esp-md5-hmac ,
lifedur= 0s and 0kb,
spi= 0x0(0), conn_id= 0, keysize= 0, flags= 0x4

ISAKMP (0): processing NONCE payload. message ID = 3361949217

ISAKMP (0): processing ID payload. message ID = 3361949217
ISAKMP (0): ID_IPV4_ADDR src 192.168.1.1 prot 0 port 0
ISAKMP (0): processing ID payload. message ID = 3361949217
ISAKMP (0): ID_IPV4_ADDR_SUBNET dst 10.1.1.0/255.255.255.0 prot 0 port 0
IPSEC(key_engine): got a queue event...
IPSEC(spi_response): getting spi 0xfec4c3aa(4274308010) for SA
from 172.18.124.99 to 172.18.124.157 for prot 3

return status is IKMP_NO_ERROR4
crypto_isakmp_process_block: src 172.18.124.99, dest 172.18.124.157
OAK_QM exchange
```

```
oakley_process_quick_mode:
OAK_QM_AUTH_AWAITmap_alloc_entry: allocating entry 4
map_alloc_entry: allocating entry 3

ISAKMP (0): Creating IPSec SAs
inbound SA from 172.18.124.99 to 172.18.124.157
(proxy 192.168.1.1 to 10.1.1.0)
has spi 4274308010 and conn_id 4 and flags 4
outbound SA from 172.18.124.157 to 172.18.124.99
(proxy 10.1.1.0 to 192.168.1.1)
has spi 798459812 and conn_id 3 and flags 4
IPSEC(key_engine): got a queue event...
IPSEC(initialize_sas): ,
(key eng. msg.) dest= 172.18.124.157, src= 172.18.124.99,
dest_proxy= 10.1.1.0/255.255.255.0/0/0 (type=4),
src_proxy= 192.168.1.1/0.0.0.0/0/0 (type=1),
protocol= ESP, transform= esp-des esp-md5-hmac ,
lifedur= 0s and 0kb,
spi= 0xfec4c3aa(4274308010), conn_id= 4, keysize= 0, flags= 0x4
IPSEC(initialize_sas): ,
(key eng. msg.) src= 172.18.124.157, dest= 172.18.124.99,
src_proxy= 10.1.1.0/255.255.255.0/0/0 (type=4),
dest_proxy= 192.168.1.1/0.0.0.0/0/0 (type=1),
protocol= ESP, transform= esp-des esp-md5-hmac ,
lifedur= 0s and 0kb,
spi= 0x2f9787a4(798459812), conn_id= 3, keysize= 0, flags= 0x4

return status is IKMP_NO_ERROR02101: decaps: rec'd IPSEC
packet has invalid spi for destaddr=172.18.124.157, prot=esp,
spi=0xfec4c3aa(0)
602301: sa created, (sa) sa_dest= 172.18.124.157, sa_prot= 50,
sa_spi= 0xfec4c3aa(4274308010), sa_trans= esp-des esp-md5-hmac ,
sa_conn_id= 4

602301: sa created, (sa) sa_dest= 172.18.124.99, sa_prot= 50,
sa_spi= 0x2f9787a4(798459812), sa_trans= esp-des esp-md5-hmac ,
sa_conn_id= 3


goss-pixb#show uauth
Current Most Seen
Authenticated Users 1 1
Authen In Progress 0 1
ipsec user 'pixc' at 192.168.1.1, authenticated
goss-pixb#show crypto ipsec sa


interface: outside
Crypto map tag: mymap, local addr. 172.18.124.157

local ident (addr/mask/prot/port): (172.18.124.157/255.255.255.255/0/0)
remote ident (addr/mask/prot/port): (192.168.1.1/255.255.255.255/0/0)
current_peer: 172.18.124.99
dynamic allocated peer ip: 192.168.1.1

PERMIT, flags={}
#pkts encaps: 0, #pkts encrypt: 0, #pkts digest 0
#pkts decaps: 0, #pkts decrypt: 0, #pkts verify 0
#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.: 172.18.124.157, remote crypto endpt.: 172.18.124.99
```

```
path mtu 1500, ipsec overhead 56, media mtu 1500
current outbound spi: aa237e4e

inbound esp sas:
spi: 0x6a9d3f79(1788690297)
transform: esp-des esp-md5-hmac ,
<--- More ---> in use settings ={Tunnel, }
slot: 0, conn id: 1, crypto map: mymap
sa timing: remaining key lifetime (k/sec): (4608000/28519)
IV size: 8 bytes
replay detection support: Y


inbound ah sas:


inbound pcp sas:


outbound esp sas:
spi: 0xaa237e4e(2854452814)
transform: esp-des esp-md5-hmac ,
in use settings ={Tunnel, }
slot: 0, conn id: 2, crypto map: mymap
sa timing: remaining key lifetime (k/sec): (4608000/28510)
IV size: 8 bytes
replay detection support: Y


outbound ah sas:
<--- More --->

outbound pcp sas:



local ident (addr/mask/prot/port): (10.1.1.0/255.255.255.0/0/0)
remote ident (addr/mask/prot/port): (192.168.1.1/255.255.255.255/0/0)
current_peer: 172.18.124.99
dynamic allocated peer ip: 192.168.1.1

PERMIT, flags={}
#pkts encaps: 4, #pkts encrypt: 4, #pkts digest 4
#pkts decaps: 4, #pkts decrypt: 4, #pkts verify 4
#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.: 172.18.124.157, remote crypto
endpt.:172.18.124.99
path mtu 1500, ipsec overhead 56, media mtu 1500
current outbound spi: 2f9787a4

inbound esp sas:
spi: 0xfec4c3aa(4274308010)
<--- More ---> transform: esp-des esp-md5-hmac ,
in use settings ={Tunnel, }
slot: 0, conn id: 4, crypto map: mymap
sa timing: remaining key lifetime (k/sec): (4607999/27820)
IV size: 8 bytes
replay detection support: Y
```

```
inbound ah sas:


inbound pcp sas:


outbound esp sas:
spi: 0x2f9787a4(798459812)
transform: esp-des esp-md5-hmac ,
in use settings ={Tunnel, }
slot: 0, conn id: 3, crypto map: mymap
sa timing: remaining key lifetime (k/sec): (4607999/27820)
IV size: 8 bytes
replay detection support: Y


<--- More ---> outbound ah sas:


outbound pcp sas:
```

## Debug y show - Xauth con los ACL por usuario transferibles

```
crypto_isakmp_process_block: src 10.66.79.229,
dest 10.66.79.69
VPN Peer: ISAKMP: Added new peer: ip:10.66.79.229
Total VPN Peers:1
VPN Peer: ISAKMP: Peer ip:10.66.79.229 Ref cnt incremented to:1
Total VPN Peers:1
OAK_AG exchange
ISAKMP (0): processing SA payload. message ID = 0

ISAKMP (0): Checking ISAKMP transform 1 against priority 20 policy
ISAKMP: encryption 3DES-CBC
ISAKMP: hash SHA
ISAKMP: default group 2
ISAKMP: extended auth pre-share
ISAKMP: life type in seconds
ISAKMP: life duration (VPI) of 0x0 0x20 0xc4 0x9b
ISAKMP (0): atts are not acceptable. Next payload is 3
ISAKMP (0): Checking ISAKMP transform 2 against priority 20 policy
ISAKMP: encryption 3DES-CBC
ISAKMP: hash MD5
ISAKMP: default group 2
ISAKMP: extended auth pre-share
ISAKMP: life type in seconds
ISAKMP: life duration (VPI) of 0x0 0x20 0xc4 0x9b
ISAKMP (0): atts are not acceptable. Next payload is 3
ISAKMP (0): Checking ISAKMP transform 3 against priority 20 policy
ISAKMP: encryption 3DES-CBC
ISAKMP: hash SHA
ISAKMP: default group 2
ISAKMP: auth pre-share
ISAKMP: life type in seconds
ISAKMP: life duration (VPI) of 0x0 0x20 0xc4 0x9b
ISAKMP (0): atts are not acceptable. Next payload is 3
ISAKMP (0): Checking ISAKMP transform 4 against priority 20 policy
ISAKMP: encryption 3DES-CBC
ISAKMP: hash MD5
ISAKMP: default group 2
ISAKMP: auth pre-share
ISAKMP: life type in seconds
```

```
ISAKMP: life duration (VPI) of 0x0 0x20 0xc4 0x9b
ISAKMP (0): atts are not acceptable. Next payload is 3
ISAKMP (0): Checking ISAKMP transform 5 against priority 20 policy
ISAKMP: encryption DES-CBC
ISAKMP: hash SHA
ISAKMP: default group 2
ISAKMP: extended auth pre-share
ISAKMP: life type in seconds
ISAKMP: life duration (VPI) of 0x0 0x20 0xc4 0x9b
ISAKMP (0): atts are not acceptable. Next payload is 3
ISAKMP (0): Checking ISAKMP transform 6 against priority 20 policy
ISAKMP: encryption DES-CBC
ISAKMP: hash MD5
ISAKMP: default group 2
ISAKMP: extended auth pre-share
ISAKMP: life type in seconds
ISAKMP: life duration (VPI) of 0x0 0x20 0xc4 0x9b
ISAKMP (0): atts are acceptable. Next payload is 3
ISAKMP (0): processing KE payload. message ID = 0

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

ISAKMP (0): processing ID payload. message ID = 0
ISAKMP (0): processing vendor id payload

ISAKMP (0): received xauth v6 vendor id

ISAKMP (0): processing vendor id payload

ISAKMP (0): remote peer supports dead peer detection

ISAKMP (0): processing vendor id payload

ISAKMP (0): speaking to a Unity client

ISAKMP (0): ID payload
next-payload : 10
type : 2
protocol : 17
port : 500
length : 10
ISAKMP (0): Total payload length: 14
return status is IKMP_NO_ERROR
crypto_isakmp_process_block: src 10.66.79.229, dest 10.66.79.69
OAK_AG exchange
ISAKMP (0): processing HASH payload. message ID = 0
ISAKMP (0): processing NOTIFY payload 24578 protocol 1
spi 0, message ID = 0RADIUS_GET_PASS
RADIUS_REQUEST
raidus.c: rad_mkpkt_authen
attribute:
type 1, length 10, content:
80917fb0: 74 65 73 74 75 73 65 72 | testuser
attribute:
type 4, length 6, content:
80917fb0: 0a 42 | .B
80917fc0: 4f 45 | OE
attribute:
type 5, length 6, content:
80917fd0: 00 00 00 01 | ....

ISAKMP (0): processing notify INITIAL_CONTACTrip 0x80791f00
: chall_state ''
: state 0x7
: timer 0x0
: info 0x5d5ba513
session_id 0x5d5ba513
request_id 0x2
user 'testuser'
app 0
reason 2
sip 10.66.79.244
type 1
rad_procpkt: ACCEPT
attribute:
type 8, length 6, content:
809186f0: ff ff | ..
80918700: ff ff | ..
RADIUS_RCVD
attribute:
type 26, length 67, content:
Vendor ID 0 0 0 9, type=1, len=61:
80918700: 41 43 53 3a 43 69 | ACS:Ci
80918710: 73 63 6f 53 65 63 75 72 65 2d 44 65 66 69 6e 65
| scoSecure-Define
80918720: 64 2d 41 43 4c 3d 23 41 43 53 41 43 4c 23 2d 50
| d-ACL=#ACSACL#-P
80918730: 49 58 2d 56 50 4e 43 6c 69 65 6e 74 2d 33 64 33
| IX-VPNClient-3d3
80918740: 32 37 38 31 35 | 27815
RADIUS_RCVD
RADIUS_REQUEST
raidus.c: rad_mkpkt_authen
attribute:
type 1, length 33, content:
809186d0: 23 41 43 53 41 43 4c 23 2d 50 49 58 | #ACSACL#-PIX
809186e0: 2d 56 50 4e 43 6c 69 65 6e 74 2d 33 64 33 32 37
| -VPNClient-3d327
809186f0: 38 31 35 | 815
attribute:
type 4, length 6, content:
809186f0: 0a 42 4f 45 | .BOE
attribute:
type 5, length 6, content:
80918700: 00 00 00 | ...
80918710: 02 | .
IPSEC(key_engine): got a queue event...rip 0x80791f00
: chall_state ''
: state 0x7
: timer 0x0
: info 0x5d5ba513
session_id 0x5d5ba513
request_id 0x3
user '#ACSACL#-PIX-VPNClient-3d327815'
app 0
reason 2
sip 10.66.79.244
type 1
rad_procpkt: ACCEPT
attribute:
type 26, length 46, content:
Vendor ID 0 0 0 9, type=1, len=40:
80918e20: 69 70 3a 69 6e 61 63 6c 23 31 3d 70 | ip:inacl#1=p
80918e30: 65 72 6d 69 74 20 69 70 20 61 6e 79 20 68 6f 73
| ermit ip any hos
80918e40: 74 20 31 30 2e 31 2e 31 2e 32 | t 10.1.1.2
RADIUS_RCVD
RADIUS_RCVD
```

```
RADIUS_ACCESS_ACCEPT:normal termination
RADIUS_DELETE

IPSEC(key_engine_delete_sas): rec'd delete notify from ISAKMP
IPSEC(key_engine_delete_sas): delete all SAs shared with 10.66.79.229

ISAKMP (0): SA has been authenticated
return status is IKMP_NO_ERROR
ISAKMP (0): sending phase 1 RESPONDER_LIFETIME notify
ISAKMP (0): sending NOTIFY message 24576 protocol 1
ISAKMP/xauth: request attribute XAUTH_TYPE
ISAKMP/xauth: request attribute XAUTH_USER_NAME
ISAKMP/xauth: request attribute XAUTH_USER_PASSWORD
ISAKMP (0:0): initiating peer config to 10.66.79.229.
ID = 3250273953 (0xc1bb3ea1)
crypto_isakmp_process_block: src 10.66.79.229, dest 10.66.79.69
ISAKMP_TRANSACTION exchange
ISAKMP (0:0): processing transaction payload from 10.66.79.229.
 message ID = 2167001532
ISAKMP: Config payload CFG_REPLY
return status is IKMP_ERR_NO_RETRANS
ISAKMP (0:0): initiating peer config to 10.66.79.229.
ID = 1530000247 (0x5b31f377)
crypto_isakmp_process_block: src 10.66.79.229, dest 10.66.79.69
ISAKMP_TRANSACTION exchange
ISAKMP (0:0): processing transaction payload from 10.66.79.229.
message ID = 2167001532
ISAKMP: Config payload CFG_ACK
return status is IKMP_NO_ERROR
crypto_isakmp_process_block: src 10.66.79.229, dest 10.66.79.69
ISAKMP_TRANSACTION exchange
ISAKMP (0:0): processing transaction payload from 10.66.79.229.
message ID = 2167001532
ISAKMP: Config payload CFG_REQUEST
ISAKMP (0:0): checking request:
ISAKMP: attribute IP4_ADDRESS (1)
ISAKMP: attribute IP4_NETMASK (2)
ISAKMP: attribute IP4_DNS (3)
ISAKMP: attribute IP4_NBNS (4)
ISAKMP: attribute ADDRESS_EXPIRY (5)
Unsupported Attr: 5
ISAKMP: attribute APPLICATION_VERSION (7)
Unsupported Attr: 7
ISAKMP: attribute UNKNOWN (28672)
Unsupported Attr: 28672
ISAKMP: attribute UNKNOWN (28673)
Unsupported Attr: 28673
ISAKMP: attribute ALT_DEF_DOMAIN (28674)
ISAKMP: attribute ALT_SPLIT_INCLUDE (28676)
ISAKMP: attribute ALT_PFS (28679)
ISAKMP: attribute UNKNOWN (28680)
Unsupported Attr: 28680
ISAKMP: attribute UNKNOWN (28677)
Unsupported Attr: 28677
ISAKMP (0:0): responding to peer config from 10.66.79.229.
ID = 2397668523
return status is IKMP_NO_ERROR
crypto_isakmp_process_block: src 10.66.79.229, dest 10.66.79.69
OAK_QM exchange
oakley_process_quick_mode:
OAK_QM_IDLE
ISAKMP (0): processing SA payload. message ID = 2858414843

ISAKMP : Checking IPSec proposal 1
```

```
ISAKMP: transform 1, ESP_3DES
ISAKMP: attributes in transform:
ISAKMP: authenticator is HMAC-MD5
ISAKMP: encaps is 1
ISAKMP: SA life type in seconds
ISAKMP: SA life duration (VPI) of 0x0 0x20 0xc4 0x9b
IPSEC(validate_proposal): transform proposal
(prot 3, trans 3, hmac_alg 1) not supported

ISAKMP (0): atts not acceptable. Next payload is 0
ISAKMP (0): skipping next ANDed proposal (1)
ISAKMP : Checking IPSec proposal 2

ISAKMP: transform 1, ESP_3DES
ISAKMP: attributes in transform:
ISAKMP: authenticator is HMAC-SHA
ISAKMP: encaps is 1
ISAKMP: SA life type in seconds
ISAKMP: SA life duration (VPI) of 0x0 0x20 0xc4 0x9b
IPSEC(validate_proposal): transform proposal
(prot 3, trans 3, hmac_alg 2) not supported

ISAKMP (0): atts not acceptable. Next payload is 0
ISAKMP (0): skipping next ANDed proposal (2)
ISAKMP : Checking IPSec proposal 3

ISAKMP: transform 1, ESP_3DES
ISAKMP: attributes in transform:
ISAKMP: authenticator is HMAC-MD5
ISAKMP: encaps is 1
ISAKMP: SA life type in seconds
ISAKMP: SA life duration (VPI) of 0x0 0x20 0xc4 0x9b IPSEC
(validate_proposal): transform proposal (prot 3, trans 3, hmac_alg 1)
not supported

ISAKMP (0): atts not acceptable. Next payload is 0
ISAKMP : Checking IPSec proposal 4

ISAKMP: transform 1, ESP_3DES
ISAKMP: attributes in transform:
ISAKMP: authenticator is HMAC-SHA
ISAKMP: encaps is 1
ISAKMP: SA life type in seconds
ISAKMP: SA life duration (VPI) of 0x0 0x20 0xc4 0x9b IPSEC
(validate_proposal): transform proposal (prot 3, trans 3, hmac_alg 2)
not supported

ISAKMP (0): atts not acceptable. Next payload is 0
ISAKMP : Checking IPSec proposal 5

ISAKMP: transform 1, ESP_DES
ISAKMP: attributes in transform:
ISAKMP: authenticator is HMAC-MD5
ISAKMP: encaps is 1
ISAKMP: SA life type in seconds
ISAKMP: SA life duration (VPI) of 0x0 0x20 0xc4 0x9b
ISAKMP (0): atts are acceptable.
ISAKMP (0): bad SPI size of 2 octets!
ISAKMP : Checking IPSec proposal 6

ISAKMP: transform 1, ESP_DES
ISAKMP: attributes in transform:
crypto_isakmp_process_block: src 10.66.79.229, dest 10.66.79.69
```

```
OAK_QM exchange
crypto_isakmp_process_block: src 10.66.79.229, dest 10.66.79.69
OAK_QM exchange
oakley_process_quick_mode:
OAK_QM_AUTH_AWAIT
ISAKMP (0): Creating IPSec SAs
sv2-4(config)#
sv2-4(config)#
sv2-4(config)#
sv2-4(config)#
sv2-4(config)#show uauth
Current Most Seen
Authenticated Users 1 1
Authen In Progress 0 1
ipsec user 'testuser' at 192.168.1.1, authenticated
access-list #ACSACL#-PIX-VPNClient-3d327815
sv2-4(config)#show access-list
access-list 108; 1 elements
access-list 108 permit ip 10.1.1.0 255.255.255.0 192.168.1.0
255.255.255.0 (hitcnt=38)
access-list #ACSACL#-PIX-VPNClient-3d327815; 1 elements
access-list #ACSACL#-PIX-VPNClient-3d327815 permit ip any host
10.1.1.2 (hitcnt=15)
access-list dynacl4; 1 elements
access-list dynacl4 permit ip host 10.66.79.69
host 192.168.1.1 (hitcnt=0)
access-list dynacl5; 1 elements
access-list dynacl5 permit ip any host 192.168.1.1 (hitcnt=15)
sv2-4(config)#show access-list
access-list 108; 1 elements
access-list 108 permit ip 10.1.1.0 255.255.255.0
192.168.1.0 255.255.255.0 (hitcnt=42)
access-list #ACSACL#-PIX-VPNClient-3d327815; 1 elements
access-list #ACSACL#-PIX-VPNClient-3d327815 permit ip any
host 10.1.1.2 (hitcnt=17)
access-list dynacl4; 1 elements
access-list dynacl4 permit ip host 10.66.79.69 host
192.168.1.1 (hitcnt=0)
access-list dynacl5; 1 elements
access-list dynacl5 permit ip any host 192.168.1.1 (hitcnt=17)



sv2-4(config)#show crypto map

Crypto Map: "mymap" interfaces: { outside }
client configuration address respond
client authentication AuthInbound

Crypto Map "mymap" 10 ipsec-isakmp
Dynamic map template tag: dynmap

Crypto Map "mymap" 20 ipsec-isakmp
Peer = 10.66.79.229
access-list dynacl6; 1 elements
access-list dynacl6 permit ip host 10.66.79.69
host 192.168.1.1 (hitcnt=0)
dynamic (created from dynamic map dynmap/10)
Current peer: 10.66.79.229
Security association lifetime: 4608000 kilobytes/28800 seconds
PFS (Y/N): N
Transform sets={ myset, }

Crypto Map "mymap" 30 ipsec-isakmp
```

```
Peer = 10.66.79.229
access-list dynacl7; 1 elements
access-list dynacl7 permit ip any host 192.168.1.1 (hitcnt=0)
dynamic (created from dynamic map dynmap/10)
Current peer: 10.66.79.229
Security association lifetime: 4608000 kilobytes/28800 seconds
PFS (Y/N): N
Transform sets={ myset, }
sv2-4(config)
```

## Información Relacionada

- Página de Soporte de PIX
- Referencias de Comando PIX
- Solicitudes de Comentarios (RFC)
- Página de soporte de Cisco Secure ACS para Windows
- Página de soporte de Cisco Secure ACS para Windows
- Página de soporte de TACACS/TACACS+
- TACACS+ en documentación de IOS
- Página de soporte de RADIUS
- Soporte Técnico y Documentación - Cisco Systems