Como adicionar a autenticação de AAA (Xauth) para o PIX IPSec 5.2 e posteriores

Índice

Introdução

O RAIO e a autenticação TACACS+ e a contabilidade, e em certa medida, autorização, são feitos para o Cisco Secure VPN Client 1.1 e os túneis de cliente de hardware do Cisco VPN 3000 2.5 que terminam no PIX. Mudanças em PIX 5.2 e autenticação extendida (XAUTH) mais atrasada sobre aquele das versões anterior que incluem o suporte a lista de acesso do Authentication, Authorization, and Accounting (AAA) para controlar que usuários autenticados podem alcançar e apoiar para a terminação de Xauth do Cisco VPN 3000 Client 2.5. **O comando vpn group split-tunneling** permite o VPN 3000 Client de conectar ao mesmo tempo à rede dentro do PIX assim como de outras redes (por exemplo, o Internet). Em PIX 5.3 e mais atrasado, a mudança AAA sobre versões de código precedente é que as portas RADIUS são configuráveis. Em PIX 6.0, o apoio para o cliente VPN 3.x é adicionado. Isto exige o grupo Diffie-Hellman 2.

Pré-requisitos

Requisitos

Não existem requisitos específicos para este documento.

Componentes Utilizados

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

- PIX Software Release 5.2.1
- Cisco Secure VPN Client 1.1
- Cisco VPN 3000 2.5 Client ou VPN Client 3.x**Nota:** A liberação de Cisco VPN Client 3.0.x não trabalha com versões de PIX mais cedo de 6.0. Refira o hardware Cisco e os clientes VPN que apoiam IPsec/PPTP/L2TP para mais informação.

As informações neste documento foram criadas a partir de dispositivos em um ambiente de laboratório específico. Todos os dispositivos utilizados neste documento foram iniciados com uma configuração (padrão) inicial. Se a sua rede estiver ativa, certifique-se de que entende o impacto potencial de qualquer comando.

Convenções

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

Informações de Apoio

A liberação de software de firewall de PIX 6.2 apoia a transferência do Access Control Lists (ACLs) ao PIX Firewall de um Access Control Server (ACS). Isto permite a configuração do usuário per. ACL em um servidor AAA de fornecer por usuário a autorização ACL. É então carregável com o ACS ao PIX Firewall. Esta característica é apoiada para servidores Radius somente. Não é apoiada para server TACACS+.

Debugar etapas

Termine estes debugam etapas:

1. Certifique-se dos trabalhos da configuração do Xauth PIX antes que você adicione a autenticação de AAA.Se você é incapaz de passar o tráfego antes que você execute o AAA, você não pode fazê-lo mais tarde.
2. Ative algum tipo de registro no PIX:Não emita o **comando logging console debugging em um** sistema carregado pesado.**O comando logging buffered debugging** pode ser emitido. Emita então o **comando show logging**.Registrar pode igualmente ser enviado a um server do log de mensagem de sistema (Syslog) e ser examinado.
3. Ativar depuração no TACACS+ ou nos servidores RADIUS. Todos os servidores possuem esta opção.

Comandos de depuração do PIX

- **debug crypto ipsec sa** — Este comando debug indica eventos de IPSec.
- **debug crypto isakmp sa** — Este comando debug indica mensagens sobre eventos do Internet Key Exchange (IKE).
- **debug crypto isakmp engine** — Este comando debug indica mensagens sobre eventos IKE.

Depuração no lado cliente

Permita o Log Viewer de ver que os debug do lado do cliente em Cisco fixam 1.1 ou VPN 3000 Client 2.5.

Perfis do servidor de 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+

O noacl, a necessidade de usuários 3000full, e 3000partial somente um username e uma senha

no Cisco Secure ACS for Windows. As necessidades de usuário do pixb um username, uma senha, um shell/executivo verificaram dentro o grupo, um ACL verificou, e 115 na caixa.

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 "********"
  }
```

RAIO do Cisco Secure ACS for Windows

RADIUS/Cisco é o tipo de dispositivo. O noacl, a necessidade de usuários 3000full, e 3000partial somente um username e uma senha no Cisco Secure ACS for Windows. As necessidades de usuário do pixb um username, uma senha, e uma verificação e acl=115 na caixa retangular Cisco/radius onde diz o par AV 009\001 (específico de fornecedor).

Nota: Você precisa o atributo de fornecedor para o ACL. O atributo 11, ID de filtro, é inválido. Esta edição é atribuída a identificação de bug Cisco CSCdt50422 (clientes registrados somente). É fixada no PIX Software Release 6.0.1.

RADIUS da Merit (oferecendo suporte a Cisco AV Pairs)

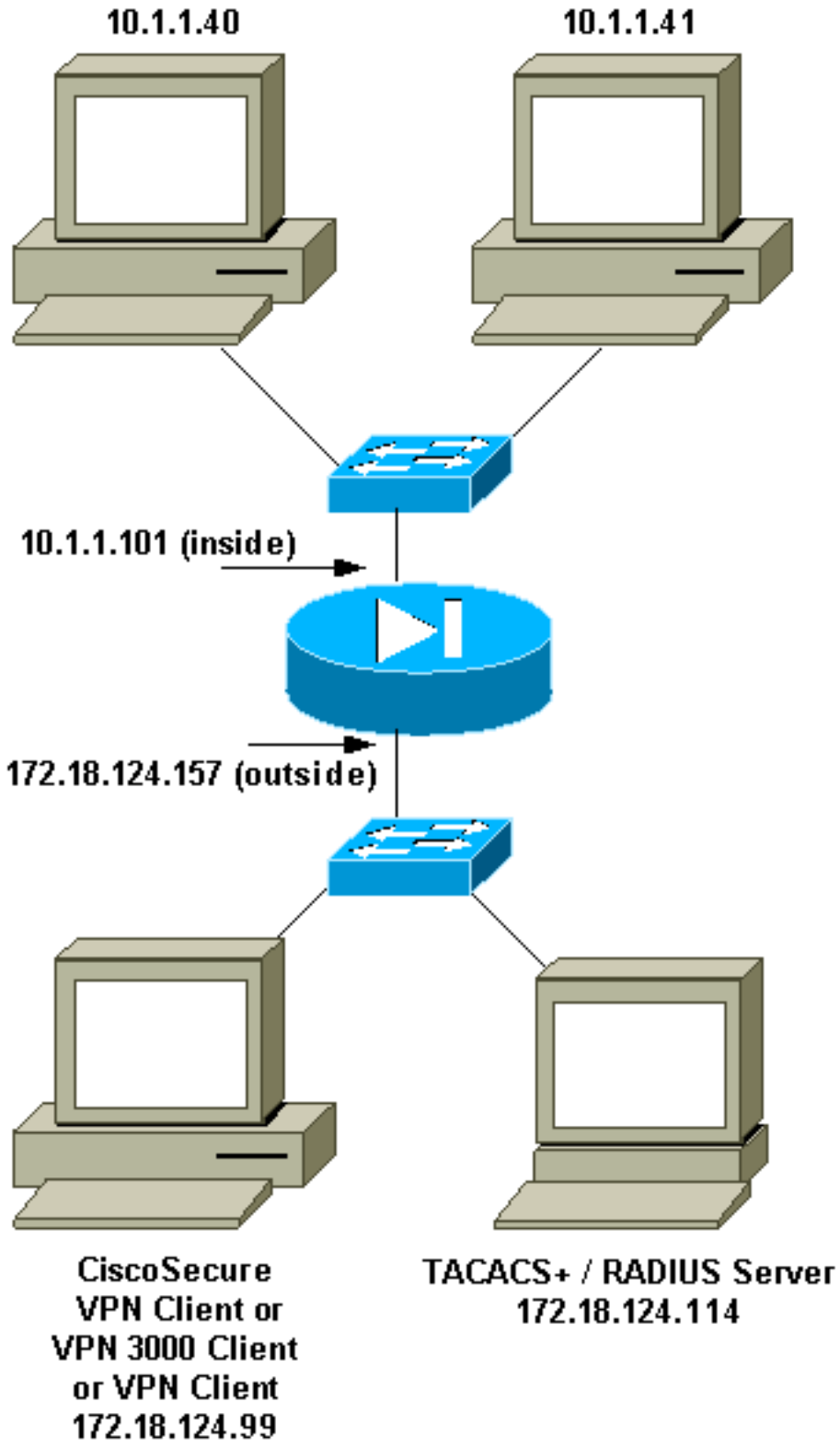
```
noacl Password= "noacl"

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

3000full Password= "3000full"

3000partial Password= "3000partial"
```

Diagrama de Rede



Portas RADIUS configuráveis (5.3 e posterior)

Alguns servidores RADIUS utilizam portas RADIUS diferentes de 1645/1646 (geralmente 1812/1813). Em PIX 5.3 e mais atrasado, a autenticação RADIUS e as portas de relatório podem ser mudadas às portas diferentes do padrão 1645/1646 com estes comandos:

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

Como autenticar com o Xauth sem grupos de VPN

Neste exemplo, todos os três clientes VPN são autenticados com Xauth. Contudo, os clientes VPN podem alcançar somente a rede dentro do PIX, porque o split-tunneling não é dentro uso. Veja como autenticar o Xauth com grupos de VPN para obter mais informações sobre do split-tunneling. Os ACL passados para baixo do servidor AAA aplicam-se a todos os clientes VPN. Neste exemplo, o objetivo é para que o noacl do usuário conecte e obtenha a todos os recursos dentro do PIX. O usuário que o pixb conecta, mas porque o ACL 115 é passado para baixo do servidor AAA durante o processo do Xauth, o usuário pode somente obter a 10.1.1.40. Alcance a 10.1.1.41 e todo o interior restante dos endereços IP de Um ou Mais Servidores Cisco ICM NT é negado.

Nota: O software PIX versão 6.0 é requerido para suporte a VPN Client 3.0.

Cisco Secure VPN Client 1.1 Setup - Xauth sem grupos de 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 uma recusa do indicador do serviço (DoS) e emita o **comando ping - t - - - -**. Quando a janela de xauth aparece, datilografe o nome de usuário e senha que concorda com esse com o servidor AAA.

VPN 3000 Client 2.5 ou cliente VPN 3.x Setup - Xauth sem grupos de VPN

Conclua estes passos:

1. Selecione o **opções > propriedades > autenticação > nome de grupo**.
2. O nome do grupo é não faz _care e a senha concorda com essa com o PIX no **comando isakmp key**. O nome do host é 172.18.124.157.
3. Clique em Conectar.
4. Quando a janela de xauth vem acima, datilografe o nome de usuário e senha que concorda com esse com o servidor AAA.

Xauth sem grupos de VPN - Instalação 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]
```

Como autenticar com o Xauth com grupos de VPN

Neste exemplo, o 3.0 do VPN 3000 Client 2.5 ou do cliente VPN pode ser autenticado com Xauth, e o split-tunneling é de fato. Em virtude da sociedade de grupo de VPN, um ACL é passado do PIX ao VPN 3000 Client. Especifica que somente a rede dentro do PIX tem um túnel criptografado. O outro tráfego (talvez ao Internet) não é cifrado.

Neste exemplo, um cliente VPN, com username 3000full (no servidor AAA), no grupo vpn3000-all (no PIX) alcança a rede 10.1.1.X inteira dentro do PIX ao mesmo tempo que o Internet. O cliente VPN recebe o vitória-server, o dns-server, e a informação de nome de domínio. O outro cliente VPN, com username 3000partial (no AAA-server), no grupo vpn3000-41 (no PIX) alcança somente um endereço IP de Um ou Mais Servidores Cisco ICM NT dentro da rede (10.1.1.40) em virtude do perfil de grupo. Este cliente VPN não recebe a informação das vitórias e do dns-server, mas ainda faz o split-tunneling.

Nota: O software PIX versão 6.0 é requerido para suporte a VPN Client 3.0.

Cliente VPN 2.5 ou 3.0 Setup - Xauth com grupos de VPN

Conclua estes passos:

Nota: O VPN 2.5 ou a instalação do cliente do 3.0 dependem do usuário envolvido.

1. Selecionar opções > Propriedades > Autenticação.

2. O nome do grupo e o group password combinam o nome do grupo no PIX como em: ******** da senha do vpngroup vpn3000-all ou ******** da senha do vpngroup vpn3000-41. O nome do host é 172.18.124.157.
3. Clique em Conectar.
4. Quando a janela de Xauth for exibida, digite o nome de usuário e a senha usados no servidor de AAA.

Neste exemplo, uma vez que o usuário 3000full é autenticado, pegara a informação do grupo vpn3000-all. O usuário 3000partial pegara a informação do grupo vpn3000-41. O indicador mostra que **negociar perfis de segurança** e **seu link é agora seguro**.

O usuário 3000full usa a senha para o grupo vpn3000-all. A lista de acesso 108 é associada com esse grupo para propósitos de split-tunneling. O túnel é formado à rede 10.1.1.x. Fluxos de tráfego unencrypted aos dispositivos não na lista de acesso 108 (por exemplo, o Internet). Este é split-tunneling.

Esta é a saída para a janela de status da conexão de cliente de VPN para o usuário 3000full:

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

O usuário 3000partial usa a senha para o grupo vpn3000-41. A lista de acesso 125 é associada com esse grupo para propósitos de split-tunneling. O túnel é formado ao dispositivo de 10.1.1.41. Fluxos de tráfego unencrypted aos dispositivos não na lista de acesso 125 (por exemplo, o Internet). Contudo, o tráfego não flui ao dispositivo de 10.1.1.40 porque este tráfego é não-roteável. Não se especifica na lista de túneis de criptografia.

Esta é a saída para a janela de status da conexão de cliente de VPN para o usuário 3000partial:

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

Xauth com grupos de VPN - Instalação de PIX

Nota: O Cisco Secure VPN Client 1.1 não trabalha com este porque não há nenhuma chave do Internet Security Association and Key Management Protocol (ISAKMP). Adicionar o comando de **0.0.0.0 do netmask de 0.0.0.0 do endereço do ******** da chave do isakmp** fazer todos os clientes VPN trabalhar.

```
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
```

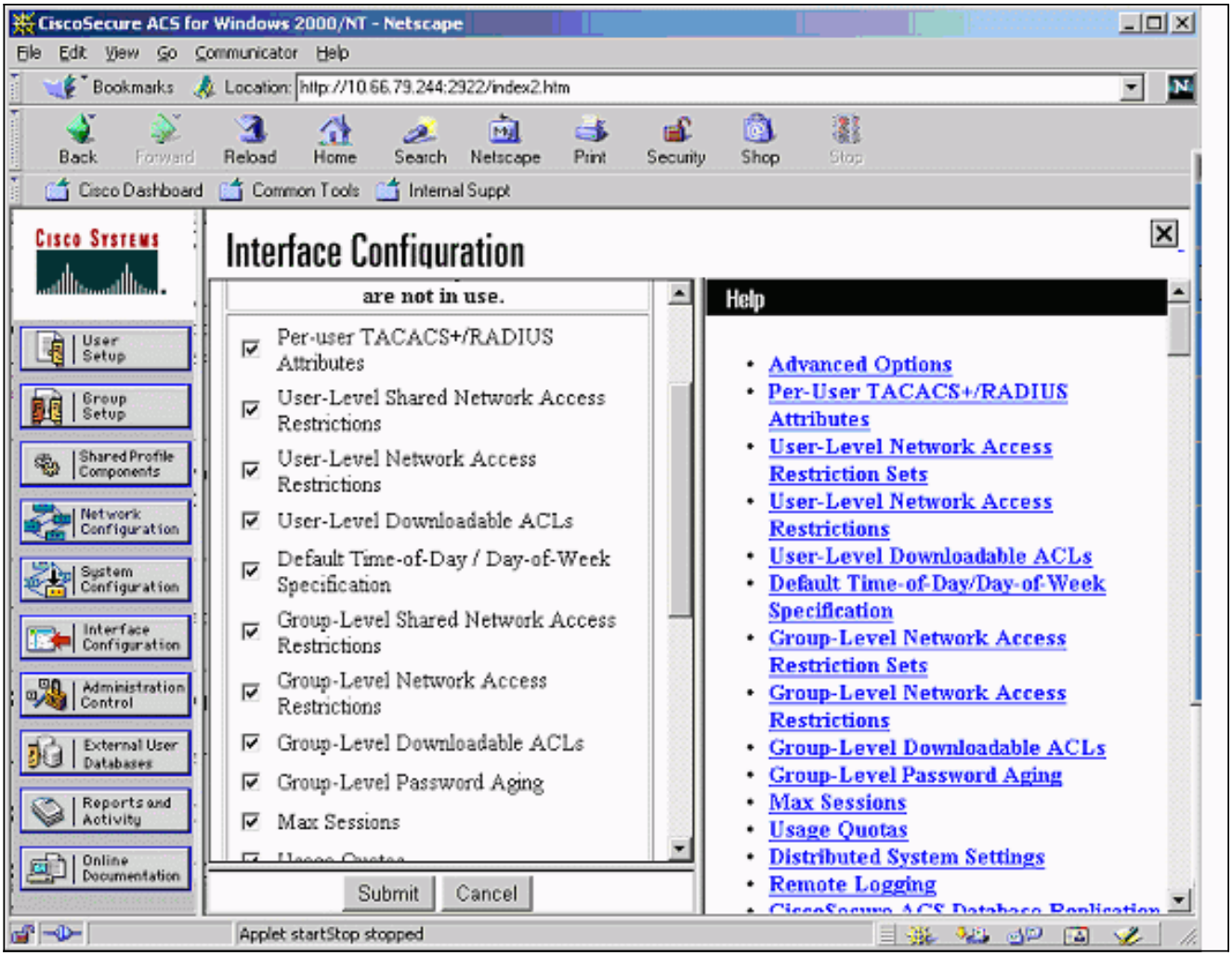
```
logging history logging facility 20 logging queue 512 interface ethernet0 auto interface
ethernet1 auto mtu outside 1500 mtu inside 1500 ip address outside 172.18.124.157 255.255.255.0
ip address inside 10.1.1.1 255.255.255.0 ip audit info action alarm ip audit attack action alarm
ip local pool test 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 com grupos de VPN e os ACL por usuário carregável - instalação ACS

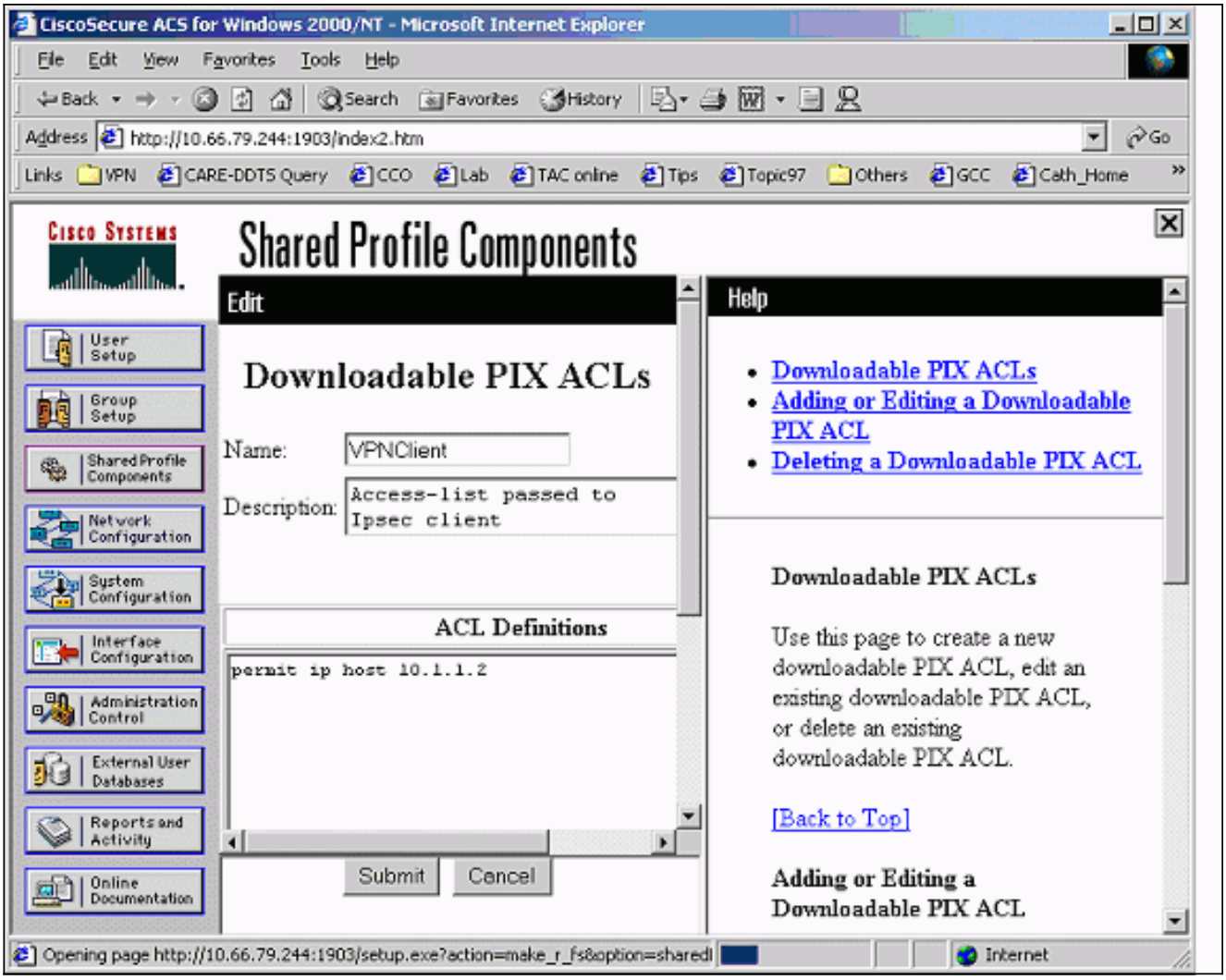
Estabelecer o Cisco Secure ACS

Conclua estes passos:

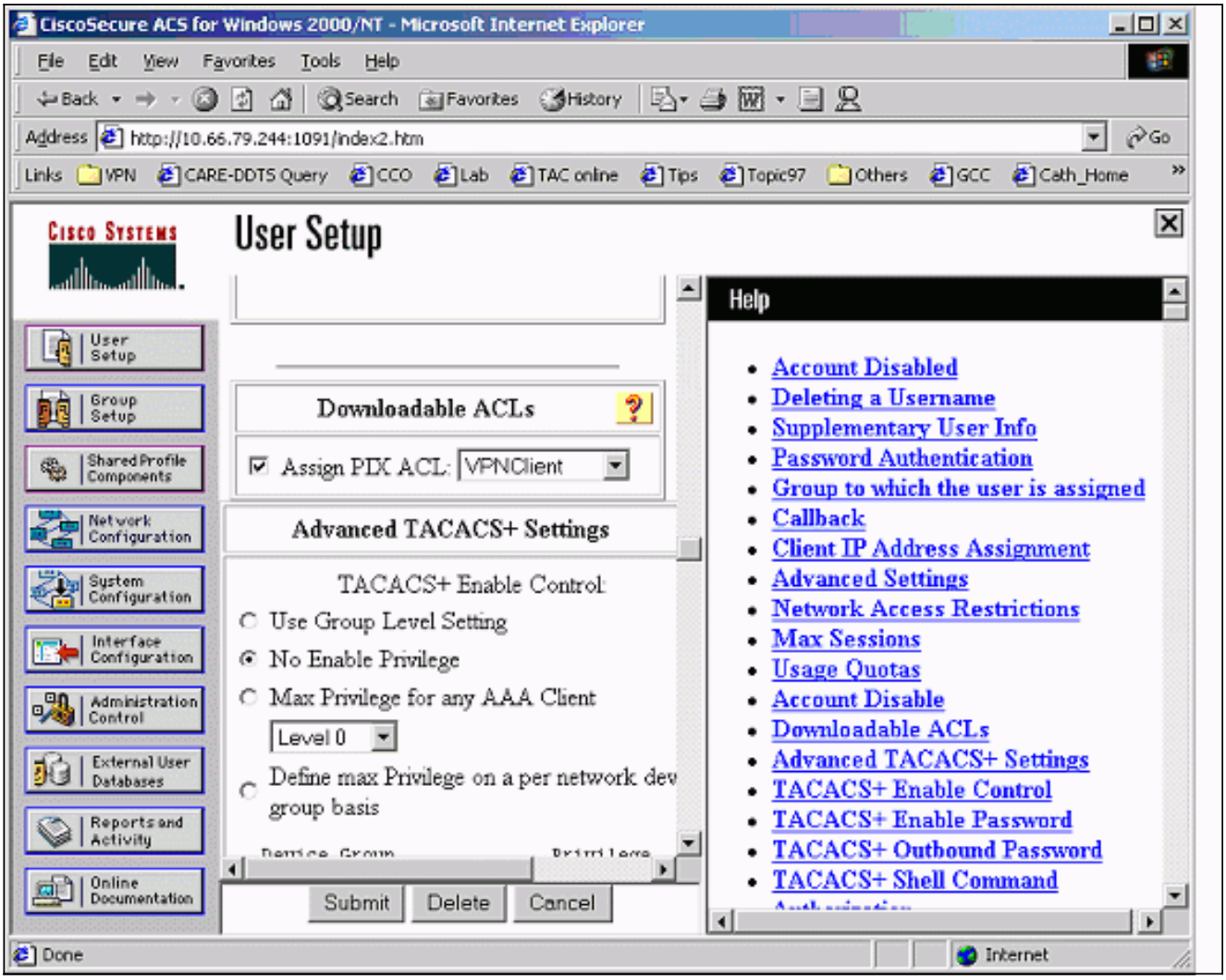
1. Clique em Interface Configuration (Configuração de interface) e selecione a opção User-Level Downloadable ACLs (ACLs de download ao nível do usuário).



2. Clique em Shared Profile Components e definia um ACL que possa ser carregado.



3. Clique em User Setup (Configuração de Usuário). Selecione a opção **para atribuir PIX ACL**. Escolha o ACL correto da lista suspensa.



Xauth com grupos de VPN e os ACL por usuário carregável - instalação PIX 6.x

Se você quer conduzir um ACL transferível por download por usuário do usuário para a autorização, use a versão 6.2(2) do software de firewall de PIX. Refira a identificação de bug Cisco CSCdx47975 (clientes registrados somente).

```
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 com grupos de VPN e os ACL por usuário carregável - instalação ASA/PIX 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
```

Como configurar o xauth local para a conexão de cliente de VPN

Estes comandos são exigidos configurar o xauth local para a conexão de cliente de VPN:

- **local de protocolo da server-***etiqueta do AAA***-server**
- *AAA-server-nome da* **authenticação do cliente do** *nome de mapa do* **crypto map**

Emita o **comando username** definir usuários locais no PIX.

A fim usar o base de dados de autenticação de usuário do firewall de PIX local, entre no **LOCAL** para o parâmetro da server-*etiqueta* para o **comando aaa-server**. **O comando aaa-server** é emitido com o **comando crypto map** instituir uma associação de autenticação de modo que os clientes VPN sejam autenticados quando alcançam o PIX Firewall.

Como adicionar relatório

Esta é a sintaxe do comando adicionar a contabilidade:

- *acctg_service da* **contabilidade aaa|exceto entrada|saída/if_name local_ip local_mask foreign_ip foreign_mask tacacs+|raio**;

ou (novo em 5.2):

- **a contabilidade aaa inclui o** *acctg_service* **de entrada|***server_tag* **de partida do fósforo**

Na configuração de PIX, isto é o comando adicionado:

- **a contabilidade aaa inclui todo o AuthInbound de entrada de 0.0.0.0 0.0.0.0 0.0.0.0 0.0.0.0**;

ou (novo em 5.2):

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

Nota: O comando sysopt connection permit-ipsec, e não o comando sysopt ipsec pl-compatible, é necessário para a conta Xauth funcionar. O relatório Xauth não funciona apenas com o comando sysopt ipsec pl-compatible. Os relatórios xauth são válidos para conexões de TCP. São inválidos para o Internet Control Message Protocol (ICMP) ou o User Datagram Protocol (UDP).

Exemplo de relatório 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
```

Exemplo de relatório 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
```

Comandos debug e show - Xauth sem 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 e show - Xauth com grupos 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 e show - Xauth com usuário per. ACL carregável

```
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)
```

Informações Relacionadas

- Página de suporte do PIX
- Referências de comando PIX
- Solicitações de Comentários (RFCs)
- Cisco Secure ACS para página de suporte do UNIX
- Cisco Secure ACS para página de suporte do Windows
- Página de Suporte do TACACS/TACACS+
- TACACS+ na Documentação do IOS
- Página de suporte RADIUS
- Suporte Técnico e Documentação - Cisco Systems