Configuración de Autenticación TACACS+ para VPDN

Contenido

Introducción

Una red virtual de marcación privada (VPDN) permite que un servicio de marcación de red privada se extienda a servidores de acceso remoto (que se definen como concentrador de acceso [LAC]) L2TP. Cuando un cliente de Point-to-Point Protocol (PPP) se comunica con un LAC, el LAC determina que debería reenviar la sesión PPP a un L2TP Network Server (LNS) para ese cliente, el cual luego autentica al usuario y comienza la negociación PPP. Una vez que finaliza la configuración de PPP, todas las tramas se envían mediante el LAC al cliente y al LNS.

Esta configuración de muestra permite que usted utilice autenticación de TACACS+ con las redes de dial up de soldado virtual (VPDN). El LAC pregunta el servidor TACACS+, determina que el LNS para remitir al usuario, y establece el túnel apropiado.

Para más información sobre los VPDN, refiera comprensión del VPDN.

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.

- Cisco Secure ACS para la versión de UNIX 2.x.x y posterior o freeware TACACS+
- Versión 11.2 del Cisco IOS ® Software y posterior

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

Para obtener más información sobre las convenciones del documento, consulte las Convenciones de Consejos Técnicos de Cisco.

Configurar

Esta sección presenta la información necesaria para configurar las características descritas en este documento.

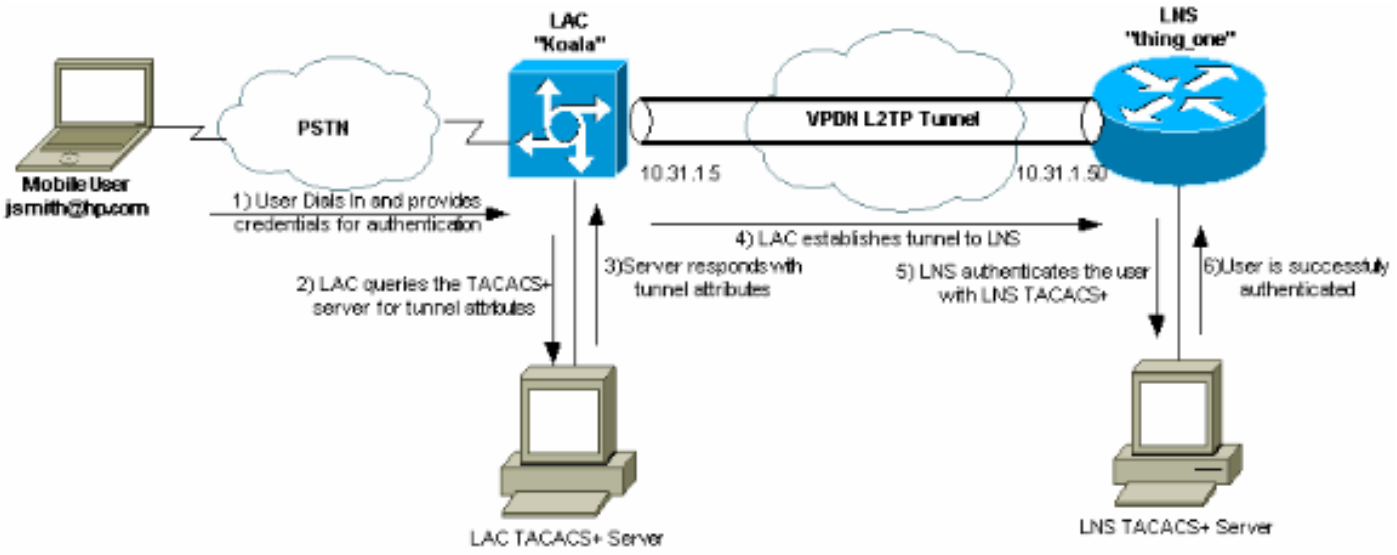
En este ejemplo, el usuario es “jsmith@hp.com” con la contraseña “prueba”. Cuando “jsmith@hp.com” marca en el router del ISP, el router del ISP envía el “hp.com” userid al servidor ISP TACACS+. El servidor ISP encuentra el userid "hp.com" y envía su tunnel-id ("isp"), la dirección IP del router gateway (HGW) (10.31.1.50), la contraseña (“hello”) del servidor de acceso a la red (NAS) y la contraseña del gateway ("there") de regreso al router ISP.

El router del ISP inicia un túnel y conecta con el router HGW, que adelante las contraseñas para la identificación del usuario “HP-GW” (“allí”) y entonces userid “ISP” (“hola”) al servidor HGW TACACS+. Una vez que se establecen los túneles, el router del ISP adelante al router HGW el userid (“jsmith@hp.com ") y contraseña (“prueba”) del usuario ese los diales adentro. Autentican a este usuario en el servidor HGW. En las configuraciones de muestra en este documento, el nombre del host del router del ISP es “koala” y el nombre del host del router HGW es “thing_one”.

Nota: Para obtener información adicional sobre los comandos que se utilizan en este documento, use la Command Lookup Tool (solo para clientes registrados).

Diagrama de la red

Este documento utiliza la configuración de red que se muestra en el siguiente diagrama.



Configuraciones del servidor TACACS+

Este documento utiliza las Configuraciones del servidor mostradas aquí.

- TACACS+ Freeware
- Cisco Secure ACS para UNIX 2.x.x

TACACS+ Freeware

```
!--- This user is on the ISP TACACS+ server. !--- The profile includes the Tunnel ID ("isp"),
the IP address !--- of the Peer (10.31.1.50), !--- and the passwords used to authenticate the
tunnel. !--- The ISP uses these attibutes to establish the tunnel. user = hp.com { service = ppp
protocol = vpdn { tunnel-id = isp ip-addresses = "10.31.1.50" nas-password = "hello" gw-password
= "there" } } !--- The next three users are on the HGW server. user = isp { chap = cleartext
"hello" service = ppp protocol = ip { default attribute = permit } } user = hp-gw { chap =
cleartext "there" service = ppp protocol = ip { default attribute = permit } } user =
jsmith@hp.com { chap = cleartext "test" service = ppp protocol = ip { default attribute = permit
} }
```

Cisco Secure ACS para UNIX 2.x.x

```
!--- This user is on the ISP server. # ./ViewProfile -p 9900 -u hp.com User Profile Information
user = hp.com{ profile_id = 83 profile_cycle = 1 service=ppp { protocol=vpdn { set tunnel-id=isp
set ip-addresses="10.31.1.50" set nas-password="hello" set gw-password="there" } protocol=lcp {
} } } !--- The next three users are on the HGW server. !--- The next two usernames are used to
authenticate the LAC !--- during tunnel initialization. # ./ViewProfile -p 9900 -u isp User
Profile Information user = isp{ profile_id = 84 profile_cycle = 1 password = chap "********"
service=ppp { protocol=ip { default attribute=permit } protocol=lcp { } } } # ./ViewProfile -p
9900 -u hp-gw User Profile Information user = hp-gw{ profile_id = 82 profile_cycle = 1 password
= chap "********" service=ppp { protocol=ip { default attribute=permit } protocol=lcp { } } } !-
-- This username is used to authenticate the end user !--- after the tunnel is established. #
./ViewProfile -p 9900 -u jsmith@hp.com User Profile Information user = jsmith@hp.com{ profile_id
= 85 profile_cycle = 1 password = chap "********" service=ppp { protocol=ip { default
attribute=permit } protocol=lcp { } } }
```

Configuración del router

Este documento usa las configuraciones detalladas aquí.

- Router ISP
- Router HGW

Configuración del router del ISP

```
koala#show running config
Building configuration...

Current configuration:
!
version 11.2
no service password-encryption
service udp-small-servers
service tcp-small-servers
!
hostname koala
!
aaa new-model
aaa authentication ppp default tacacs+ none
aaa authorization network tacacs+ none
aaa accounting network start-stop tacacs+

enable password ww
!
!--- VPDN is enabled. vpdn enable
!
interface Ethernet0
ip address 10.31.1.5 255.255.255.0
!
interface Serial0
shutdown
!
interface Serial1
shutdown
!
interface Async1
ip unnumbered Ethernet0
encapsulation ppp
async mode dedicated
no cdp enable
ppp authentication chap
!
ip default-gateway 10.31.1.1
no ip classless
ip route 0.0.0.0 0.0.0.0 10.31.1.1
!
!--- Specify the TACACS server information on the NAS.
tacacs-server host 171.68.120.194
tacacs-server key cisco
no tacacs-server directed-request
snmp-server community public RW
snmp-server enable traps config
!
line con 0
password ww
line 1 16
password ww
autoselect ppp
modem InOut
```

```
transport input all
stopbits 1
rxspeed 115200
txspeed 115200
flowcontrol hardware
line aux 0
line vty 0 4
exec-timeout 0 0
password ww
!
end
```

Configuración del router HGW

```
thing_one#show running config
Building configuration...

Current configuration:
!
version 11.2
no service password-encryption
no service udp-small-servers
no service tcp-small-servers
!
hostname thing_one
!
aaa new-model
aaa authentication ppp default tacacs+ none
aaa authorization network tacacs+ none
enable password ww
!
!--- Enable VPDN. vpdn enable
!--- Specify the remote host ("isp" on the network
access server) !--- and the local name ("hp-gw" on the
home gateway) to use to authenticate. !--- Also specify
the virtual template to use. !--- The local name and the
remote host name must match !--- the ones in the TACACS
server. vpdn incoming isp hp-gw virtual-template 1
!
interface Loopback0
shutdown
!
interface Ethernet0
ip address 10.31.1.50 255.255.255.0
!
interface Virtual-Template1
!--- Create a virtual template interface. ip unnumbered
Ethernet0
!--- Un-number the Virtual interface to an available LAN
interface. peer default ip address pool async
!--- Use the pool "async" to assign the IP address for
incoming connections. ppp authentication chap
!--- Use CHAP authentication for the incoming
connection. ! interface Serial0 shutdown ! interface
Serial1 shutdown ! ip local pool async 15.15.15.15 no ip
classless ip route 0.0.0.0 0.0.0.0 10.31.1.1 ! tacacs-
server host 171.68.118.101
no tacacs-server directed-request
tacacs-server key cisco
!--- Specify the TACACS+ server information on the NAS.
! line con 0 exec-timeout 0 0 line 1 8 line aux 0 line
vty 0 4 ! end
```

Verificación

Actualmente, no hay un procedimiento de verificación disponible para esta configuración.

Troubleshooting

En esta sección encontrará información que puede utilizar para solucionar problemas de configuración.

Comandos para resolución de problemas

Nota: Antes de ejecutar un comando debug, consulte Información Importante sobre Comandos Debug.

- **haga el debug de la autenticación aaa** — Visualiza la información sobre la autenticación del Authentication, Authorization, and Accounting (AAA) /TACACS+.
- **debug aaa authorization** — Visualiza la información sobre la autorización AAA/TACACS+.
- debug ppp negotiation — Muestra los paquetes PPP transmitidos durante el inicio PPP, durante el cual se negocian las opciones PPP.
- **debug tacacs+** — Visualiza la información de debugging detallada asociada al TACACS+.
- **debug vpdn errors** — Visualiza los errores que evitan que un túnel PPP sea establecido o los errores que hacen un túnel establecido cerrarse.
- debug vpdn events — Muestra mensajes relativos a eventos que forman parte del establecimiento o cierre normal del túnel PPP.
- **debug vpdn l2f-errors** — Visualiza los errores del protocolo de la capa 2 que previenen el establecimiento de la capa 2 o previenen su funcionamiento normal.
- **debug vpdn l2f-events** — Visualiza los mensajes sobre los eventos que son establecimiento del túnel normal de la parte de PPP o apagan para la capa 2.
- **debug vpdn l2f-packets** — Mensajes de las visualizaciones sobre las encabezados y el estatus del Layer 2 Forwarding Protocol.
- **debug vpdn packets** — Las visualizaciones acodan 2 errores y eventos del Tunnel Protocol (L2TP) que sean una parte del establecimiento normal de túneles o apaguen para los VPDN.
- debug vtemplate - Muestra información de clonación para una interfaz de acceso virtual desde el momento en que se clona desde una plantilla virtual hasta el momento en que la interfaz de acceso virtual se cae al finalizar la llamada.

Ejemplo de resultado del comando debug

Estos debugs se proporcionan para la referencia.

- Depuración adecuada del router del ISP
- 'Depuración adecuada del router HGW'
- Debugs para la falla de conexión en el router del ISP
- Debugs para las fallas de conexión en el router HGW

Depuración adecuada del router del ISP

```
koala#show debug
General OS:
AAA Authentication debugging is on
AAA Authorization debugging is on
AAA Accounting debugging is on
VPN:
VPN events debugging is on
VPN errors debugging is on
koala#
%LINK-3-UPDOWN: Interface Async1, changed state to up
15:04:47: VPDN: Looking for tunnel -- hp.com --
15:04:47: AAA/AUTHEN: create_user (0x15FA80) user='hp.com' ruser=''
   port='Async1' rem_addr='' authen_type=NONE service=LOGIN priv=0
15:04:47: AAA/AUTHOR/VPDN: : (2445181346): user='hp.com'
15:04:47: AAA/AUTHOR/VPDN: : (2445181346): send AV service=ppp
15:04:47: AAA/AUTHOR/VPDN: : (2445181346): send AV protocol=vpdn
15:04:47: AAA/AUTHOR/VPDN: : (2445181346): Method=TACACS+
15:04:47: AAA/AUTHOR/TAC+: (2445181346): user=hp.com
15:04:47: AAA/AUTHOR/TAC+: (2445181346): send AV service=ppp
15:04:47: AAA/AUTHOR/TAC+: (2445181346): send AV protocol=vpdn
15:04:47: TAC+: (2445181346): received author response status = PASS_ADD

15:04:47: AAA/AUTHOR (2445181346): Post authorization status = PASS_ADD
15:04:47: AAA/AUTHOR/VPDN: Processing AV service=ppp
15:04:47: AAA/AUTHOR/VPDN: Processing AV protocol=vpdn
15:04:47: AAA/AUTHOR/VPDN: Processing AV tunnel-id=isp
15:04:47: AAA/AUTHOR/VPDN: Processing AV ip-addresses=10.31.1.50
15:04:47: AAA/AUTHOR/VPDN: Processing AV nas-password=hello
15:04:47: AAA/AUTHOR/VPDN: Processing AV gw-password=there
15:04:47: VPDN: Get tunnel info with NAS isp GW hp.com, IP 10.31.1.50
!--- The TACACS+ server returns the attributes the !--- NAS should use for the tunnel. !--- The
tunnel-id is "ISP" and the IP address of HGW is 10.31.1.50. 15:04:47: AAA/AUTHEN: free_user
(0x15FA80) user='hp.com' ruser='' port='Async1' rem_addr='' authen_type=NONE service=LOGIN
priv=0 15:04:47: VPDN: Forward to address 10.31.1.50 15:04:47: As1 VPDN: Forwarding... 15:04:47:
AAA/AUTHEN: create_user (0x118008) user='jsmith@hp.com' ruser='' port='Async1' rem_addr='async'
authen_type=CHAP service=PPP priv=1 15:04:47: As1 VPDN: Bind interface direction=1 15:04:47: As1
VPDN: jsmith@hp.com is forwarded
%LINEPROTO-5-UPDOWN: Line protocol on Interface Async1, changed state to up
15:04:49: AAA/ACCT: NET acct start. User jsmith@hp.com, Port Async1: Async1
!--- User finishes and disconnects. %LINEPROTO-5-UPDOWN: Line protocol on Interface Async1,
changed state to down %LINK-5-CHANGED: Interface Async1, changed state to reset 15:05:27: As1
VPDN: Cleanup 15:05:27: As1 VPDN: Reset 15:05:27: As1 VPDN: Reset 15:05:27: As1 VPDN: Unbind
interface 15:05:27: AAA/ACCT: Network acct stop. User jsmith@hp.com, Port Async1: task_id=2
timezone=UTC service=vpdn bytes_in=1399 bytes_out=150 paks_in=27 paks_out=9 elapsed_time=38
%LINK-3-UPDOWN: Interface Async1, changed state to down 15:05:30: AAA/AUTHEN: free_user
(0x118008) user='jsmith@hp.com' ruser='' port='Async1' rem_addr='async' authen_type=CHAP
service=PPP priv=1 koala#
```

‘Depuración adecuada del router HGW’

```
thing_one#show debug
General OS:
AAA Authentication debugging is on
AAA Authorization debugging is on
AAA Accounting debugging is on
VPN:
VPN events debugging is on
VPN errors debugging is on
VTEMPLATE:
Virtual Template debugging is on
thing_one#
```

```
15:04:46: AAA/AUTHEN: create_user (0x15E6E0) user='isp' ruser='' port=''
rem_addr='' authen_type=CHAP service=PPP priv=1
15:04:46: TAC+: ver=192 id=969200103 received AUTHEN status = PASS
15:04:46: AAA/AUTHEN: free_user (0x15E6E0) user='isp' ruser='' port=''
rem_addr='' authen_type=CHAP service=PPP priv=1
15:04:46: AAA/AUTHEN (3252085483): status = PASS
15:04:46: AAA/AUTHEN: free_user (0x15CBEC) user='isp' ruser='' port=''
rem_addr='' authen_type=CHAP service=PPP priv=1
15:04:46: AAA/AUTHEN: create_user (0x15F1B8) user='isp' ruser='' port=''
rem_addr='' authen_type=CHAP service=PPP priv=1
15:04:46: AAA/AUTHEN/START (3897539709): port='' list='default'
   action=LOGIN service=PPP
15:04:46: AAA/AUTHEN/START (3897539709): found list default
15:04:46: AAA/AUTHEN/START (3897539709): Method=TACACS+
15:04:46: TAC+: send AUTHEN/START packet ver=193 id=3897539709
15:04:46: TAC+: ver=192 id=3897539709 received AUTHEN status = GETPASS
15:04:46: AAA/AUTHEN: create_user (0x15E6F0) user='isp' ruser='' port=''
rem_addr='' authen_type=CHAP service=PPP priv=1
15:04:46: TAC+: ver=192 id=2306139011 received AUTHEN status = PASS
15:04:46: AAA/AUTHEN: free_user (0x15E6F0) user='isp' ruser='' port=''
rem_addr='' authen_type=CHAP service=PPP priv=1
15:04:46: AAA/AUTHEN (3897539709): status = PASS
15:04:46: VPDN: Chap authentication succeeded for isp
!--- The LAC ("ISP") is succesfully authenticated. 15:04:46: AAA/AUTHEN: free_user (0x15F1B8)
user='isp' ruser='' port='' rem_addr='' authen_type=CHAP service=PPP priv=1 15:04:46: Vi1
VTEMPLATE: Reuse Vi1, recycle queue size 0 15:04:46: Vi1 VTEMPLATE: Set default settings with no
ip address 15:04:47: Vi1 VTEMPLATE: Hardware address 00e0.1e68.942c 15:04:47: Vi1 VPDN: Virtual
interface created for jsmith@hp.com 15:04:47: Vi1 VPDN: Set to Async interface 15:04:47: Vi1
VPDN: Clone from Vtemplate 1 filterPPP=0 blocking 15:04:47: Vi1 VTEMPLATE: Has a new cloneblk
vtemplate, now it has vtemplate 15:04:47: Vi1 VTEMPLATE: Undo default settings 15:04:47: Vi1
VTEMPLATE: ************* CLONE VACCESS1 ***************** 15:04:47: Vi1 VTEMPLATE: Clone from
vtemplate1 interface Virtual-Access1 no ip address encap ppp ip unnum eth 0 peer default ip
address pool async ppp authen chap end %LINK-3-UPDOWN: Interface Virtual-Access1, changed state
to up 15:04:48: Vi1 VPDN: Bind interface direction=2 15:04:48: Vi1 VPDN: PPP LCP accepted sent &
rcv CONFACK 15:04:48: Vi1 VPDN: Virtual interface iteration 15:04:48: AAA/AUTHEN: create_user
(0x161688) user='jsmith@hp.com' ruser='' port='Virtual-Access1' rem_addr='async'
authen_type=CHAP service=PPP priv=1 15:04:48: AAA/AUTHEN/START (580760432): port='Virtual-
Access1' list='' action=LOGIN service=PPP 15:04:48: AAA/AUTHEN/START (580760432): using
"default" list 15:04:48: AAA/AUTHEN/START (580760432): Method=TACACS+ 15:04:48: TAC+: send
AUTHEN/START packet ver=193 id=580760432 15:04:48: Vi1 VPDN: Virtual interface iteration
15:04:49: TAC+: ver=192 id=580760432 received AUTHEN status = GETPASS !--- Authenticate user
jsmith@hp.com with the TACACS+ server. 15:04:49: AAA/AUTHEN: create_user (0x1667C0)
user='jsmith@hp.com' ruser=''
 port='Virtual-Access1' rem_addr='async' authen_type=CHAP service=PPP priv=1
15:04:49: TAC+: ver=192 id=2894253624 received AUTHEN status = PASS
15:04:49: AAA/AUTHEN: free_user (0x1667C0) user='jsmith@hp.com' ruser=''
 port='Virtual-Access1' rem_addr='async' authen_type=CHAP service=PPP priv=1
15:04:49: AAA/AUTHEN (580760432): status = PASS
15:04:49: AAA/AUTHOR/LCP Vi1: Authorize LCP
15:04:49: AAA/AUTHOR/LCP: Virtual-Access1: (687698354): user='jsmith@hp.com'
15:04:49: AAA/AUTHOR/LCP: Virtual-Access1: (687698354): send AV service=ppp
15:04:49: AAA/AUTHOR/LCP: Virtual-Access1: (687698354): send AV protocol=lcp
15:04:49: AAA/AUTHOR/LCP: Virtual-Access1: (687698354): Method=TACACS+
15:04:49: AAA/AUTHOR/TAC+: (687698354): user=jsmith@hp.com
15:04:49: AAA/AUTHOR/TAC+: (687698354): send AV service=ppp
15:04:49: AAA/AUTHOR/TAC+: (687698354): send AV protocol=lcp
15:04:49: TAC+: (687698354): received author response status = PASS_ADD
15:04:49: AAA/AUTHOR (687698354): Post authorization status = PASS_ADD
15:04:49: AAA/ACCT: NET acct start. User jsmith@hp.com, Port Virtual-Access1:
 Virtual-Access1
15:04:49: AAA/AUTHOR/FSM Vi1: (0): Can we start IPCP?
15:04:49: AAA/AUTHOR/FSM: Virtual-Access1: (3562892028): user='jsmith@hp.com'
15:04:49: AAA/AUTHOR/FSM: Virtual-Access1: (3562892028): send AV service=ppp
```

```
15:04:49: AAA/AUTHOR/FSM: Virtual-Access1: (3562892028): send AV protocol=ip
15:04:49: AAA/AUTHOR/FSM: Virtual-Access1: (3562892028): Method=TACACS+
15:04:49: AAA/AUTHOR/TAC+: (3562892028): user=jsmith@hp.com
15:04:49: AAA/AUTHOR/TAC+: (3562892028): send AV service=ppp
15:04:49: AAA/AUTHOR/TAC+: (3562892028): send AV protocol=ip
%LINEPROTO-5-UPDOWN: Line protocol on Interface Virtual-Access1,
   changed state to up
15:04:49: TAC+: (3562892028): received author response status = PASS_ADD
15:04:49: AAA/AUTHOR (3562892028): Post authorization status = PASS_ADD
!--- IPCP negotiation begins. 15:04:49: AAA/AUTHOR/FSM Vi1: We can start IPCP 15:04:50:
AAA/AUTHOR/IPCP Vi1: Start. Her address 0.0.0.0, we want 0.0.0.0 15:04:50: AAA/AUTHOR/IPCP Vi1:
Processing AV service=ppp 15:04:50: AAA/AUTHOR/IPCP Vi1: Processing AV protocol=ip 15:04:50:
AAA/AUTHOR/IPCP Vi1: Authorization succeeded 15:04:50: AAA/AUTHOR/IPCP Vi1: Done. Her address
0.0.0.0, we want 0.0.0.0 15:04:51: AAA/AUTHOR/IPCP Vi1: Start. Her address 0.0.0.0, we want
15.15.15.15 15:04:51: AAA/AUTHOR/IPCP Vi1: Processing AV service=ppp 15:04:51: AAA/AUTHOR/IPCP
Vi1: Processing AV protocol=ip 15:04:51: AAA/AUTHOR/IPCP Vi1: Authorization succeeded 15:04:51:
AAA/AUTHOR/IPCP Vi1: Done. Her address 0.0.0.0, we want 15.15.15.15 15:04:51: AAA/AUTHOR/IPCP
Vi1: Start. Her address 15.15.15.15, we want 15.15.15.15 15:04:51: AAA/AUTHOR/IPCP: Virtual-
Access1: (3193852847): user='jsmith@hp.com' 15:04:51: AAA/AUTHOR/IPCP: Virtual-Access1:
(3193852847): send AV service=ppp 15:04:51: AAA/AUTHOR/IPCP: Virtual-Access1: (3193852847): send
AV protocol=ip 15:04:51: AAA/AUTHOR/IPCP: Virtual-Access1: (3193852847): send AV
addr*15.15.15.15 15:04:51: AAA/AUTHOR/IPCP: Virtual-Access1: (3193852847): Method=TACACS+
15:04:51: AAA/AUTHOR/TAC+: (3193852847): user=jsmith@hp.com 15:04:51: AAA/AUTHOR/TAC+:
(3193852847): send AV service=ppp 15:04:51: AAA/AUTHOR/TAC+: (3193852847): send AV protocol=ip
15:04:51: AAA/AUTHOR/TAC+: (3193852847): send AV addr*15.15.15.15 15:04:51: TAC+: (3193852847):
received author response status = PASS_ADD 15:04:51: AAA/AUTHOR (3193852847): Post authorization
status = PASS_ADD 15:04:51: AAA/AUTHOR/IPCP Vi1: Processing AV service=ppp 15:04:51:
AAA/AUTHOR/IPCP Vi1: Processing AV protocol=ip 15:04:51: AAA/AUTHOR/IPCP Vi1: Processing AV
addr*15.15.15.15 15:04:51: AAA/AUTHOR/IPCP Vi1: Authorization succeeded 15:04:51:
AAA/AUTHOR/IPCP Vi1: Done. Her address 15.15.15.15, we want 15.15.15.15 !--- User finishes and
disconnects. 15:05:24: Vi1 VPDN: Reset 15:05:24: Vi1 VPDN: Reset %LINK-3-UPDOWN: Interface
Virtual-Access1, changed state to down 15:05:24: Vi1 VPDN: Cleanup 15:05:24: Vi1 VPDN: Reset
15:05:24: Vi1 VPDN: Reset 15:05:24: Vi1 VPDN: Unbind interface 15:05:24: Vi1 VTEMPLATE: Free
vaccess 15:05:24: Vi1 VPDN: Reset 15:05:24: Vi1 VPDN: Reset 15:05:24: AAA/ACCT: Network acct
stop. User jsmith@hp.com, Port Virtual-Access1: task_id=2 timezone=UTC service=ppp protocol=ip
addr=15.15.15.15 bytes_in=564 bytes_out=142 paks_in=15 paks_out=8 elapsed_time=35 15:05:24:
AAA/AUTHEN: free_user (0x161688) user='jsmith@hp.com' ruser='' port='Virtual-Access1'
rem_addr='async' authen_type=CHAP service=PPP priv=1 %LINEPROTO-5-UPDOWN: Line protocol on
Interface Virtual-Access1, changed state to down 15:05:25: VTEMPLATE: Clean up dirty vaccess
queue, size 1 15:05:25: Vi1 VTEMPLATE: Found a dirty vaccess clone with vtemplate 15:05:25: Vi1
VTEMPLATE: ************ UNCLONE VACCESS1 ************** 15:05:25: Vi1 VTEMPLATE: Unclone to-be-
freed command#5 interface Virtual-Access1 default ppp authen chap default peer default ip
address pool async default ip unnum eth 0 default encap ppp default ip address end 15:05:26: Vi1
VTEMPLATE: Set default settings with no ip address 15:05:26: Vi1 VTEMPLATE: Remove cloneblk
vtemplate with vtemplate 15:05:26: Vi1 VTEMPLATE: Add vaccess to recycle queue, queue size=1
thing_one#
```

Debugs para la falla de conexión en el router del ISP

```
koala#show debug
General OS:
AAA Authentication debugging is on
AAA Authorization debugging is on
AAA Accounting debugging is on
VPN:
VPN events debugging is on
VPN errors debugging is on
koala#
!--- Problem 1: !--- The ISP TACACS+ server is down. !--- There is no output on the HGW router
!--- because the call has not gone that far.

AAA/AUTHOR (3015476150): Post authorization status = ERROR
AAA/AUTHOR/VPDN: : (3015476150): Method=NOT_SET
```

```
AAA/AUTHOR/VPDN: : (3015476150): no methods left to try
AAA/AUTHOR (3015476150): Post authorization status = ERROR
VPDN: (hp.com) Authorization failed, could not talk to AAA server or
 local tunnel problem
!--- Problem 2: !--- Userid hp.com is not in the ISP server. !--- There is no output on the
Gateway router !--- because the call has not gone that far.

TAC+: (894828802): received author response status = PASS_ADD
AAA/AUTHOR (894828802): Post authorization status = PASS_ADD
VPDN: (hp.com) Authorization failed, had talked to AAA server;
   but both Tunnel ID and IP address are missing
AAA/AUTHEN: free_user (0x16A6E4) user='hp.com' ruser=''
   port='Async1' rem_addr='' authen_type=NONE service=LOGIN priv=0
AAA/AUTHEN: create_user (0x16CA8C) user='jsmith@hp.com' ruser=''
   port='Async1' rem_addr='async' authen_type=CHAP service=PPP priv=1
AAA/AUTHEN/START (1904487288): port='Async1' list=''
   action=LOGIN service=PPP
AAA/AUTHEN/START (1904487288): using "default" list
AAA/AUTHEN (1904487288): status = UNKNOWN
AAA/AUTHEN/START (1904487288): Method=TACACS+
TAC+: send AUTHEN/START packet ver=193 id=1904487288
TAC+: ver=193 id=1904487288 received AUTHEN status = FAIL
AAA/AUTHEN (1904487288): status = FAIL
```

Debugs para las fallas de conexión en el router HGW

```
thing_one#show debug
General OS:
AAA Authentication debugging is on
AAA Authorization debugging is on
AAA Accounting debugging is on
VPN:
VPN events debugging is on
VPN errors debugging is on
VTEMPLATE:
Virtual Template debugging is on
thing_one#
!--- Problem 1: !--- The problem is in the tunnel definition on HGW router. !--- In the HGW
configuration, vpdn incoming hp-gw isp virtual-template 1 !--- is inserted instead of vpdn
incoming isp hp-gw virtual-template 1 !--- The debug vpdn l2f-errors command displays.

L2F: Couldn't find tunnel named isp
L2F: Couldn't find tunnel named isp
!--- Problem 2: !--- This message appears when User hp-gw is not in the HGW server.

TAC+: ver=192 id=1920941753 received AUTHEN status = FAIL
AAA/AUTHEN: free_user (0x138C34) user='hp-gw' ruser=''
   port='' rem_addr='' authen_type=CHAP service=PPP priv=1
AAA/AUTHEN (3006335673): status = FAIL
VPDN: authentication failed, couldn't find user information for hp-gw
!--- Problem 3: !--- This appears when user isp is not in the HGW server.

TAC+: ver=192 id=1917558147 received AUTHEN status = FAIL
AAA/AUTHEN: free_user (0x15F20C) user='isp' ruser=''
   port='' rem_addr='' authen_type=CHAP service=PPP priv=1
AAA/AUTHEN (1949507921): status = FAIL
VPDN: authentication failed, couldn't find user information for isp
!--- Problem 4: !--- This message appears when User jsmith@hp.com is !--- not in the HGW server:

TAC+: ver=192 id=755036341 received AUTHEN status = FAIL
AAA/AUTHEN: free_user (0x15F89C) user='jsmith@hp.com' ruser=''
```

```
   port='Virtual-Access1' rem_addr='async' authen_type=CHAP service=PPP priv=1
AAA/AUTHEN (2606986667): status = FAIL
```

Información Relacionada

- Página de soporte de Cisco Secure ACS para Windows
- Página de soporte TACACS/TACACS+
- Soporte Técnico y Documentación - Cisco Systems