

# Configuración de Autenticación TACACS+ para VPDN

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## [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 adelanta 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 adelanta 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 attributes 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: Vil VTEMPLATE: Reuse Vil, recycle queue size 0 15:04:46: Vil VTEMPLATE: Set default settings with no ip address 15:04:47: Vil VTEMPLATE: Hardware address 00e0.1e68.942c 15:04:47: Vil VPDN: Virtual interface created for jsmith@hp.com 15:04:47: Vil VPDN: Set to Async interface 15:04:47: Vil VPDN: Clone from Vtemplate 1 filterPPP=0 blocking 15:04:47: Vil VTEMPLATE: Has a new cloneblk vtemplate, now it has vtemplate 15:04:47: Vil VTEMPLATE: Undo default settings 15:04:47: Vil VTEMPLATE: \*\*\*\*\* CLONE VACCESS1 \*\*\*\*\* 15:04:47: Vil VTEMPLATE: Clone from vtemplatel 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: Vil VPDN: Bind interface direction=2 15:04:48: Vil VPDN: PPP LCP accepted sent & rcv CONFACK 15:04:48: Vil 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: Vil 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 Vil: 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 Vil: (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 Vil: We can start IPCP 15:04:50: AAA/AUTHOR/IPCP Vil: Start. Her address 0.0.0.0, we want 0.0.0.0 15:04:50: AAA/AUTHOR/IPCP Vil: Processing AV service=ppp 15:04:50: AAA/AUTHOR/IPCP Vil: Processing AV protocol=ip 15:04:50: AAA/AUTHOR/IPCP Vil: Authorization succeeded 15:04:50: AAA/AUTHOR/IPCP Vil: Done. Her address 0.0.0.0, we want 0.0.0.0 15:04:51: AAA/AUTHOR/IPCP Vil: Start. Her address 0.0.0.0, we want 15.15.15.15 15:04:51: AAA/AUTHOR/IPCP Vil: Processing AV service=ppp 15:04:51: AAA/AUTHOR/IPCP Vil: Processing AV protocol=ip 15:04:51: AAA/AUTHOR/IPCP Vil: Authorization succeeded 15:04:51: AAA/AUTHOR/IPCP Vil: Done. Her address 0.0.0.0, we want 15.15.15.15 15:04:51: AAA/AUTHOR/IPCP Vil: 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](#)