

# TACACS+ verificatie voor VPDN's configureren

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## [Inleiding](#)

Een virtueel privé inbel-netwerk (VPDN) stelt een privé netwerkinbel in dienst in staat om over te spannen naar externe toegangsservers (gedefinieerd als de L2TP Access Concentrator [LAC]). Wanneer een Point-to-Point Protocol (PPP)-client in een LAC inbelt, bepaalt de LAC dat deze PPP-sessie naar een L2TP-netwerkserver (LNS) voor die client wordt doorgestuurd, die vervolgens de gebruiker voor verificatie vastlegt en de PPP-onderhandeling start. Zodra PPP de instelling is voltooid, worden alle frames via de LAC naar de client en de LNS verzonden.

Deze voorbeeldconfiguratie stelt u in staat om TACACS+ verificatie te gebruiken met Virtual Private Dial-Up Networks (VPDN's). De LAC vraagt de TACACS+ server, bepaalt welke LNS om de gebruiker door te sturen en stelt de juiste tunnel vast.

Raadpleeg voor meer informatie over VPDN's het [begrip van VPDN](#).

## [Voorwaarden](#)

### [Vereisten](#)

Er zijn geen specifieke vereisten van toepassing op dit document.

### [Gebruikte componenten](#)

De informatie in dit document is gebaseerd op de volgende software- en hardware-versies:

- Cisco Secure ACS voor UNIX versie 2.x.x en later of TACACS+-firmware
- Cisco IOS-software release 11.2 en hoger

De informatie in dit document is gebaseerd op de apparaten in een specifieke laboratoriumomgeving. Alle apparaten die in dit document worden beschreven, hadden een opgeschoonde (standaard)configuratie. Als uw netwerk live is, moet u de potentiële impact van elke opdracht begrijpen.

## Conventies

Raadpleeg [Cisco Technical Tips Conventions](#) (Conventies voor technische tips van Cisco) voor meer informatie over documentconventies.

## Configureren

In deze sectie worden de informatie gepresenteerd die nodig is om de functies te configureren die in dit document worden beschreven.

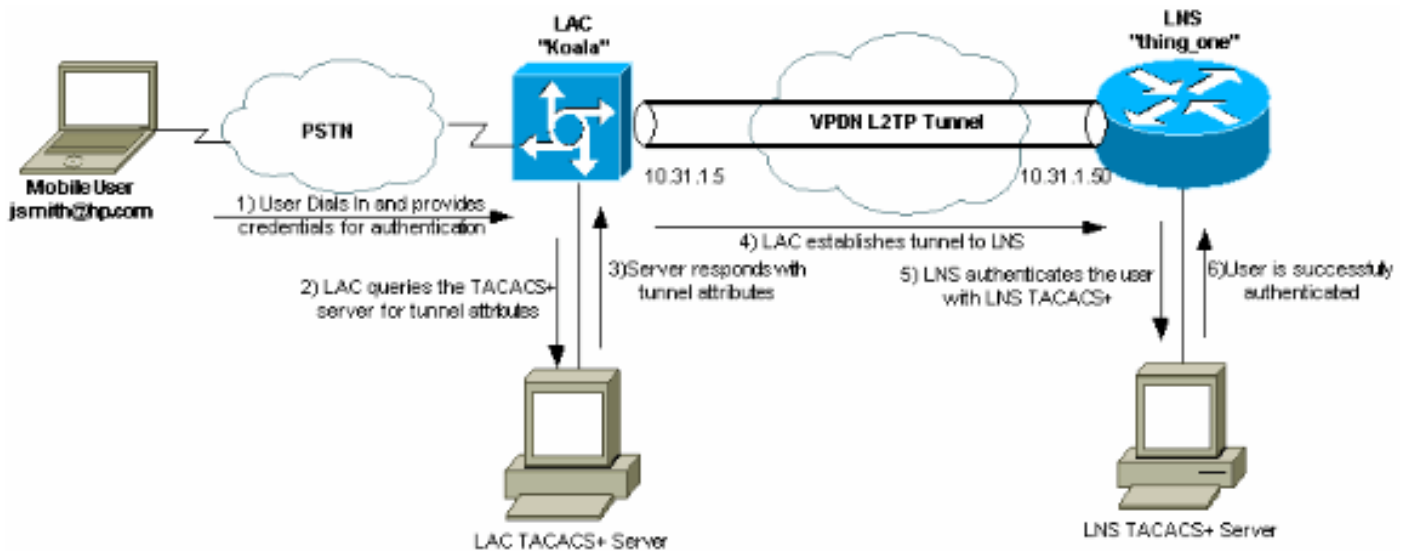
In dit voorbeeld is de gebruiker "jsmith@hp.com" met het wachtwoord "test". Wanneer "jsmith@hp.com" in de ISP-router wordt bellen, verstuurt de ISP-router "hp.com"-gebruikersnaam naar de ISP TACACS+ server. De ISP-server vindt de "hp.com"-gebruiker en verstuurt zijn tunnel-id ("isp"), het IP-adres van de HGW-router (10.31.1.50), het NAS-wachtwoord (Network Access Server) ("hallo") en het wachtwoord voor de gateway ("alweer") naar de ISP-router.

De ISP-router stelt een tunnel in en sluit zich aan op de HGW-router, die de wachtwoorden voor de gebruiker "hp-gw" ("daar") en de gebruiker "isp" ("hallo") doorgeeft naar de HGW TACACS+ server. Zodra de tunnels zijn geïnstalleerd, stuurt de ISP router naar de HGW-router de gebruikersnaam ("jsmith@hp.com") en het wachtwoord ("test") van de gebruiker die inbellen. Deze gebruiker is op de HGW-server echt bevonden. In de voorbeeldconfiguraties in dit document, is de naam van de ISP router host naam "koala" en is de naam van de HGW router host naam "thing\_one".

**N.B.:** Als u aanvullende informatie wilt vinden over de opdrachten in dit document, gebruikt u het [Opdrachtplanningprogramma](#) (alleen [geregistreerd](#) klanten).

## Netwerkdigram

Dit document gebruikt de netwerkinstellingen die in dit diagram worden weergegeven.



## Configuraties van TACACS+ servers

Dit document gebruikt de serverconfiguraties die hier worden weergegeven.

- [TACACS+ software](#)
- [Cisco Secure ACS voor UNIX 2.x.x](#)

## TACACS+ software

```
!--- 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 =
jasmith@hp.com { chap = cleartext "test" service = ppp protocol = ip { default attribute = permit
} }
```

## Cisco Secure ACS voor 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 jasmith@hp.com User Profile Information user = jasmith@hp.com{ profile_id
= 85 profile_cycle = 1 password = chap "*****" service=ppp { protocol=ip { default
attribute=permit } protocol=lcp { } } }
```

## Routerconfiguratie

Dit document gebruikt de configuraties die hier worden weergegeven.

- [ISP-router](#)
- [HGW-router](#)

### Configuratie van IP-router

```
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
```

## HGW-routerconfiguratie

```
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
```

## Verifiëren

Er is momenteel geen verificatieprocedure beschikbaar voor deze configuratie.

## Problemen oplossen

Deze sectie bevat informatie waarmee u problemen met de configuratie kunt oplossen.

### Opdrachten voor probleemoplossing

**Opmerking:** Voordat u **debug**-opdrachten afgeeft, raadpleegt u [Belangrijke informatie over debug-opdrachten](#).

- **debug van verificatie**—informatie over verificatie, autorisatie en accounting (AAA)/TACACS+ verificatie.
- **debug van autorisatie**—informatie over AAA/TACACS+ autorisatie wordt weergegeven.
- **debug PPP onderhandeling**-displays PPP-pakketten die tijdens PPP-opstarten worden verzonden, waar PPP-opties worden onderhandeld.
- **debug van tacacs+**-displays gedetailleerde zuiveringsinformatie geassocieerd met TACACS+.
- **debug VPDN fouten**-displays die verhinderen dat een PPP-tunnel wordt aangelegd of fouten die een ingestelde tunnel veroorzaken om te sluiten.
- **debug VPDN gebeurtenissen**-displays over gebeurtenissen die deel uitmaken van de normale PPP-tunnelvestiging of shutdown.
- **debug vpdn l2f-fouten**—Hiermee wordt Layer 2-protocolfouten weergegeven die een Layer 2-instelling voorkomen of de normale werking ervan voorkomen.
- **debug vpdn l2f-gebeurtenissen**-displays over gebeurtenissen die deel uitmaken van de normale PPP-tunnelvestiging of shutdown voor Layer 2.
- **debug vpdn l2f-pakketten**-displays over Layer 2 het doorsturen van protocolkoppen en -status.
- **debug VPDN-pakketten**—Hiermee wordt Layer 2 Tunnel Protocol (L2TP) fouten en gebeurtenissen weergegeven die een onderdeel zijn van een normale tunnelinstelling of shutdown voor VPDN's.
- **debug Vsjabloon**-Hier wordt informatie over klonen voor een virtuele toegangsinterface weergegeven vanaf het moment dat het geluid van een virtuele sjabloon wordt gekloond tot het moment dat de virtuele toegangsinterface afloopt wanneer de oproep stopt.

### Monster debug-uitvoer

Deze debugs worden ter referentie verstrekt.

- [IPS-router - goede debug](#)
- [HGW-router - goed defect](#)
- [Debugs voor mislukte verbinding met ISP-router](#)
- [Debugs voor mislukte verbindingen op HGW router](#)

### IPS-router - goede debug

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#

[HGW-router - goed defect](#)

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
vtemplatel1 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 Vil: Processing AV service=ppp 15:04:51:
AAA/AUTHOR/IPCP Vil: Processing AV protocol=ip 15:04:51: AAA/AUTHOR/IPCP Vil: Processing AV
addr*15.15.15.15 15:04:51: AAA/AUTHOR/IPCP Vil: Authorization succeeded 15:04:51:
AAA/AUTHOR/IPCP Vil: Done. Her address 15.15.15.15, we want 15.15.15.15 !--- User finishes and
disconnects. 15:05:24: Vil VPDN: Reset 15:05:24: Vil VPDN: Reset %LINK-3-UPDOWN: Interface
Virtual-Access1, changed state to down 15:05:24: Vil VPDN: Cleanup 15:05:24: Vil VPDN: Reset
15:05:24: Vil VPDN: Reset 15:05:24: Vil VPDN: Unbind interface 15:05:24: Vil VTEMPLATE: Free
vaccess 15:05:24: Vil VPDN: Reset 15:05:24: Vil 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: Vil VTEMPLATE: Found a dirty vaccess clone with vtemplate 15:05:25: Vil
VTEMPLATE: ***** UNCLONE VACCESS1 ***** 15:05:25: Vil 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 encaps ppp default ip address end 15:05:26: Vil
VTEMPLATE: Set default settings with no ip address 15:05:26: Vil VTEMPLATE: Remove cloneblk
vtemplate with vtemplate 15:05:26: Vil VTEMPLATE: Add vaccess to recycle queue, queue size=1
thing_one#

```

## [Debugs voor mislukte verbinding op ISP-router](#)

```
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 voor mislukte verbindingen op HGW router

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
```

## Gerelateerde informatie

- [Cisco Secure ACS voor UNIX-ondersteuningspagina](#)
- [Pagina voor TACACS+ ondersteuning](#)
- [Technische ondersteuning en documentatie – Cisco Systems](#)