

Configurazione dell'autenticazione TACACS+ per le VPDN

Sommario

[Introduzione](#)

[Prerequisiti](#)

[Requisiti](#)

[Componenti usati](#)

[Convenzioni](#)

[Configurazione](#)

[Esempio di rete](#)

[Configurazioni server TACACS+](#)

[Configurazioni router](#)

[Verifica](#)

[Risoluzione dei problemi](#)

[Comandi per la risoluzione dei problemi](#)

[Output di esempio del comando debug](#)

[Informazioni correlate](#)

[Introduzione](#)

Una VPDN (Virtual Private Dial-up Network) consente a un servizio di connessione remota di rete privata di collegarsi ai server di accesso remoto (definiti come L2TP Access Concentrator [LAC]). Quando un client PPP (Point-to-Point Protocol) effettua una chiamata a un LAC, il LAC determina che deve inoltrare la sessione PPP a un server di rete L2TP (LNS) per tale client, che quindi autentica l'utente e avvia la negoziazione PPP. Al termine dell'installazione del PPP, tutti i frame vengono inviati tramite il LAC al client e all'LNS.

Questa configurazione di esempio consente di utilizzare l'autenticazione TACACS+ con le VPDN (Virtual Private Dial-Up Network). Il LAC interroga il server TACACS+, determina gli LNS da inoltrare all'utente e stabilisce il tunnel appropriato.

Per ulteriori informazioni sulle VPDN, consultare il documento sulla [descrizione delle VPDN](#).

[Prerequisiti](#)

[Requisiti](#)

Nessun requisito specifico previsto per questo documento.

[Componenti usati](#)

Le informazioni fornite in questo documento si basano sulle seguenti versioni software e hardware:

- Cisco Secure ACS per UNIX versione 2.x.x e successive o freeware TACACS+
- Software Cisco IOS® versione 11.2 e successive

Le informazioni discusse in questo documento fanno riferimento a dispositivi usati in uno specifico ambiente di emulazione. Su tutti i dispositivi menzionati nel documento la configurazione è stata ripristinata ai valori predefiniti. Se la rete è operativa, valutare attentamente eventuali conseguenze derivanti dall'uso dei comandi.

Convenzioni

Per ulteriori informazioni sulle convenzioni usate, consultare il documento [Cisco sulle convenzioni nei suggerimenti tecnici](#).

Configurazione

In questa sezione vengono presentate le informazioni necessarie per configurare le funzionalità descritte più avanti nel documento.

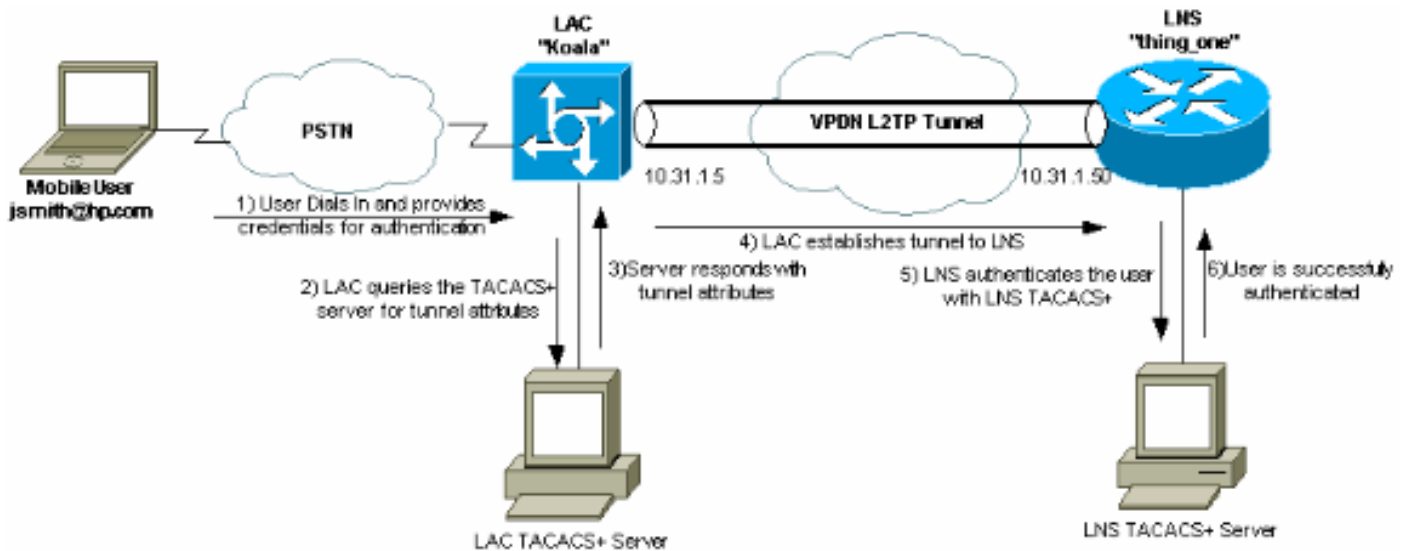
In questo esempio, l'utente è "jsmith@hp.com" con la password "test". Quando "jsmith@hp.com" viene chiamato sul router ISP, il router ISP invia l'ID utente "hp.com" al server ISP TACACS+. Il server ISP trova l'ID utente "hp.com" e invia il relativo ID tunnel ("isp"), l'indirizzo IP del router gateway locale (HGW) (10.31.1.50), la password del server di accesso alla rete (NAS) ("hello") e la password del gateway ("there") al router ISP.

Il router ISP avvia un tunnel e si connette al router HGW, che inoltra le password dell'ID utente "hp-gw" ("there") e quindi dell'ID utente "isp" ("hello") al server HGW TACACS+. Una volta stabiliti i tunnel, il router ISP inoltra al router HGW l'ID utente ("jsmith@hp.com") e la password ("test") dell'utente che effettua la chiamata. L'utente è autenticato sul server HGW. Nelle configurazioni di esempio di questo documento, il nome host del router ISP è "koala" e il nome host del router HGW è "thing_one".

Nota: per ulteriori informazioni sui comandi menzionati in questo documento, usare lo [strumento di ricerca dei comandi](#) (solo utenti [registrati](#)).

Esempio di rete

Nel documento viene usata l'impostazione di rete mostrata nel diagramma.



Configurazioni server TACACS+

Nel documento vengono usate le configurazioni del server mostrate di seguito.

- [TACACS+ Freeware](#)
- [Cisco Secure ACS per 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 per 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 { } } }
```

Configurazioni router

Nel documento vengono usate le configurazioni mostrate di seguito.

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

Configurazione router 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
```

Configurazione 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
```

Verifica

Attualmente non è disponibile una procedura di verifica per questa configurazione.

Risoluzione dei problemi

Le informazioni contenute in questa sezione permettono di risolvere i problemi relativi alla configurazione.

Comandi per la risoluzione dei problemi

Nota: prima di usare i comandi di **debug**, consultare le [informazioni importanti sui comandi di debug](#).

- **debug aaa authentication:** visualizza le informazioni sull'autenticazione, l'autorizzazione e l'accounting (AAA)/TACACS+.
- **debug aaa authorization:** visualizza le informazioni sull'autorizzazione AAA/TACACS+.
- **debug ppp negotiation:** visualizza i pacchetti PPP trasmessi durante l'avvio del protocollo PPP, in cui le opzioni PPP vengono negoziate.
- **debug tacacs+:** visualizza informazioni di debug dettagliate associate a TACACS+.
- **debug vpdn errors:** visualizza gli errori che impediscono di stabilire un tunnel PPP o gli errori che provocano la chiusura di un tunnel stabilito.
- **debug vpdn events:** visualizza i messaggi relativi agli eventi che fanno parte della normale creazione o chiusura del tunnel PPP.
- **debug vpdn l2f-errors:** visualizza gli errori del protocollo di layer 2 che impediscono la definizione del layer 2 o il normale funzionamento dello stesso.
- **debug vpdn l2f-events:** visualizza i messaggi relativi agli eventi che fanno parte della normale creazione del tunnel PPP o del processo di arresto per il layer 2.
- **debug vpdn l2f-packets:** visualizza i messaggi relativi alle intestazioni e allo stato del protocollo di inoltro di layer 2.
- **debug vpdn packets:** visualizza gli errori e gli eventi del protocollo L2TP (Layer 2 Tunnel Protocol) che fanno parte della normale definizione del tunnel o del normale arresto delle VPDN.
- **debug vtemplate:** visualizza le informazioni di duplicazione per un'interfaccia di accesso virtuale dal momento in cui viene duplicata da un modello virtuale al momento in cui l'interfaccia di accesso virtuale diventa inattiva al termine della chiamata.

Output di esempio del comando debug

Questi debug vengono forniti come riferimento.

- [Debug corretto del router ISP](#)
- [Debug corretto del router HGW](#)
- [Debug della connessione non riuscita sul router ISP](#)
- [Debug per connessioni non riuscite sul router HGW](#)

Debug corretto del router 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#

```

[Debug corretto 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
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 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 encaps 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#

```

[Debug per connessioni non riuscite su router 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

```

[Debug per connessioni non riuscite sul 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
```

Informazioni correlate

- [Pagina di supporto di Cisco Secure ACS per UNIX](#)
- [Pagina di supporto TACACS+](#)
- [Documentazione e supporto tecnico – Cisco Systems](#)