

# 如何使用TACACS+設定第2層通道通訊協定驗證

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## 簡介

本檔案介紹如何使用TACACS+設定第2層通道通訊協定(L2TP)。其中包括L2TP訪問集中器(LAC)TACACS+伺服器、L2TP網路伺服器(LNS)TACACS+伺服器和路由器的配置示例。

## 必要條件

### 需求

本文件沒有特定需求。

### 採用元件

本文中的資訊係根據以下軟體和硬體版本：

- 兩台Cisco 2511路由器
- Cisco IOS®軟體版本12.0(2)。T
- Cisco Secure UNIX、Cisco Secure Windows或TACACS+免費軟體

本文中的資訊是根據特定實驗室環境內的裝置所建立。文中使用到的所有裝置皆從已清除（預設）的組態來啟動。如果您的網路正在作用，請確保您已瞭解任何指令可能造成的影響。

## 慣例

如需文件慣例的詳細資訊，請參閱[思科技術提示慣例](#)。

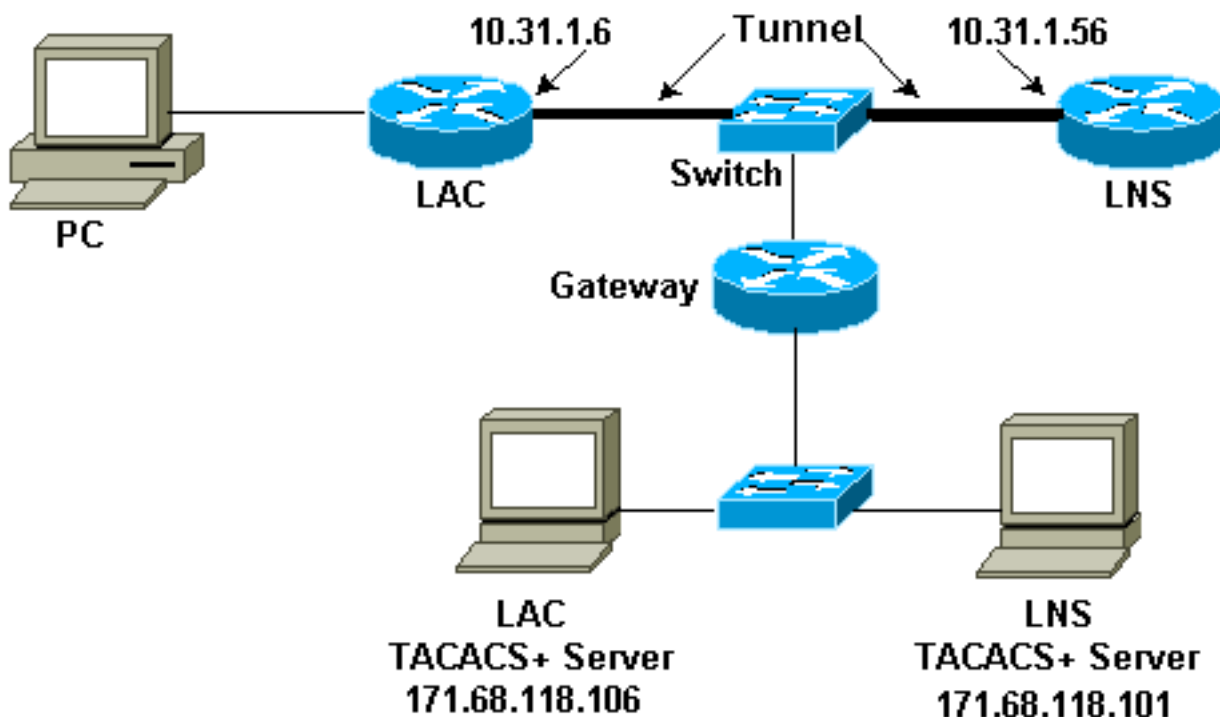
## 設定

本節提供用於設定本文件中所述功能的資訊。

**注意：**要查詢有關本文檔中使用的命令的其他資訊，請使用[命令查詢工具](#)（[僅限註冊客戶](#)）。

## 網路圖表

本檔案會使用下圖中所示的網路設定。



## TACACS+伺服器組態

### LAC配置 — Cisco Secure UNIX

```
# ./ViewProfile -p 9900 -u rtp.cisco.com user = rtp.cisco.com{
service=ppp {
protocol=vpdn {
set tunnel-type=l2tp
set tunnel-id=rtp_tunnel
set ip-addresses="10.31.1.56"
}
}
```

```

}

# ./ViewProfile -p 9900 -u rtp_tunnel
user = rtp_tunnel{
password = chap "FGHIJ"
service=ppp {
protocol=lcp {
}
protocol=ip {
}
}
}

```

## [LNS配置 — Cisco Secure UNIX](#)

```

# ./ViewProfile -p 9900 -u janedoe@rtp.cisco.com
user = janedoe@rtp.cisco.com{
password = chap "rtprules"
service=ppp {
protocol=lcp {
}
protocol=ip {
}
}
}

# ./ViewProfile -p 9900 -u ABCDE
user = ABCDE{
password = chap "FGHIJ"
service=ppp {
protocol=lcp {
}
protocol=ip {
}
}
}

```

## [LAC配置 — Cisco Secure Windows](#)

完成以下步驟，在Cisco Secure Windows上配置LAC:

1. 將使用者rtp\_tunnel設定為普通PPP使用者（使用者設定中的密碼和/或CHAP密碼）。
2. 將使用者放入group\_1並檢查服務PPP/IP。如果顯示了此框，請選中PPP/LCP。
3. 設定使用者rtp.cisco.com。密碼是「不比對」。
4. 如果某些選項未顯示在「組設定」中，請轉至**介面配置**，然後選中相應的框使其顯示。
5. 將使用者放入group\_2並檢查服務PPP/VPDN。tunnel-id為rtp\_tunnel,ip address list為10.31.1.56，在下方的矩形自定義屬性框中，鍵入tunnel-type=l2tp。

## [LNS配置 — Cisco Secure Windows](#)

完成以下步驟，為Cisco Secure Windows配置LNS:

1. 將使用者「ABCDE」和「janedoe@rtp.cisco.com」設定為普通PPP使用者（使用者設定中的密碼和/或CHAP密碼）。
2. 將使用者放入group\_3並檢查服務PPP/IP。如果顯示了此框，請選中PPP/LCP。

## LAC TACACS+免費軟體配置

```
user = rtp.cisco.com {
service = ppp protocol = vpdn {
tunnel-type = l2tp
tunnel-id = rtp_tunnel
ip-addresses = "10.31.1.56"
}
}
```

```
user = rtp_tunnel {
chap = cleartext "FGHIJ"
service = ppp protocol = ip {
default attribute = permit
}
}
```

## LNS TACACS+免費軟體配置

```
key = "cisco"
```

```
user = janedoe@rtp.cisco.com {
chap = cleartext "rtprules"
service = ppp protocol = ip {
default attribute = permit
}
}
```

```
user = ABCDE {
chap = cleartext "FGHIJ"
service = ppp protocol = ip {
default attribute = permit
}
}
```

## 路由器配置

### LAC路由器配置

```
version 12.0
service timestamps debug datetime
service timestamps log uptime
no service password-encryption
!
hostname LAC
!
aaa new-model
aaa authentication ppp default if-needed tacacs+
aaa authorization network default tacacs+
aaa accounting network default start-stop tacacs+
enable secret level 7 5 $1$Dj3K$9jkyuJR6fJV2JO./Qt0lC1
enable password ww
!
username john password 0 doe
ip subnet-zero
no ip domain-lookup
!
vpdn enable
!
```

```
vpdn search-order domain
!
interface Loopback0
no ip address
no ip directed-broadcast
!
interface Ethernet0
ip address 10.31.1.144 255.255.255.0
no ip directed-broadcast
!
interface Serial0
no ip address
no ip directed-broadcast
no ip mroute-cache
shutdown
!
interface Serial1
no ip address
no ip directed-broadcast
shutdown
!
interface Async1
ip unnumbered Ethernet0
no ip directed-broadcast
ip tcp header-compression passive
encapsulation ppp
async mode dedicated
peer default ip address pool default
ppp authentication chap
!
ip local pool default 10.5.5.5 10.5.5.50
ip classless
ip route 0.0.0.0 0.0.0.0 10.31.1.1
!
tacacs-server host 171.68.118.106
tacacs-server key cisco
!
line con 0
transport input none
line 1
exec-timeout 0 0
autoselect during-login
autoselect ppp
modem Dialin
transport preferred none
transport output none
speed 38400
flowcontrol hardware
line 2 16
modem InOut
transport input all
speed 38400
flowcontrol hardware
line aux 0
line vty 0 4
password WW
!
end
```

## LNS路由器配置

```
version 12.0
service timestamps debug datetime
```

```
service timestamps log uptime
no service password-encryption
!
hostname LNS
!
aaa new-model
aaa authentication ppp default if-needed tacacs+
aaa authorization network default tacacs+
aaa accounting network default start-stop tacacs+
enable secret 5 $1$wfMI$ixUG9hw7yhmsv.87.krpZl
enable password WW
!
username john password 0 doe
ip subnet-zero
no ip domain-lookup
!
vpdn enable
!
vpdn-group 1
accept dialin l2tp virtual-template 1 remote rtp_tunnel
local name ABCDE
!
interface Ethernet0
ip address 10.31.1.56 255.255.255.0
no ip directed-broadcast
!
interface Virtual-Templatel
ip unnumbered Ethernet0
no ip directed-broadcast
peer default ip address pool default
ppp authentication chap
!
interface Serial0
no ip address
no ip directed-broadcast
no ip mroute-cache
shutdown
!
interface Serial1
no ip address
no ip directed-broadcast
shutdown
!
interface Async1
ip unnumbered Ethernet0
no ip directed-broadcast
ip tcp header-compression passive
encapsulation ppp
async mode dedicated
peer default ip address pool setup_pool
ppp authentication chap pap
!
!
!
!
ip local pool default 10.6.1.1 10.6.1.2
ip classless
ip route 0.0.0.0 0.0.0.0 10.31.1.1
!
tacacs-server host 171.68.118.101
tacacs-server key cisco
!
line con 0
```

```
transport input none
line 1 8
autoselect during-login
autoselect ppp
modem Dialin
speed 115200
flowcontrol hardware
line aux 0
line vty 0 4
password WW
!
end
```

## 驗證

### 兩台路由器的Show命令輸出

本節提供的資訊可用於確認您的組態是否正常運作。

[輸出直譯器工具](#)(僅供註冊客戶使用)支援某些show命令，此工具可讓您檢視[show](#)命令輸出的分析。

### LAC路由器

```
LAC#show vpdn session
```

```
L2TP Session Information (Total tunnels=1 sessions=1)
```

```
LocID RemID TunID Intf Username State Last Chg
1 1 76 As1 janedoe@rtp.c est 00:00:32
```

```
% No active L2F tunnels
```

```
LAC#show vpdn tunnel
```

```
L2TP Tunnel Information (Total tunnels=1 sessions=1)
```

```
LocID RemID Remote Name State Remote Address Port Sessions
76 58 ABCDE est 10.31.1.56 1701 1
```

```
% No active L2F tunnels
```

### LNS路由器

```
LNS#show vpdn session
```

```
L2TP Session Information (Total tunnels=1 sessions=1)
```

```
LocID RemID TunID Intf Username State Last Chg
1 1 58 Vi1 janedoe@rtp.c est 00:01:55
```

```
% No active L2F tunnels
```

```
LNS#show vpdn tunnel
```

```
L2TP Tunnel Information (Total tunnels=1 sessions=1)
```

```
LocID RemID Remote Name State Remote Address Port Sessions
58 76 rtp_tunnel est 10.31.1.144 1701 1
```

% No active L2F tunnels

## 顯示兩台路由器的版本輸出

LAC#**show version**

```
Cisco Internetwork Operating System Software
IOS (tm) 2500 Software (C2500-IS-L), Version 12.0(2)T, RELEASE SOFTWARE (fc1)
Copyright (c) 1986-1998 by cisco Systems, Inc.
Compiled Wed 09-Dec-98 02:31 by dschwart
Image text-base: 0x030403B0, data-base: 0x00001000

ROM: System Bootstrap, Version 11.0(10c), SOFTWARE
BOOTFLASH: 3000 Bootstrap Software (IGS-BOOT-R), Version 11.0(10c), RELEASE SOFTWARE (fc1)

LAC uptime is 20 hours, 22 minutes
System restarted by reload at 16:13:55 UTC Fri Jan 29 1999
System image file is "flash:c2500-is-l.120-2.T"
```

```
cisco 2511 (68030) processor (revision M) with 14336K/2048K bytes of memory.
Processor board ID 07041186, with hardware revision 00000000
Bridging software.
X.25 software, Version 3.0.0.
1 Ethernet/IEEE 802.3 interface(s)
2 Serial network interface(s)
16 terminal line(s)
32K bytes of non-volatile configuration memory.
16384K bytes of processor board System flash (Read ONLY)
Configuration register is 0x2102
```

## 可能出錯 — 從LAC進行錯誤調試

此偵錯輸出包含有關路由器配置錯誤時序列停止位置的註釋。

LAC#**show debug**

```
General OS:
AAA Authentication debugging is on
AAA Authorization debugging is on
AAA Accounting debugging is on
VPN:
L2X protocol events debugging is on
L2X protocol errors debugging is on
VPDN events debugging is on
VPDN errors debugging is on
VTEMPLATE:
Virtual Template debugging is on
LAC#
Jan 30 12:17:09: As1 AAA/AUTHOR/FSM: (0): LCP succeeds trivially
20:03:18: %LINK-3-UPDOWN: Interface Async1, changed state to up
Jan 30 12:17:09: As1 VPDN: Looking for tunnel -- rtp.cisco.com --
Jan 30 12:17:09: AAA: parse name=Async1 idb type=10 tty=1
Jan 30 12:17:09: AAA: name=Async1 flags=0x11 type=4 shelf=0 slot=0 adapter=0
port=1 channel=0
Jan 30 12:17:09: AAA/AUTHEN: create_user (0x278B90) user='rtp.cisco.com'
ruser='' port='Async1'
rem_addr='' authen_type=NONE service=LOGIN priv=0
Jan 30 12:17:09: AAA/AUTHOR/VPDN (898425447): Port='Async1'
list='default' service=NET
Jan 30 12:17:09: AAA/AUTHOR/VPDN: (898425447) user='rtp.cisco.com'
Jan 30 12:17:09: AAA/AUTHOR/VPDN: (898425447) send AV service=ppp
Jan 30 12:17:09: AAA/AUTHOR/VPDN: (898425447) send AV protocol=vpdn
```



```
Jan 30 12:17:09: AAA/AUTHOR/VPDN (898425447) found list "default"
Jan 30 12:17:09: AAA/AUTHOR/VPDN: (898425447) Method=TACACS+
Jan 30 12:17:09: AAA/AUTHOR/TAC+: (898425447): user=rtp.cisco.com
Jan 30 12:17:09: AAA/AUTHOR/TAC+: (898425447): send AV service=ppp
Jan 30 12:17:09: AAA/AUTHOR/TAC+: (898425447): send AV protocol=vpdn
Jan 30 12:17:09: TAC+: (898425447): received author response status = PASS_ADD
Jan 30 12:17:09: AAA/AUTHOR (898425447): Post authorization status = PASS_ADD
Jan 30 12:17:09: AAA/AUTHOR/VPDN: Processing AV service=ppp
Jan 30 12:17:09: AAA/AUTHOR/VPDN: Processing AV protocol=vpdn
Jan 30 12:17:09: AAA/AUTHOR/VPDN: Processing AV tunnel-type=l2tp
Jan 30 12:17:09: AAA/AUTHOR/VPDN: Processing AV tunnel-id=rtp_tunnel
!--- If the wrong tunnel termination IP address !--- is in the profile: Jan 30 12:56:30:
AAA/AUTHOR/VPDN: Processing AV ip-addresses=1.1.1.1
Jan 30 12:17:09: AAA/AUTHOR/VPDN: Processing AV ip-addresses=10.31.1.56
Jan 30 12:17:09: As1 VPDN: Get tunnel info for rtp.cisco.com with LAC
rtp_tunnel, IP 10.31.1.56
Jan 30 12:17:09: AAA/AUTHEN: free_user (0x278B90) user='rtp.cisco.com'
ruser='' port='Async1'
rem_addr='' authen_type=NONE service=LOGIN priv=0
!--- If the wrong tunnel termination IP !--- address is in the profile: Jan 30 12:56:30: As1
VPDN: Forward to address 1.1.1.1
!--- The connection eventually drops on this end and no !--- debug is seen on the other end. Jan
Jan 30 12:17:09: As1 VPDN: Forward to address 10.31.1.56 Jan 30 12:17:09: As1 VPDN: Forwarding...
Jan 30 12:17:09: AAA: parse name=Async1 idb type=10 tty=1 Jan 30 12:17:09: AAA: name=Async1
flags=0x11 type=4 shelf=0 slot=0 adapter=0 port=1 channel=0 Jan 30 12:17:09: AAA/AUTHEN:
create_user (0x22CDEC) user='janedoe@rtp.cisco.com' ruser='' port='Async1' rem_addr='async'
authen_type=CHAP service=PPP priv=1 Jan 30 12:17:09: As1 VPDN: Bind interface direction=1 Jan 30
12:17:09: Tnl/Cl 74/1 L2TP: Session FS enabled Jan 30 12:17:09: Tnl/Cl 74/1 L2TP: Session state
change from idle to wait-for-tunnel Jan 30 12:17:09: As1 74/1 L2TP: Create session Jan 30
12:17:09: Tnl 74 L2TP: SM State idle Jan 30 12:17:09: Tnl 74 L2TP: O SCCRQ Jan 30 12:17:09: Tnl
74 L2TP: Tunnel state change from idle to wait-ctl-reply Jan 30 12:17:09: Tnl 74 L2TP: SM State
wait-ctl-reply Jan 30 12:17:09: As1 VPDN: janedoe@rtp.cisco.com is forwarded Jan 30 12:17:10:
Tnl 74 L2TP: I SCCRQ from ABCDE Jan 30 12:17:10: Tnl 74 L2TP: Got a challenge from remote peer,
ABCDE Jan 30 12:17:10: AAA: parse name= idb type=-1 tty=-1 Jan 30 12:17:10: AAA/AUTHEN:
create_user (0x23232C) user='rtp_tunnel' ruser='' port='' rem_addr='' authen_type=CHAP
service=PPP priv=1 Jan 30 12:17:10: AAA/AUTHEN/START (1598999635): port='' list='default'
action=SENDAUTH service=PPP Jan 30 12:17:10: AAA/AUTHEN/START (1598999635): found list default
Jan 30 12:17:10: AAA/AUTHEN (1598999635): status = UNKNOWN Jan 30 12:17:10: AAA/AUTHEN/START
(1598999635): Method=TACACS+ Jan 30 12:17:10: TAC+: send AUTHEN/START packet ver=193
id=1598999635 Jan 30 12:17:10: TAC+: ver=192 id=1598999635 received AUTHEN status = ERROR Jan 30
12:17:10: AAA: parse name= idb type=-1 tty=-1 Jan 30 12:17:10: AAA/AUTHEN: create_user
(0x232470) user='rtp_tunnel' ruser='' port='' rem_addr='' authen_type=CHAP service=PPP priv=1
Jan 30 12:17:10: TAC+: ver=192 id=3400389836 received AUTHEN status = PASS Jan 30 12:17:10:
AAA/AUTHEN: free_user (0x232470) user='rtp_tunnel' ruser='' port='' rem_addr='' authen_type=CHAP
service=PPP priv=1 Jan 30 12:17:10: AAA/AUTHEN (1598999635): status = PASS Jan 30 12:17:10:
AAA/AUTHEN: free_user (0x23232C) user='rtp_tunnel' ruser='' port='' rem_addr='' authen_type=CHAP
service=PPP priv=1 !--- Change the CHAP passwords. The password rtp_tunnel !--- in the LAC
TACACS+ users' file does not match the !--- password for "local name ABCDE" from the router !---
in the LNS TACACS+ users' file: Jan 30 13:24:23: Tnl 88 L2TP: Tunnel Authentication fails for
ABCDE
Jan 30 13:24:23: Tnl 88 L2TP: Expected 7C959CA96C1E4AAA68BB3D481249488B
Jan 30 13:24:23: Tnl 88 L2TP: Got E4118FB4C8C4467EA4BF8872276C20B2
Jan 30 12:17:10: Tnl 74 L2TP: Got a response from remote peer, ABCDE
Jan 30 12:17:10: AAA: parse name= idb type=-1 tty=-1
Jan 30 12:17:10: AAA/AUTHEN: create_user (0x22FBA4) user='rtp_tunnel'
ruser='' port=''
rem_addr='' authen_type=CHAP service=PPP priv=1
Jan 30 12:17:10: AAA/AUTHEN/START (2964849625): port='' list='default'
action=SENDAUTH service=PPP
Jan 30 12:17:10: AAA/AUTHEN/START (2964849625): found list default
Jan 30 12:17:10: AAA/AUTHEN (2964849625): status = UNKNOWN
Jan 30 12:17:10: AAA/AUTHEN/START (2964849625): Method=TACACS+
Jan 30 12:17:10: TAC+: send AUTHEN/START packet ver=193 id=2964849625
```

```

20:03:20: %LINEPROTO-5-UPDOWN: Line protocol on Interface Async1,
        changed state to up
Jan 30 12:17:11: TAC+: ver=192 id=2964849625 received AUTHEN status = ERROR
Jan 30 12:17:11: AAA: parse name= idb type=-1 tty=-1
Jan 30 12:17:11: AAA/AUTHEN: create_user (0x22FC8C) user='rtp_tunnel'
        ruser='' port=''
rem_addr='' authen_type=CHAP service=PPP priv=1
Jan 30 12:17:11: As1 74/1 L2TP: Discarding data packet because tunnel is not open
Jan 30 12:17:11: As1 74/1 L2TP: Discarding data packet because tunnel is not open
Jan 30 12:17:11: TAC+: ver=192 id=1474818051 received AUTHEN status = PASS
Jan 30 12:17:11: AAA/AUTHEN: free_user (0x22FC8C) user='rtp_tunnel' ruser=''
        port=''
rem_addr='' authen_type=CHAP service=PPP priv=1
Jan 30 12:17:11: AAA/AUTHEN (2964849625): status = PASS
Jan 30 12:17:11: AAA/AUTHEN: free_user (0x22FBA4) user='rtp_tunnel' ruser=''
        port=''
rem_addr='' authen_type=CHAP service=PPP priv=1
Jan 30 12:17:11: Tnl 74 L2TP: Tunnel Authentication success
Jan 30 12:17:11: Tnl 74 L2TP: Tunnel state change from wait-ctl-reply to
        established
Jan 30 12:17:11: Tnl 74 L2TP: O SCCCN to ABCDE tnlid 56
Jan 30 12:17:11: Tnl 74 L2TP: SM State established
Jan 30 12:17:11: As1 74/1 L2TP: O ICRQ to ABCDE 56/0
Jan 30 12:17:11: As1 74/1 L2TP: Session state change from wait-for-tunnel
        to wait-reply
Jan 30 12:17:11: Tnl 74 L2TP: Dropping old CM, Ns 0, expected 1
Jan 30 12:17:11: As1 74/1 L2TP: O ICCN to ABCDE 56/1
Jan 30 12:17:11: As1 74/1 L2TP: Session state change from wait-reply to
        established
LAC#

```

## 可能出現錯誤 — LNS的調試錯誤

此偵錯輸出包含有關路由器配置錯誤時序列停止位置的註釋。

### LNS#**show debug**

General OS:

AAA Authentication debugging is on

AAA Authorization debugging is on

AAA Accounting debugging is on

VPN:

L2X protocol events debugging is on

L2X protocol errors debugging is on

VPDN events debugging is on

VPDN errors debugging is on

VTEMPLATE:

Virtual Template debugging is on

LNS#

Jan 30 12:17:09: L2TP: I SCCRQ from rtp\_tunnel tnl 74

Jan 30 12:17:09: Tnl 56 L2TP: New tunnel created for remote rtp\_tunnel,  
address 10.31.1.144

*!--- Instead of the LAC sending the "rtp\_tunnel" !--- (see the user profile on the TACACS+ server), it sends "junk". !--- We are expecting "rtp\_tunnel" as in "accept dialin l2tp !--- virtual-template 1 remote rtp\_tunnel" in this configuration: Jan 30 13:05:16: L2TP: I SCCRQ from junk tnl 81*

**Jan 30 13:05:16: L2X: Never heard of junk**

**Jan 30 13:05:16: L2TP: Could not find info block for junk**

Jan 30 12:17:09: Tnl 56 L2TP: Got a challenge in SCCRQ, rtp\_tunnel

Jan 30 12:17:09: AAA: parse name= idb type=-1 tty=-1

Jan 30 12:17:09: AAA/AUTHEN: create\_user (0x21F6D0) user='ABCDE'  
ruser='' port=''

```
rem_addr='' authen_type=CHAP service=PPP priv=1
Jan 30 12:17:09: AAA/AUTHEN/START (3194595626): port='' list='default'
          action=SENDAUTH service=PPP
Jan 30 12:17:09: AAA/AUTHEN/START (3194595626): found list default
Jan 30 12:17:09: AAA/AUTHEN (3194595626): status = UNKNOWN
Jan 30 12:17:09: AAA/AUTHEN/START (3194595626): Method=TACACS+
Jan 30 12:17:09: TAC+: send AUTHEN/START packet ver=193 id=3194595626
Jan 30 12:17:09: TAC+: ver=192 id=3194595626 received AUTHEN status = ERROR
Jan 30 12:17:09: AAA: parse name= idb type=-1 tty=-1
Jan 30 12:17:09: AAA/AUTHEN: create_user (0x2281AC) user='ABCDE' ruser='' port=''
rem_addr='' authen_type=CHAP service=PPP priv=1
Jan 30 12:17:09: TAC+: ver=192 id=3639011179 received AUTHEN status = PASS
Jan 30 12:17:09: AAA/AUTHEN: free_user (0x2281AC) user='ABCDE' ruser='' port=''
rem_addr='' authen_type=CHAP service=PPP priv=1
Jan 30 12:17:09: AAA/AUTHEN (3194595626): status = PASS
Jan 30 12:17:09: AAA/AUTHEN: free_user (0x21F6D0) user='ABCDE' ruser='' port=''
rem_addr='' authen_type=CHAP service=PPP priv=1
Jan 30 12:17:09: Tnl 56 L2TP: O SCCRP to rtp_tunnel tnlid 74
Jan 30 12:17:09: Tnl 56 L2TP: Tunnel state change from idle to wait-ctl-reply
Jan 30 12:17:10: Tnl 56 L2TP: O Resend SCCRP, flg TLF, ver 2, len 152,
          tnl 74, cl 0, ns 0, nr 1
Jan 30 12:17:10: Tnl 56 L2TP: I SCCCN from rtp_tunnel tnl 74
Jan 30 12:17:10: Tnl 56 L2TP: Got a Challenge Response in SCCCN from rtp_tunnel
Jan 30 12:17:10: AAA: parse name= idb type=-1 tty=-1
Jan 30 12:17:10: AAA/AUTHEN: create_user (0x227F3C) user='ABCDE' ruser='' port=''
rem_addr='' authen_type=CHAP service=PPP priv=1
Jan 30 12:17:10: AAA/AUTHEN/STARTTranslating "rtp.cisco.com"
(4117701992): port='' list='default' action=SENDAUTH service=PPP
Jan 30 12:17:10: AAA/AUTHEN/START (4117701992): found list default
Jan 30 12:17:10: AAA/AUTHEN (4117701992): status = UNKNOWN
Jan 30 12:17:10: AAA/AUTHEN/START (4117701992): Method=TACACS+
Jan 30 12:17:10: TAC+: send AUTHEN/START packet ver=193 id=4117701992
Jan 30 12:17:11: TAC+: ver=192 id=4117701992 received AUTHEN status = ERROR
Jan 30 12:17:11: AAA: parse name= idb type=-1 tty=-1
Jan 30 12:17:11: AAA/AUTHEN: create_user (0x228E68) user='ABCDE' ruser='' port=''
rem_addr='' authen_type=CHAP service=PPP priv=1
Jan 30 12:17:11: TAC+: ver=192 id=2827432721 received AUTHEN status = PASS
Jan 30 12:17:11: AAA/AUTHEN: free_user (0x228E68) user='ABCDE' ruser='' port=''
rem_addr='' authen_type=CHAP service=PPP priv=1
Jan 30 12:17:11: AAA/AUTHEN (4117701992): status = PASS
Jan 30 12:17:11: AAA/AUTHEN: free_user (0x227F3C) user='ABCDE' ruser='' port=''
rem_addr='' authen_type=CHAP service=PPP priv=1
Jan 30 12:17:11: Tnl 56 L2TP: Tunnel Authentication success
Jan 30 12:17:11: Tnl 56 L2TP: Tunnel state change from wait-ctl-reply
          to established
Jan 30 12:17:11: Tnl 56 L2TP: SM State established
Jan 30 12:17:11: Tnl 56 L2TP: I ICRQ from rtp_tunnel tnl 74
Jan 30 12:17:11: Tnl/Cl 56/1 L2TP: Session FS enabled
Jan 30 12:17:11: Tnl/Cl 56/1 L2TP: Session state change from idle to
          wait-for-tunnel
Jan 30 12:17:11: Tnl/Cl 56/1 L2TP: New session created
Jan 30 12:17:11: Tnl/Cl 56/1 L2TP: O ICRP to rtp_tunnel 74/1
Jan 30 12:17:11: Tnl/Cl 56/1 L2TP: Session state change from wait-for-tunnel
          to wait-connect
Jan 30 12:17:11: Tnl/Cl 56/1 L2TP: I ICCN from rtp_tunnel tnl 74, cl 1
Jan 30 12:17:11: Tnl/Cl 56/1 L2TP: Session state change from wait-connect
          to established
Jan 30 12:17:11: Vif VTEMPLATE: Reuse Vif, recycle queue size 0
Jan 30 12:17:11: Vif VTEMPLATE: Hardware address 00e0.1e68.942c
Jan 30 12:17:11: Vif VPDN: Virtual interface created for janedoe@rtp.cisco.com
Jan 30 12:17:11: Vif VPDN: Set to Async interface
Jan 30 12:17:11: Vif VPDN: Clone from Vtemplate 1 filterPPP=0 blocking
Jan 30 12:17:11: Vif VTEMPLATE: Has a new cloneblk vtemplate, now it has
          vtemplate
```

```
Jan 30 12:17:11: Vi1 VTEMPLATE: ***** CLONE VACCESS1 *****
Jan 30 12:17:11: Vi1 VTEMPLATE: Clone from Virtual-Template1
interface Virtual-Access1
default ip address
no ip address
encap ppp
ip unnumbered Ethernet0
peer default ip address pool default
ppp authentication chap
ip unnum ethernet0
peer def ip address pool default
ppp authen chap
end

Jan 30 12:17:12: janedoe@rtp.cisco.com 56/1 L2TP: Session with no hwidb
20:12:14: %LINK-3-UPDOWN: Interface Virtual-Access1, changed state to up
Jan 30 12:17:13: Vi1 AAA/AUTHOR/FSM: (0): LCP succeeds trivially
Jan 30 12:17:13: Vi1 VPDN: Bind interface direction=2
Jan 30 12:17:13: Vi1 VPDN: PPP LCP accepted rcv CONFACK
Jan 30 12:17:13: Vi1 VPDN: PPP LCP accepted sent CONFACK
Jan 30 12:17:13: Vi1 L2X: Discarding packet because of no mid/session
Jan 30 12:17:13: AAA: parse name=Virtual-Access1 idb type=21 tty=-1
Jan 30 12:17:13: AAA: name=Virtual-Access1 flags=0x11 type=5 shelf=0 slot=0
adapter=0 port=1 channel=0
Jan 30 12:17:13: AAA/AUTHEN: create_user (0x1F5100) user='janedoe@rtp.cisco.com'
ruser='' port='Virtual-Access1' rem_addr='' authen_type=CHAP
service=PPP priv=1
Jan 30 12:17:13: AAA/AUTHEN/START (562517969): port='Virtual-Access1' list=''
action=LOGIN service=PPP
Jan 30 12:17:13: AAA/AUTHEN/START (562517969): using "default" list
Jan 30 12:17:13: AAA/AUTHEN (562517969): status = UNKNOWN
Jan 30 12:17:13: AAA/AUTHEN/START (562517969): Method=TACACS+
Jan 30 12:17:13: TAC+: send AUTHEN/START packet ver=193 id=562517969
Jan 30 12:17:14: TAC+: ver=192 id=562517969 received AUTHEN status = GETPASS
Jan 30 12:17:14: AAA: parse name=Virtual-Access1 idb type=-1 tty=-1
Jan 30 12:17:14: AAA: name=Virtual-Access1 flags=0x11 type=6 shelf=0 slot=0
adapter=0 port=1 channel=0
Jan 30 12:17:14: AAA/AUTHEN: create_user (0x1F5270) user='janedoe@rtp.cisco.com'
ruser='' port='Virtual-Access1' rem_addr='' authen_type=CHAP
service=PPP priv=1
Jan 30 12:17:14: TAC+: ver=192 id=2384902384 received AUTHEN status = PASS
Jan 30 12:17:14: AAA/AUTHEN: free_user (0x1F5270) user='janedoe@rtp.cisco.com'
ruser='' port='Virtual-Access1' rem_addr='' authen_type=CHAP
service=PPP priv=1
```

```
!--- Here, the tunnel is ok, but the user !--- enters a bad password in dialing: Jan 30
13:39:44: AAA/AUTHEN (1958732267): status = FAIL
21:34:45: %VPDN-6-AUTHENFAIL: L2F HGW 10.31.1.144, AAA authentication
failure for Vi1 user
```

**janedoe@rtp.cisco.com; Authentication failure**

```
Jan 30 12:17:14: AAA/AUTHEN (562517969): status = PASS
Jan 30 12:17:14: Vi1 AAA/AUTHOR/LCP: Authorize LCP
Jan 30 12:17:14: AAA/AUTHOR/LCP Vi1 (413543389): Port='Virtual-Access1'
list='' service=NET
Jan 30 12:17:14: AAA/AUTHOR/LCP: Vi1 (413543389) user='janedoe@rtp.cisco.com'
Jan 30 12:17:14: AAA/AUTHOR/LCP: Vi1 (413543389) send AV service=ppp
Jan 30 12:17:14: AAA/AUTHOR/LCP: Vi1 (413543389) send AV protocol=lcp
Jan 30 12:17:14: AAA/AUTHOR/LCP (413543389) found list "default"
Jan 30 12:17:14: AAA/AUTHOR/LCP: Vi1 (413543389) Method=TACACS+
Jan 30 12:17:14: AAA/AUTHOR/TAC+: (413543389): user=janedoe@rtp.cisco.com
Jan 30 12:17:14: AAA/AUTHOR/TAC+: (413543389): send AV service=ppp
Jan 30 12:17:14: AAA/AUTHOR/TAC+: (413543389): send AV protocol=lcp
Jan 30 12:17:14: TAC+: (413543389): received author response status = PASS_ADD
Jan 30 12:17:14: AAA/AUTHOR (413543389): Post authorization status = PASS_ADD
```

```
Jan 30 12:17:14: AAA/ACCT/NET/START User janedoe@rtp.cisco.com, Port
Virtual-Access1, List ""
Jan 30 12:17:14: AAA/ACCT/NET: Found list "default"
Jan 30 12:17:14: Vll AAA/AUTHOR/FSM: (0): Can we start IPCP?
Jan 30 12:17:14: AAA/AUTHOR/FSM Vll (1358526470): Port='Virtual-Access1'
list='' service=NET
Jan 30 12:17:14: AAA/AUTHOR/FSM: Vll (1358526470) user='janedoe@rtp.cisco.com'
Jan 30 12:17:14: AAA/AUTHOR/FSM: Vll (1358526470) send AV service=ppp
Jan 30 12:17:14: AAA/AUTHOR/FSM: Vll (1358526470) send AV protocol=ip
Jan 30 12:17:14: AAA/AUTHOR/FSM (1358526470) found list "default"
Jan 30 12:17:14: AAA/AUTHOR/FSM: Vll (1358526470) Method=TACACS+
Jan 30 12:17:14: AAA/AUTHOR/TAC+: (1358526470): user=janedoe@rtp.cisco.com
Jan 30 12:17:14: AAA/AUTHOR/TAC+: (1358526470): send AV service=ppp
Jan 30 12:17:14: AAA/AUTHOR/TAC+: (1358526470): send AV protocol=ip
Jan 30 12:17:14: TAC+: (1358526470): received author response status = PASS_ADD
Jan 30 12:17:14: AAA/AUTHOR (1358526470): Post authorization status = PASS_ADD
Jan 30 12:17:14: Vll AAA/AUTHOR/FSM: We can start IPCP
Jan 30 12:17:14: TAC+: (1442592025): received acct response status = UNKNOWN
20:12:16: %LINEPROTO-5-UPDOWN: Line protocol on Interface Virtual-Access1,
changed state to up
Jan 30 12:17:16: Vll AAA/AUTHOR/IPCP: Start. Her address 0.0.0.0, we want 0.0.0.0
Jan 30 12:17:16: Vll AAA/AUTHOR/IPCP: Processing AV service=ppp
Jan 30 12:17:16: Vll AAA/AUTHOR/IPCP: Processing AV protocol=ip
Jan 30 12:17:16: Vll AAA/AUTHOR/IPCP: Authorization succeeded
Jan 30 12:17:16: Vll AAA/AUTHOR/IPCP: Done. Her address 0.0.0.0,
we want 0.0.0.0
Jan 30 12:17:16: Vll AAA/AUTHOR/IPCP: Start. Her address 0.0.0.0,
we want 10.6.1.1
Jan 30 12:17:16: Vll AAA/AUTHOR/IPCP: Processing AV service=ppp
Jan 30 12:17:16: Vll AAA/AUTHOR/IPCP: Processing AV protocol=ip
Jan 30 12:17:16: Vll AAA/AUTHOR/IPCP: Authorization succeeded
Jan 30 12:17:16: Vll AAA/AUTHOR/IPCP: Done. Her address 0.0.0.0,
we want 10.6.1.1
Jan 30 12:17:16: Vll AAA/AUTHOR/IPCP: Start. Her address 10.6.1.1,
we want 10.6.1.1
Jan 30 12:17:16: AAA/AUTHOR/IPCP Vll (3572380713): Port='Virtual-Access1'
list='' service=NET
Jan 30 12:17:16: AAA/AUTHOR/IPCP: Vll (3572380713) user='janedoe@rtp.cisco.com'
Jan 30 12:17:16: AAA/AUTHOR/IPCP: Vll (3572380713) send AV service=ppp
Jan 30 12:17:16: AAA/AUTHOR/IPCP: Vll (3572380713) send AV protocol=ip
Jan 30 12:17:16: AAA/AUTHOR/IPCP: Vll (3572380713) send AV addr*10.6.1.1
Jan 30 12:17:16: AAA/AUTHOR/IPCP (3572380713) found list "default"
Jan 30 12:17:16: AAA/AUTHOR/IPCP: Vll (3572380713) Method=TACACS+
Jan 30 12:17:16: AAA/AUTHOR/TAC+: (3572380713): user=janedoe@rtp.cisco.com
Jan 30 12:17:16: AAA/AUTHOR/TAC+: (3572380713): send AV service=ppp
Jan 30 12:17:16: AAA/AUTHOR/TAC+: (3572380713): send AV protocol=ip
Jan 30 12:17:16: AAA/AUTHOR/TAC+: (3572380713): send AV addr*10.6.1.1
Jan 30 12:17:17: TAC+: (3572380713): received author response status = PASS_ADD
Jan 30 12:17:17: AAA/AUTHOR (3572380713): Post authorization status = PASS_ADD
Jan 30 12:17:17: Vll AAA/AUTHOR/IPCP: Processing AV service=ppp
Jan 30 12:17:17: Vll AAA/AUTHOR/IPCP: Processing AV protocol=ip
Jan 30 12:17:17: Vll AAA/AUTHOR/IPCP: Processing AV addr*10.6.1.1
Jan 30 12:17:17: Vll AAA/AUTHOR/IPCP: Authorization succeeded
Jan 30 12:17:17: Vll AAA/AUTHOR/IPCP: Done. Her address 10.6.1.1,
we want 10.6.1.1
```

LNS#

## **LNS記帳記錄**

此程式位於LNS TACACS+伺服器上。

Sat Jan 30 05:27:01 1999 10.31.1.56 janedoe@rtp.cisco.com

```
Virtual-Access1 unknown
start task_id=4 start_time=917700054 timezone=UTC service=ppp
```

```
Sat Jan 30 05:27:27 1999 10.31.1.56 janedoe@rtp.cisco.com
Virtual-Access1 unknown
stop task_id=4 start_time=917700054 timezone=UTC service=ppp
protocol=ip addr=10.6.1.1 disc-cause=2 disc-cause-ext=1011
pre-bytes-in=0 pre-bytes-out=8
pre-paks-in=0 pre-paks-out=2 bytes_in=862 bytes_out=142
paks_in=19 paks_out=8 pre-session-time=1
```

## 疑難排解

本節提供的資訊可用於對組態進行疑難排解。

## 疑難排解指令

**注意：**發出debug指令之前，請先參閱[有關Debug指令的重要資訊](#)。

- **debug aaa authentication** — 顯示有關AAA/TACACS+身份驗證的資訊。
- **debug aaa authorization** — 顯示有關AAA/TACACS+授權的資訊。
- **debug aaa accounting** — 在發生責任事件時顯示有關這些事件的資訊。此命令顯示的資訊與用於將記帳資訊傳輸到伺服器的記帳協定無關。
- **debug tacacs+** — 顯示與TACACS+關聯的詳細調試資訊。
- **debug vtemplate** — 顯示虛擬訪問介面的克隆資訊，從虛擬模板克隆到呼叫結束時虛擬訪問介面關閉為止。
- **debug vpdn error** — 顯示阻止PPP隧道建立的錯誤或導致已建立的隧道關閉的錯誤。
- **debug vpdn events** — 顯示有關屬於正常PPP隧道建立或關閉部分的事件的消息。
- **debug vpdn l2x-errors** — 顯示阻止第2層建立或阻止其正常操作的第2層協定錯誤。
- **debug vpdn l2x-events** — 顯示有關屬於第2層正常PPP隧道建立或關閉的事件的消息。

## 調試輸出

### 從LAC路由器進行良好調試

```
LAC#show debug
General OS:
AAA Authentication debugging is on
AAA Authorization debugging is on
AAA Accounting debugging is on
VPN:
L2X protocol events debugging is on
L2X protocol errors debugging is on
VPDN events debugging is on
VPDN errors debugging is on
VTEMPLATE:
Virtual Template debugging is on
LAC#
Jan 30 12:17:09: As1 AAA/AUTHOR/FSM: (0): LCP succeeds trivially
20:03:18: %LINK-3-UPDOWN: Interface Async1, changed state to up
Jan 30 12:17:09: As1 VPDN: Looking for tunnel -- rtp.cisco.com --
Jan 30 12:17:09: AAA: parse name=Async1 idb type=10 tty=1
Jan 30 12:17:09: AAA: name=Async1 flags=0x11 type=4 shelf=0 slot=0 adapter=0
port=1 channel=0
```

```
Jan 30 12:17:09: AAA/AUTHEN: create_user (0x278B90) user='rtp.cisco.com'
ruser=''
port='Async1' rem_addr='' authen_type=NONE service=LOGIN priv=0
Jan 30 12:17:09: AAA/AUTHOR/VPDN (898425447): Port='Async1' list='default'
service=NET
Jan 30 12:17:09: AAA/AUTHOR/VPDN: (898425447) user='rtp.cisco.com'
Jan 30 12:17:09: AAA/AUTHOR/VPDN: (898425447) send AV service=ppp
Jan 30 12:17:09: AAA/AUTHOR/VPDN: (898425447) send AV protocol=vpdn
Jan 30 12:17:09: AAA/AUTHOR/VPDN (898425447) found list "default"
Jan 30 12:17:09: AAA/AUTHOR/VPDN: (898425447) Method=TACACS+
Jan 30 12:17:09: AAA/AUTHOR/TAC+: (898425447): user=rtp.cisco.com
Jan 30 12:17:09: AAA/AUTHOR/TAC+: (898425447): send AV service=ppp
Jan 30 12:17:09: AAA/AUTHOR/TAC+: (898425447): send AV protocol=vpdn
Jan 30 12:17:09: TAC+: (898425447): received author response status = PASS_ADD
Jan 30 12:17:09: AAA/AUTHOR (898425447): Post authorization status = PASS_ADD
Jan 30 12:17:09: AAA/AUTHOR/VPDN: Processing AV service=ppp
Jan 30 12:17:09: AAA/AUTHOR/VPDN: Processing AV protocol=vpdn
Jan 30 12:17:09: AAA/AUTHOR/VPDN: Processing AV tunnel-type=l2tp
Jan 30 12:17:09: AAA/AUTHOR/VPDN: Processing AV tunnel-id=rtp_tunnel
Jan 30 12:17:09: AAA/AUTHOR/VPDN: Processing AV ip-addresses=10.31.1.56
Jan 30 12:17:09: As1 VPDN: Get tunnel info for rtp.cisco.com with LAC
rtp_tunnel, IP 10.31.1.56
Jan 30 12:17:09: AAA/AUTHEN: free_user (0x278B90) user='rtp.cisco.com' ruser=''
port='Async1' rem_addr='' authen_type=NONE service=LOGIN priv=0
Jan 30 12:17:09: As1 VPDN: Forward to address 10.31.1.56
Jan 30 12:17:09: As1 VPDN: Forwarding...
Jan 30 12:17:09: AAA: parse name=Async1 idb type=10 tty=1
Jan 30 12:17:09: AAA: name=Async1 flags=0x11 type=4 shelf=0 slot=0 adapter=0
port=1 channel=0
Jan 30 12:17:09: AAA/AUTHEN: create_user (0x22CDEC) user='janedoe@rtp.cisco.com'
ruser='' port='Async1' rem_addr='async' authen_type=CHAP
service=PPP priv=1
Jan 30 12:17:09: As1 VPDN: Bind interface direction=1
Jan 30 12:17:09: Tnl/Cl 74/1 L2TP: Session FS enabled
Jan 30 12:17:09: Tnl/Cl 74/1 L2TP: Session state change from idle to
wait-for-tunnel
Jan 30 12:17:09: As1 74/1 L2TP: Create session
Jan 30 12:17:09: Tnl 74 L2TP: SM State idle
Jan 30 12:17:09: Tnl 74 L2TP: O SCCRQ
Jan 30 12:17:09: Tnl 74 L2TP: Tunnel state change from idle to wait-ctl-reply
Jan 30 12:17:09: Tnl 74 L2TP: SM State wait-ctl-reply
Jan 30 12:17:09: As1 VPDN: janedoe@rtp.cisco.com is forwarded
Jan 30 12:17:10: Tnl 74 L2TP: I SCCRP from ABCDE
Jan 30 12:17:10: Tnl 74 L2TP: Got a challenge from remote peer, ABCDE
Jan 30 12:17:10: AAA: parse name= idb type=-1 tty=-1
Jan 30 12:17:10: AAA/AUTHEN: create_user (0x23232C) user='rtp_tunnel'
ruser='' port=''
rem_addr='' authen_type=CHAP service=PPP priv=1
Jan 30 12:17:10: AAA/AUTHEN/START (1598999635): port='' list='default'
action=SENDAUTH service=PPP
Jan 30 12:17:10: AAA/AUTHEN/START (1598999635): found list default
Jan 30 12:17:10: AAA/AUTHEN (1598999635): status = UNKNOWN
Jan 30 12:17:10: AAA/AUTHEN/START (1598999635): Method=TACACS+
Jan 30 12:17:10: TAC+: send AUTHEN/START packet ver=193 id=1598999635
Jan 30 12:17:10: TAC+: ver=192 id=1598999635 received AUTHEN status = ERROR
Jan 30 12:17:10: AAA: parse name= idb type=-1 tty=-1
Jan 30 12:17:10: AAA/AUTHEN: create_user (0x232470) user='rtp_tunnel'
ruser='' port=''
rem_addr='' authen_type=CHAP service=PPP priv=1
Jan 30 12:17:10: TAC+: ver=192 id=3400389836 received AUTHEN status = PASS
Jan 30 12:17:10: AAA/AUTHEN: free_user (0x232470) user='rtp_tunnel'
ruser='' port=''
rem_addr='' authen_type=CHAP service=PPP priv=1
Jan 30 12:17:10: AAA/AUTHEN (1598999635): status = PASS
```

```
Jan 30 12:17:10: AAA/AUTHEN: free_user (0x23232C) user='rtp_tunnel'
ruser='' port=''
rem_addr='' authen_type=CHAP service=PPP priv=1
Jan 30 12:17:10: Tnl 74 L2TP: Got a response from remote peer, ABCDE
Jan 30 12:17:10: AAA: parse name= idb type=-1 tty=-1
Jan 30 12:17:10: AAA/AUTHEN: create_user (0x22FBA4) user='rtp_tunnel'
ruser='' port=''
rem_addr='' authen_type=CHAP service=PPP priv=1
Jan 30 12:17:10: AAA/AUTHEN/START (2964849625): port='' list='default'
action=SENDAUTH service=PPP
Jan 30 12:17:10: AAA/AUTHEN/START (2964849625): found list default
Jan 30 12:17:10: AAA/AUTHEN (2964849625): status = UNKNOWN
Jan 30 12:17:10: AAA/AUTHEN/START (2964849625): Method=TACACS+
Jan 30 12:17:10: TAC+: send AUTHEN/START packet ver=193 id=2964849625
20:03:20: %LINEPROTO-5-UPDOWN: Line protocol on Interface Async1,
changed state to up
Jan 30 12:17:11: TAC+: ver=192 id=2964849625 received AUTHEN status = ERROR
Jan 30 12:17:11: AAA: parse name= idb type=-1 tty=-1
Jan 30 12:17:11: AAA/AUTHEN: create_user (0x22FC8C) user='rtp_tunnel'
ruser='' port=''
rem_addr='' authen_type=CHAP service=PPP priv=1
Jan 30 12:17:11: As1 74/1 L2TP: Discarding data packet because tunnel
is not open
Jan 30 12:17:11: As1 74/1 L2TP: Discarding data packet because tunnel
is not open
Jan 30 12:17:11: TAC+: ver=192 id=1474818051 received AUTHEN status = PASS
Jan 30 12:17:11: AAA/AUTHEN: free_user (0x22FC8C) user='rtp_tunnel'
ruser='' port=''
rem_addr='' authen_type=CHAP service=PPP priv=1
Jan 30 12:17:11: AAA/AUTHEN (2964849625): status = PASS
Jan 30 12:17:11: AAA/AUTHEN: free_user (0x22FBA4) user='rtp_tunnel'
ruser='' port=''
rem_addr='' authen_type=CHAP service=PPP priv=1
Jan 30 12:17:11: Tnl 74 L2TP: Tunnel Authentication success
Jan 30 12:17:11: Tnl 74 L2TP: Tunnel state change from wait-ctl-reply to
established
Jan 30 12:17:11: Tnl 74 L2TP: O SCCCN to ABCDE tnlid 56
Jan 30 12:17:11: Tnl 74 L2TP: SM State established
Jan 30 12:17:11: As1 74/1 L2TP: O ICRQ to ABCDE 56/0
Jan 30 12:17:11: As1 74/1 L2TP: Session state change from wait-for-tunnel
to wait-reply
Jan 30 12:17:11: Tnl 74 L2TP: Dropping old CM, Ns 0, expected 1
Jan 30 12:17:11: As1 74/1 L2TP: O ICCN to ABCDE 56/1
Jan 30 12:17:11: As1 74/1 L2TP: Session state change from wait-reply to
established
```

LAC#

## [從LNS路由器進行良好調試](#)

LNS#**show debug**

General OS:

AAA Authentication debugging is on

AAA Authorization debugging is on

AAA Accounting debugging is on

VPN:

L2X protocol events debugging is on

L2X protocol errors debugging is on

VPDN events debugging is on

VPDN errors debugging is on

VTEMPLATE:

Virtual Template debugging is on

LNS#

Jan 30 12:17:09: L2TP: I SCCRQ from rtp\_tunnel tnl 74



```
Jan 30 12:17:09: Tnl 56 L2TP: New tunnel created for remote
rtp_tunnel, address 10.31.1.144
Jan 30 12:17:09: Tnl 56 L2TP: Got a challenge in SCCRQ, rtp_tunnel
Jan 30 12:17:09: AAA: parse name= idb type=-1 tty=-1
Jan 30 12:17:09: AAA/AUTHEN: create_user (0x21f6d0) user='ABCDE'
ruser='' port=''
rem_addr='' authen_type=CHAP service=PPP priv=1
Jan 30 12:17:09: AAA/AUTHEN/START (3194595626): port='' list='default'
action=SENDAUTH service=PPP
Jan 30 12:17:09: AAA/AUTHEN/START (3194595626): found list default
Jan 30 12:17:09: AAA/AUTHEN (3194595626): status = UNKNOWN
Jan 30 12:17:09: AAA/AUTHEN/START (3194595626): Method=TACACS+
Jan 30 12:17:09: TAC+: send AUTHEN/START packet ver=193 id=3194595626
Jan 30 12:17:09: TAC+: ver=192 id=3194595626 received AUTHEN status = ERROR
Jan 30 12:17:09: AAA: parse name= idb type=-1 tty=-1
Jan 30 12:17:09: AAA/AUTHEN: create_user (0x2281ac) user='ABCDE'
ruser='' port=''
rem_addr='' authen_type=CHAP service=PPP priv=1
Jan 30 12:17:09: TAC+: ver=192 id=3639011179 received AUTHEN status = PASS
Jan 30 12:17:09: AAA/AUTHEN: free_user (0x2281ac) user='ABCDE' ruser='' port=''
rem_addr='' authen_type=CHAP service=PPP priv=1
Jan 30 12:17:09: AAA/AUTHEN (3194595626): status = PASS
Jan 30 12:17:09: AAA/AUTHEN: free_user (0x21f6d0) user='ABCDE' ruser='' port=''
rem_addr='' authen_type=CHAP service=PPP priv=1
Jan 30 12:17:09: Tnl 56 L2TP: O SCCRP to rtp_tunnel tnlid 74
Jan 30 12:17:09: Tnl 56 L2TP: Tunnel state change from idle to
wait-ctl-reply
Jan 30 12:17:10: Tnl 56 L2TP: O Resend SCCRP, flg TLF, ver 2, len 152,
tnl 74, cl 0, ns 0, nr 1
Jan 30 12:17:10: Tnl 56 L2TP: I SCCC from rtp_tunnel tnl 74
Jan 30 12:17:10: Tnl 56 L2TP: Got a Challenge Response in SCCC from rtp_tunnel
Jan 30 12:17:10: AAA: parse name= idb type=-1 tty=-1
Jan 30 12:17:10: AAA/AUTHEN: create_user (0x227f3c) user='ABCDE'
ruser='' port=''
rem_addr='' authen_type=CHAP service=PPP priv=1
Jan 30 12:17:10: AAA/AUTHEN/STARTTranslating "rtp.cisco.com"
(4117701992): port='' list='default' action=SENDAUTH service=PPP
Jan 30 12:17:10: AAA/AUTHEN/START (4117701992): found list default
Jan 30 12:17:10: AAA/AUTHEN (4117701992): status = UNKNOWN
Jan 30 12:17:10: AAA/AUTHEN/START (4117701992): Method=TACACS+
Jan 30 12:17:10: TAC+: send AUTHEN/START packet ver=193 id=4117701992
Jan 30 12:17:11: TAC+: ver=192 id=4117701992 received AUTHEN status = ERROR
Jan 30 12:17:11: AAA: parse name= idb type=-1 tty=-1
Jan 30 12:17:11: AAA/AUTHEN: create_user (0x228e68) user='ABCDE' ruser='' port=''
rem_addr='' authen_type=CHAP service=PPP priv=1
Jan 30 12:17:11: TAC+: ver=192 id=2827432721 received AUTHEN status = PASS
Jan 30 12:17:11: AAA/AUTHEN: free_user (0x228e68) user='ABCDE' ruser='' port=''
rem_addr='' authen_type=CHAP service=PPP priv=1
Jan 30 12:17:11: AAA/AUTHEN (4117701992): status = PASS
Jan 30 12:17:11: AAA/AUTHEN: free_user (0x227f3c) user='ABCDE' ruser='' port=''
rem_addr='' authen_type=CHAP service=PPP priv=1
Jan 30 12:17:11: Tnl 56 L2TP: Tunnel Authentication success
Jan 30 12:17:11: Tnl 56 L2TP: Tunnel state change from wait-ctl-reply
to established
Jan 30 12:17:11: Tnl 56 L2TP: SM State established
Jan 30 12:17:11: Tnl 56 L2TP: I ICRQ from rtp_tunnel tnl 74
Jan 30 12:17:11: Tnl/C1 56/1 L2TP: Session FS enabled
Jan 30 12:17:11: Tnl/C1 56/1 L2TP: Session state change from idle to
wait-for-tunnel
Jan 30 12:17:11: Tnl/C1 56/1 L2TP: New session created
Jan 30 12:17:11: Tnl/C1 56/1 L2TP: O ICRP to rtp_tunnel 74/1
Jan 30 12:17:11: Tnl/C1 56/1 L2TP: Session state change from wait-for-tunnel
to wait-connect
Jan 30 12:17:11: Tnl/C1 56/1 L2TP: I ICCN from rtp_tunnel tnl 74, cl 1
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Jan 30 12:17:11: Tnl/Cl 56/1 L2TP: Session state change from wait-connect
to established
Jan 30 12:17:11: Vi1 VTEMPLATE: Reuse Vi1, recycle queue size 0
Jan 30 12:17:11: Vi1 VTEMPLATE: Hardware address 00e0.1e68.942c
Jan 30 12:17:11: Vi1 VPDN: Virtual interface created for janedoe@rtp.cisco.com
Jan 30 12:17:11: Vi1 VPDN: Set to Async interface
Jan 30 12:17:11: Vi1 VPDN: Clone from Vtemplate 1 filterPPP=0 blocking
Jan 30 12:17:11: Vi1 VTEMPLATE: Has a new cloneblk vtemplate, now it has vtemplate
Jan 30 12:17:11: Vi1 VTEMPLATE: ***** CLONE VACCESS1 *****
Jan 30 12:17:11: Vi1 VTEMPLATE: Clone from Virtual-Templatel
interface Virtual-Access1
default ip address
no ip address
encap ppp
ip unnumbered Ethernet0
peer default ip address pool default
ppp authentication chap
ip unnum ethernet0
peer def ip address pool default
ppp authen chap
end

Jan 30 12:17:12: janedoe@rtp.cisco.com 56/1 L2TP: Session with no hwidb
20:12:14: %LINK-3-UPDOWN: Interface Virtual-Access1, changed state to up
Jan 30 12:17:13: Vi1 AAA/AUTHOR/FSM: (0): LCP succeeds trivially
Jan 30 12:17:13: Vi1 VPDN: Bind interface direction=2
Jan 30 12:17:13: Vi1 VPDN: PPP LCP accepted rcv CONFACK
Jan 30 12:17:13: Vi1 VPDN: PPP LCP accepted sent CONFACK
Jan 30 12:17:13: Vi1 L2X: Discarding packet because of no mid/session
Jan 30 12:17:13: AAA: parse name=Virtual-Access1 idb type=21 tty=-1
Jan 30 12:17:13: AAA: name=Virtual-Access1 flags=0x11 type=5 shelf=0 slot=0
adapter=0 port=1 channel=0
Jan 30 12:17:13: AAA/AUTHEN: create_user (0x1F5100) user='janedoe@rtp.cisco.com'
ruser='' port='Virtual-Access1' rem_addr='' authen_type=CHAP
service=PPP priv=1
Jan 30 12:17:13: AAA/AUTHEN/START (562517969): port='Virtual-Access1' list=''
action=LOGIN service=PPP
Jan 30 12:17:13: AAA/AUTHEN/START (562517969): using "default" list
Jan 30 12:17:13: AAA/AUTHEN (562517969): status = UNKNOWN
Jan 30 12:17:13: AAA/AUTHEN/START (562517969): Method=TACACS+
Jan 30 12:17:13: TAC+: send AUTHEN/START packet ver=193 id=562517969
Jan 30 12:17:14: TAC+: ver=192 id=562517969 received AUTHEN status = GETPASS
Jan 30 12:17:14: AAA: parse name=Virtual-Access1 idb type=-1 tty=-1
Jan 30 12:17:14: AAA: name=Virtual-Access1 flags=0x11 type=6 shelf=0 slot=0
adapter=0 port=1 channel=0
Jan 30 12:17:14: AAA/AUTHEN: create_user (0x1F5270) user='janedoe@rtp.cisco.com'
ruser='' port='Virtual-Access1' rem_addr='' authen_type=CHAP
service=PPP priv=1
Jan 30 12:17:14: TAC+: ver=192 id=2384902384 received AUTHEN status = PASS
Jan 30 12:17:14: AAA/AUTHEN: free_user (0x1F5270) user='janedoe@rtp.cisco.com'
ruser='' port='Virtual-Access1' rem_addr='' authen_type=CHAP
service=PPP priv=1
Jan 30 12:17:14: AAA/AUTHEN (562517969): status = PASS
Jan 30 12:17:14: Vi1 AAA/AUTHOR/LCP: Authorize LCP
Jan 30 12:17:14: AAA/AUTHOR/LCP Vi1 (413543389): Port='Virtual-Access1'
list='' service=NET
Jan 30 12:17:14: AAA/AUTHOR/LCP: Vi1 (413543389) user='janedoe@rtp.cisco.com'
Jan 30 12:17:14: AAA/AUTHOR/LCP: Vi1 (413543389) send AV service=ppp
Jan 30 12:17:14: AAA/AUTHOR/LCP: Vi1 (413543389) send AV protocol=lcp
Jan 30 12:17:14: AAA/AUTHOR/LCP (413543389) found list "default"
Jan 30 12:17:14: AAA/AUTHOR/LCP: Vi1 (413543389) Method=TACACS+
Jan 30 12:17:14: AAA/AUTHOR/TAC+: (413543389): user=janedoe@rtp.cisco.com
Jan 30 12:17:14: AAA/AUTHOR/TAC+: (413543389): send AV service=ppp
Jan 30 12:17:14: AAA/AUTHOR/TAC+: (413543389): send AV protocol=lcp
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Jan 30 12:17:14: TAC+: (413543389): received author response status = PASS_ADD
Jan 30 12:17:14: AAA/AUTHOR (413543389): Post authorization status = PASS_ADD
Jan 30 12:17:14: AAA/ACCT/NET/START User janedoe@rtp.cisco.com,
Port Virtual-Access1, List ""
Jan 30 12:17:14: AAA/ACCT/NET: Found list "default"
Jan 30 12:17:14: Vi1 AAA/AUTHOR/FSM: (0): Can we start IPCP?
Jan 30 12:17:14: AAA/AUTHOR/FSM Vi1 (1358526470): Port='Virtual-Access1'
list='' service=NET
Jan 30 12:17:14: AAA/AUTHOR/FSM: Vi1 (1358526470) user='janedoe@rtp.cisco.com'
Jan 30 12:17:14: AAA/AUTHOR/FSM: Vi1 (1358526470) send AV service=ppp
Jan 30 12:17:14: AAA/AUTHOR/FSM: Vi1 (1358526470) send AV protocol=ip
Jan 30 12:17:14: AAA/AUTHOR/FSM (1358526470) found list "default"
Jan 30 12:17:14: AAA/AUTHOR/FSM: Vi1 (1358526470) Method=TACACS+
Jan 30 12:17:14: AAA/AUTHOR/TAC+: (1358526470): user=janedoe@rtp.cisco.com
Jan 30 12:17:14: AAA/AUTHOR/TAC+: (1358526470): send AV service=ppp
Jan 30 12:17:14: AAA/AUTHOR/TAC+: (1358526470): send AV protocol=ip
Jan 30 12:17:14: TAC+: (1358526470): received author response status = PASS_ADD
Jan 30 12:17:14: AAA/AUTHOR (1358526470): Post authorization status = PASS_ADD
Jan 30 12:17:14: Vi1 AAA/AUTHOR/FSM: We can start IPCP
Jan 30 12:17:14: TAC+: (1442592025): received acct response status = UNKNOWN
20:12:16: %LINEPROTO-5-UPDOWN: Line protocol on Interface Virtual-Access1,
changed state to up
Jan 30 12:17:16: Vi1 AAA/AUTHOR/IPCP: Start. Her address 0.0.0.0, we want 0.0.0.0
Jan 30 12:17:16: Vi1 AAA/AUTHOR/IPCP: Processing AV service=ppp
Jan 30 12:17:16: Vi1 AAA/AUTHOR/IPCP: Processing AV protocol=ip
Jan 30 12:17:16: Vi1 AAA/AUTHOR/IPCP: Authorization succeeded
Jan 30 12:17:16: Vi1 AAA/AUTHOR/IPCP: Done. Her address 0.0.0.0, we want 0.0.0.0
Jan 30 12:17:16: Vi1 AAA/AUTHOR/IPCP: Start. Her address 0.0.0.0, we want 10.6.1.1
Jan 30 12:17:16: Vi1 AAA/AUTHOR/IPCP: Processing AV service=ppp
Jan 30 12:17:16: Vi1 AAA/AUTHOR/IPCP: Processing AV protocol=ip
Jan 30 12:17:16: Vi1 AAA/AUTHOR/IPCP: Authorization succeeded
Jan 30 12:17:16: Vi1 AAA/AUTHOR/IPCP: Done. Her address 0.0.0.0, we want 10.6.1.1
Jan 30 12:17:16: Vi1 AAA/AUTHOR/IPCP: Start. Her address 10.6.1.1, we want 10.6.1.1
Jan 30 12:17:16: AAA/AUTHOR/IPCP Vi1 (3572380713): Port='Virtual-Access1'
list='' service=NET
Jan 30 12:17:16: AAA/AUTHOR/IPCP: Vi1 (3572380713) user='janedoe@rtp.cisco.com'
Jan 30 12:17:16: AAA/AUTHOR/IPCP: Vi1 (3572380713) send AV service=ppp
Jan 30 12:17:16: AAA/AUTHOR/IPCP: Vi1 (3572380713) send AV protocol=ip
Jan 30 12:17:16: AAA/AUTHOR/IPCP: Vi1 (3572380713) send AV addr*10.6.1.1
Jan 30 12:17:16: AAA/AUTHOR/IPCP (3572380713) found list "default"
Jan 30 12:17:16: AAA/AUTHOR/IPCP: Vi1 (3572380713) Method=TACACS+
Jan 30 12:17:16: AAA/AUTHOR/TAC+: (3572380713): user=janedoe@rtp.cisco.com
Jan 30 12:17:16: AAA/AUTHOR/TAC+: (3572380713): send AV service=ppp
Jan 30 12:17:16: AAA/AUTHOR/TAC+: (3572380713): send AV protocol=ip
Jan 30 12:17:16: AAA/AUTHOR/TAC+: (3572380713): send AV addr*10.6.1.1
Jan 30 12:17:17: TAC+: (3572380713): received author response status = PASS_ADD
Jan 30 12:17:17: AAA/AUTHOR (3572380713): Post authorization status = PASS_ADD
Jan 30 12:17:17: Vi1 AAA/AUTHOR/IPCP: Processing AV service=ppp
Jan 30 12:17:17: Vi1 AAA/AUTHOR/IPCP: Processing AV protocol=ip
Jan 30 12:17:17: Vi1 AAA/AUTHOR/IPCP: Processing AV addr*10.6.1.1
Jan 30 12:17:17: Vi1 AAA/AUTHOR/IPCP: Authorization succeeded
Jan 30 12:17:17: Vi1 AAA/AUTHOR/IPCP: Done. Her address 10.6.1.1, we want 10.6.1.1
LNS#
```

## [相關資訊](#)

- [Cisco Secure UNIX支援頁](#)
- [TACACS/TACACS+ 支援頁面](#)
- [Cisco IOS檔案中的TACACS+](#)
- [Cisco Secure ACS for Windows支援頁](#)
- [技術支援 - Cisco Systems](#)