

# 调试 RADIUS、PAP 与 CHAP 时的一般问题

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## 简介

本文档会检查使用口令身份验证协议 (PAP) 或质询握手身份验证协议 (CHAP) 时，RADIUS 的常见调试问题，并会提供 Microsoft Windows 95、Windows NT、Windows 98 和 Windows 2000 的普通 PC 设置和各种配置示例，以及调试成功与失败的示例。

## 开始使用前

### 规则

有关文档规则的详细信息，请参阅 [Cisco 技术提示规则](#)。

### 先决条件

本文档没有任何特定的前提条件。

### 使用的组件

本文档中的信息基于 Cisco IOS 软件版本 11.2 及以上。

本文档中的信息都是基于特定实验室环境中的设备创建的。本文档中使用的所有设备最初均采用原始（默认）配置。如果您是在真实网络上操作，请确保您在使用任何命令前已经了解其潜在影响。

## [普通 PC 设置](#)

### [Windows 95](#)

按照下面所提供的指导：

1. 在“拨号网络”窗口中，请选择连接名，然后选择**文件 > 属性**。
2. 在“服务器类型”选项卡上，查看是否已勾选“拨号服务器类型”下的**要求加密的口令框**。如果此方框已勾选，表示 PC 只接受 CHAP 身份验证。如果此方框未勾选，表示 PC 接受 PAP 或 CHAP 身份验证。

### [Windows NT](#)

按照下面所提供的指导：

1. 在“拨号网络”窗口中选择连接名，然后选择**文件 > 属性**。
2. 检查“安全”选项卡上的设置：如果**接受任何身份验证，包括明文**方框已勾选，表示 PC 接受 PAP 或 CHAP。如果**仅接受加密的身份验证**方框已勾选，表示 PC 只接受 CHAP 身份验证。

### [Windows 98](#)

按照下面所提供的指导：

1. 在“拨号网络”窗口中选择连接名，然后选择**属性**。
2. 在“服务器类型”选项卡上，检查“高级选项”区域中的设置：如果**要求加密的口令框**未勾选，表示 PC 接受 PAP 或 CHAP 身份验证。如果**要求加密的口令框**已勾选，表示 PC 只接受 CHAP 身份验证。

### [Windows 2000](#)

按照下面所提供的指导：

1. 在“网络和拨号连接”中选择连接名，然后选择**属性**。
2. 在“安全”选项卡上，检查**高级 > 设置 > 允许这些协议**区域中的设置：如果**未加密的口令 (PAP)**方框已勾选，表示 PC 接受 PAP。如果**质询握手身份验证协议 (CHAP)**方框已勾选，表示 PC 接受 [RFC 1994](#) 中规定的 CHAP。如果 **Microsoft CHAP (MS-CHAP)**方框已勾选，表示 PC 接受 MS-CHAP 版本 1，不接受 RFC 1994 中规定的 CHAP。

## [配置和调试示例](#)

### [RADIUS 和 PAP](#)

## 配置 - RADIUS 和 PAP

```
Current configuration:
!
version 11.2
service timestamps debug uptime
no service password-encryption
service udp-small-servers
service tcp-small-servers
!
hostname rtpkrb
!
aaa new-model
!
!--- The following four command lines are specific to !-
-- Cisco IOS 11.2 and later, up until 11.3.3.T. !--- See
below this configuration for commands !--- for other
Cisco IOS releases. ! aaa authentication login default
radius local aaa authentication ppp default if-needed
radius local aaa authorization exec radius if-
authenticated aaa authorization network radius if-
authenticated ! enable secret 5
$1$pkX.$JdAysRE1SbdbDe7bj0wyt0 enable password ww !
username john password 0 doe username cse password 0
csecse ip host rtpkrb 10.31.1.5 ip domain-name
RTP.CISCO.COM ip name-server 171.68.118.103 ! interface
Loopback0 ip address 1.1.1.1 255.255.255.0 ! interface
Ethernet0 ip address 10.31.1.5 255.255.0.0 no mop
enabled ! interface Serial0 no ip address no ip mroute-
cache shutdown ! interface Serial1 no ip address
shutdown ! interface Async1 ip unnumbered Ethernet0
encapsulation ppp async mode dedicated peer default ip
address pool async no cdp enable ppp authentication pap
! ip local pool async 15.15.15.15 ip classless ip route
0.0.0.0 0.0.0.0 10.31.1.1 ! snmp-server community public
RW snmp-server host 171.68.118.100 traps public radius-
server host 171.68.118.101 auth-port 1645 acct-port 1646
radius-server key cisco ! line con 0 line 1 session-
timeout 20 exec-timeout 20 0 password ww autoselect
during-login autoselect ppp modem InOut transport input
all stopbits 1 speed 38400 flowcontrol hardware line 2
modem InOut speed 38400 flowcontrol hardware line 3 16
line aux 0 line vty 0 4 exec-timeout 0 0 password ww !
end
```

## [用于其它 Cisco IOS 版本的命令](#)

**注意：** 要使用这些命令，请按照 Cisco IOS 版本的指示，从上述配置中删除突出显示的命令，然后再粘贴这些命令。

### Cisco IOS 11.3.3.T 到 12.0.5.T

```
aaa authen login default radius local
aaa authen ppp default if-needed radius local
aaa authorization exec default radius if-authenticated
aaa authorization network default radius if-authenticated
```

### Cisco IOS 12.0.5.T 及更高版本

```
aaa authen login default group radius local
aaa authen ppp default if-needed group radius local
```

```
aaa authorization exec default group radius if-authenticated
aaa authorization network default group radius if-authenticated
```

## 调试示例 - RADIUS 和 PAP

**注意：**在调试输出中，粗体文本突出显示了调试中的问题。纯文本表示调试成功。

```
rtplib#
rtplib#sho deb
General OS:
AAA Authentication debugging is on
AAA Authorization debugging is on
PPP:
PPP authentication debugging is on
PPP protocol negotiation debugging is on
Radius protocol debugging is on
rtplib#
4d02h: As1 LCP: I CONFREQ [Closed] id 0 len 20
4d02h: As1 LCP: ACCM 0x00000000 (0x020600000000)
4d02h: As1 LCP: MagicNumber 0x00001F67 (0x050600001F67)
4d02h: As1 LCP: PFC (0x0702)
4d02h: As1 LCP: ACFC (0x0802)
4d02h: As1 LCP: Lower layer not up, discarding packet
%LINK-3-UPDOWN: Interface Async1, changed state to up
4d02h: As1 PPP: Treating connection as a dedicated line
4d02h: As1 PPP: Phase is ESTABLISHING, Active Open
4d02h: As1 LCP: O CONFREQ [Closed] id 85 len 24
4d02h: As1 LCP: ACCM 0x000A0000 (0x0206000A0000)
4d02h: As1 LCP: AuthProto PAP (0x0304C023)
4d02h: As1 LCP: MagicNumber 0xF54252D5 (0x0506F54252D5)
4d02h: As1 LCP: PFC (0x0702)
4d02h: As1 LCP: ACFC (0x0802)
```

```
PC insists on doing chap ('accept encrypted authentication only'), but router is set up for pap:
As1 LCP: I CONFNAK [REQsent] id 98 len 12 As1 LCP: AuthProto 0xC123 (0x0308C12301000001) As1
LCP: O CONFREQ [REQsent] id 99 len 24 As1 LCP: ACCM 0x000A0000 (0x0206000A0000) As1 LCP:
AuthProto PAP (0x0304C023) As1 LCP: MagicNumber 0xF54D1AF8 (0x0506F54D1AF8) As1 LCP: PFC
(0x0702) As1 LCP: ACFC (0x0802) As1 LCP: I CONFREQ [REQsent] id 99 len 8 As1 LCP: AuthProto PAP
(0x0304C023) As1 PPP: Closing connection because remote won't authenticate 4d02h: As1 LCP: I
CONFACK [REQsent] id 85 len 24 4d02h: As1 LCP: ACCM 0x000A0000 (0x0206000A0000) 4d02h: As1 LCP:
AuthProto PAP (0x0304C023) 4d02h: As1 LCP: MagicNumber 0xF54252D5 (0x0506F54252D5) 4d02h: As1
LCP: PFC (0x0702) 4d02h: As1 LCP: ACFC (0x0802) 4d02h: As1 LCP: I CONFREQ [ACKRcvd] id 0 len 20
4d02h: As1 LCP: ACCM 0x00000000 (0x020600000000) 4d02h: As1 LCP: MagicNumber 0x00001F67
(0x050600001F67) 4d02h: As1 LCP: PFC (0x0702) 4d02h: As1 LCP: ACFC (0x0802) 4d02h: As1 LCP: O
CONFACK [ACKRcvd] id 0 len 20 4d02h: As1 LCP: ACCM 0x00000000 (0x020600000000) 4d02h: As1 LCP:
MagicNumber 0x00001F67 (0x050600001F67) 4d02h: As1 LCP: PFC (0x0702) 4d02h: As1 LCP: ACFC
(0x0802) 4d02h: As1 LCP: State is Open 4d02h: As1 PPP: Phase is AUTHENTICATING, by this end
4d02h: As1 PAP: I AUTH-REQ id 14 len 19 from "ddunlap" 4d02h: As1 PAP: Authenticating peer
ddunlap 4d02h: AAA/AUTHEN: create_user (0x15AD58) user='ddunlap' ruser='' port='Async1'
rem_addr='async' authen_type=PAP service=PPP priv=1 4d02h: AAA/AUTHEN/START (1953436918):
port='Async1' list='' action=LOGIN service=PPP 4d02h: AAA/AUTHEN/START (1953436918): using
"default" list 4d02h: AAA/AUTHEN (1953436918): status = UNKNOWN 4d02h: AAA/AUTHEN/START
(1953436918): Method=RADIUS 4d02h: RADIUS: Initial Transmit id 7 171.68.118.101:1645, Access-
Request, len 77 4d02h: Attribute 4 6 0A1F0105 4d02h: Attribute 5 6 00000001 4d02h: Attribute 6 1
6 00000000 4d02h: Attribute 1 9 6464756E 4d02h: Attribute 2 18 7882E0A5 4d02h: Attribute 6 6
00000002 4d02h: Attribute 7 6 00000001 Radius server is down - produces ERROR - since user is
not in local database, failover to local FAILs As1 PAP: I AUTH-REQ id 16 len 19 from "ddunlap"
As1 AUTH: Duplicate authentication request id=16 already in progress As1 PAP: I AUTH-REQ id 17
len 19 from "ddunlap" As1 AUTH: Duplicate authentication request id=17 already in progress
RADIUS: Retransmit id 9 As1 PAP: I AUTH-REQ id 18 len 19 from "ddunlap" As1 AUTH: Duplicate
authentication request id=18 already in progress As1 PAP: I AUTH-REQ id 19 len 19 from "ddunlap"
As1 AUTH: Duplicate authentication request id=19 already in progress As1 PAP: I AUTH-REQ id 20
```

len 19 from "ddunlap" As1 AUTH: Duplicate authentication request id=20 already in progress  
RADIUS: Retransmit id 9 As1 PAP: I AUTH-REQ id 21 len 19 from "ddunlap" As1 AUTH: Duplicate  
authentication request id=21 already in progress As1 PAP: I AUTH-REQ id 22 len 19 from "ddunlap"  
As1 AUTH: Duplicate authentication request id=22 already in progress RADIUS: Retransmit id 9 As1  
PAP: I AUTH-REQ id 23 len 19 from "ddunlap" As1 AUTH: Duplicate authentication request id=23  
already in progress As1 LCP: I TERMREQ [Open] id 1 len 8 (0x000002CE) As1 LCP: O TERMACK [Open]  
id 1 len 4 As1 PPP: Phase is TERMINATING RADIUS: No response for id 9 %RADIUS-3-ALLDEADSERVER:  
No active radius servers found. Id 9. RADIUS: No response from server AAA/AUTHEN (3025998849):  
status = ERROR AAA/AUTHEN/START (3025998849): Method=LOCAL AAA/AUTHEN (3025998849): status =  
FAIL Key in router does not match that of server: RADIUS: Received from id 21  
171.68.118.101:1645, Access-Reject, len 20 RADIUS: Reply for 21 fails decrypt NT client sends  
'DOMAIN\user' and Radius server expects 'user': RADIUS: Received from id 11 171.68.118.101:1645,  
Access-Reject, len 20 AAA/AUTHEN (1406749115): status = FAIL As1 PAP: O AUTH-NAK id 25 len 32  
msg is "Password validation failure" As1 PPP: Phase is TERMINATING As1 LCP: O TERMREQ [Open] id  
108 len 4 AAA/AUTHEN: free\_user (0xDA520) user='CISCO\ddunlap' ruser='' port='Async1'  
rem\_addr='async' authen\_type=PAP service=PPP priv=1 Radius server refuses user because user  
enters bad password, or both userid & password are bad: RADIUS: Received from id 12  
171.68.118.101:1645, Access-Reject, len 20 AAA/AUTHEN (733718529): status = FAIL As1 PAP: O  
AUTH-NAK id 26 len 32 msg is "Password validation failure" As1 PPP: Phase is TERMINATING As1  
LCP: O TERMREQ [Open] id 111 len 4 AAA/AUTHEN: free\_user (0x15B030) user='ddunlap' ruser=''  
='Async1' rem\_addr='async' authen\_type=PAP service=PPP priv=1 User passes authentication (i.e.  
username/password is good) but fails authorization (profile not set up for Service-Type=Framed &  
Framed-Protocol=PPP): RADIUS: Received from id 13 171.68.118.101:1645, Access-Accept, len 20  
RADIUS: saved authorization data for user 15AD58 at 15ADF0 AAA/AUTHEN (56862281): status = PASS  
AAA/AUTHOR/LCP As1: Authorize LCP AAA/AUTHOR/LCP: Async1: (959162008): user='cse'  
AAA/AUTHOR/LCP: Async1: (959162008): send AV service=ppp AAA/AUTHOR/LCP: Async1: (959162008):  
send AV protocol=lcp AAA/AUTHOR/LCP: Async1: (959162008): Method=RADIUS RADIUS: no appropriate  
authorization type for user. AAA/AUTHOR (959162008): Post authorization status = FAIL  
AAA/AUTHOR/LCP As1: Denied AAA/AUTHEN: free\_user (0x15AD58) user='cse' ruser='' port='Async1'  
rem\_addr='async' authen\_type=PAP service=PPP priv=1 As1 PAP: O AUTH-NAK id 27 len 25 msg is  
"Authorization failed" 4d02h: RADIUS: Received from id 7 171.68.118.101:1645, Access-Accept, len  
32 4d02h: Attribute 6 6 00000002 4d02h: Attribute 7 6 00000001 4d02h: RADIUS: saved  
authorization data for user 15AD58 at 16C7F4 4d02h: AAA/AUTHEN (1953436918): status = PASS  
4d02h: AAA/AUTHOR/LCP As1: Authorize LCP 4d02h: AAA/AUTHOR/LCP: Async1: (2587233868):  
user='ddunlap' 4d02h: AAA/AUTHOR/LCP: Async1: (2587233868): send AV service=ppp 4d02h:  
AAA/AUTHOR/LCP: Async1: (2587233868): send AV protocol=lcp 4d02h: AAA/AUTHOR/LCP: Async1:  
(2587233868): Method=RADIUS 4d02h: AAA/AUTHOR (2587233868): Post authorization status =  
PASS\_REPL 4d02h: AAA/AUTHOR/LCP As1: Processing AV service=ppp 4d02h: As1 PAP: O AUTH-ACK id 14  
len 5 4d02h: As1 PPP: Phase is UP 4d02h: AAA/AUTHOR/FSM As1: (0): Can we start IPCP? 4d02h:  
AAA/AUTHOR/FSM: Async1: (423372862): user='ddunlap' 4d02h: AAA/AUTHOR/FSM: Async1: (423372862):  
send AV service=ppp 4d02h: AAA/AUTHOR/FSM: Async1: (423372862): send AV protocol=ip 4d02h:  
AAA/AUTHOR/FSM: Async1: (423372862): Method=RADIUS 4d02h: AAA/AUTHOR (423372862): Post  
authorization status = PASS\_REPL 4d02h: AAA/AUTHOR/FSM As1: We can start IPCP 4d02h: As1 IPCP: O  
CONFREQ [Closed] id 17 len 10 4d02h: As1 IPCP: Address 10.31.1.5 (0x03060A1F0105) 4d02h: As1  
IPCP: I CONFREQ [REQsent] id 1 len 34 4d02h: As1 IPCP: Address 0.0.0.0 (0x030600000000) 4d02h:  
As1 IPCP: PrimaryDNS 0.0.0.0 (0x810600000000) 4d02h: As1 IPCP: PrimaryWINS 0.0.0.0  
(0x820600000000) 4d02h: As1 IPCP: SecondaryDNS 0.0.0.0 (0x830600000000) 4d02h: As1 IPCP:  
SecondaryWINS 0.0.0.0 (0x840600000000) 4d02h: AAA/AUTHOR/IPCP As1: Start. Her address 0.0.0.0,  
we want 0.0.0.0 4d02h: AAA/AUTHOR/IPCP As1: Processing AV service=ppp 4d02h: AAA/AUTHOR/IPCP  
As1: Authorization succeeded 4d02h: AAA/AUTHOR/IPCP As1: Done. Her address 0.0.0.0, we want  
0.0.0.0 4d02h: As1 IPCP: Using pool 'async' 4d02h: As1 IPCP: Pool returned 15.15.15.15 4d02h:  
As1 IPCP: O CONFREQ [REQsent] id 1 len 22 4d02h: As1 IPCP: PrimaryWINS 0.0.0.0 (0x820600000000)  
4d02h: As1 IPCP: SecondaryDNS 0.0.0.0 (0x830600000000) 4d02h: As1 IPCP: SecondaryWINS 0.0.0.0  
(0x840600000000) 4d02h: As1 IPCP: I CONFREQ [REQsent] id 17 len 10 4d02h: As1 IPCP: Address  
10.31.1.5 (0x03060A1F0105) %LINEPROTO-5-UPDOWN: Line protocol on Interface Async1, changed state  
to up 4d02h: As1 IPCP: I CONFREQ [ACKrcvd] id 2 len 16 4d02h: As1 IPCP: Address 0.0.0.0  
(0x030600000000) 4d02h: As1 IPCP: PrimaryDNS 0.0.0.0 (0x810600000000) 4d02h: AAA/AUTHOR/IPCP  
As1: Start. Her address 0.0.0.0, we want 15.15.15.15 4d02h: AAA/AUTHOR/IPCP As1: Processing AV  
service=ppp 4d02h: AAA/AUTHOR/IPCP As1: Authorization succeeded 4d02h: AAA/AUTHOR/IPCP As1:  
Done. Her address 0.0.0.0, we want 15.15.15.15 4d02h: As1 IPCP: O CONFREQ [ACKrcvd] id 2 len 16  
4d02h: As1 IPCP: Address 15.15.15.15 (0x03060F0F0F0F) 4d02h: As1 IPCP: PrimaryDNS 171.68.118.103  
(0x8106AB447667) 4d02h: As1 IPCP: I CONFREQ [ACKrcvd] id 3 len 16 4d02h: As1 IPCP: Address  
15.15.15.15 (0x03060F0F0F0F) 4d02h: As1 IPCP: PrimaryDNS 171.68.118.103 (0x8106AB447667) 4d02h:  
AAA/AUTHOR/IPCP As1: Start. Her address 15.15.15.15, we want 15.15.15.15 4d02h: AAA/AUTHOR/IPCP:

```
Asyncl: (4204275250): user='ddunlap' 4d02h: AAA/AUTHOR/IPCP: Asyncl: (4204275250): send AV
service=ppp 4d02h: AAA/AUTHOR/IPCP: Asyncl: (4204275250): send AV protocol=ip 4d02h:
AAA/AUTHOR/IPCP: Asyncl: (4204275250): send AV addr*15.15.15.15 4d02h: AAA/AUTHOR/IPCP: Asyncl:
(4204275250): Method=RADIUS 4d02h: AAA/AUTHOR (4204275250): Post authorization status =
PASS_REPL 4d02h: AAA/AUTHOR/IPCP As1: Reject 15.15.15.15, using 15.15.15.15 4d02h:
AAA/AUTHOR/IPCP As1: Processing AV service=ppp 4d02h: AAA/AUTHOR/IPCP As1: Processing AV
addr*15.15.15.15 4d02h: AAA/AUTHOR/IPCP As1: Authorization succeeded 4d02h: AAA/AUTHOR/IPCP As1:
Done. Her address 15.15.15.15, we want 15.15.15.15 4d02h: As1 IPCP: O CONFACK [ACKrcvd] id 3 len
16 4d02h: As1 IPCP: Address 15.15.15.15 (0x03060F0F0F0F) 4d02h: As1 IPCP: PrimaryDNS
171.68.118.103 (0x8106AB447667) 4d02h: As1 IPCP: State is Open 4d02h: As1 IPCP: Install route to
15.15.15.15 rtpkrb#
```

## RADIUS 和 CHAP

### 配置 - RADIUS 和 CHAP

```
Current configuration:
!
version 11.2
service timestamps debug uptime
no service password-encryption
service udp-small-servers
service tcp-small-servers
!
hostname rtpkrb
!
aaa new-model
!
!--- The following four command lines are specific to !-
-- Cisco IOS 11.2 and later, up until 11.3.3.T. !--- See
below this configuration for commands !--- for other
Cisco IOS releases. ! aaa authentication login default
radius local aaa authentication ppp default if-needed
radius local aaa authorization exec radius if-
authenticated aaa authorization network radius if-
authenticated ! enable secret 5
!$pkX.$JdAySRE1SbdbDe7bj0wyt0 enable password ww !
username john password 0 doe username cse password 0
csecse ip host rtpkrb 10.31.1.5 ip name-server
171.68.118.103 ! interface Loopback0 ip address 1.1.1.1
255.255.255.0 ! interface Ethernet0 ip address 10.31.1.5
255.255.0.0 no mop enabled ! interface Serial0 no ip
address no ip mroute-cache shutdown ! interface Serial1
no ip address shutdown ! interface Asyncl ip unnumbered
Ethernet0 encapsulation ppp async mode dedicated peer
default ip address pool async no cdp enable ppp
authentication chap ! ip local pool async 15.15.15.15 ip
classless ip route 0.0.0.0 0.0.0.0 10.31.1.1 ! snmp-
server community public RW snmp-server host
171.68.118.100 traps public radius-server host
171.68.118.101 auth-port 1645 acct-port 1646 radius-
server key cisco ! line con 0 line 1 session-timeout 20
exec-timeout 20 0 password ww autoselect during-login
autoselect ppp modem InOut transport input all stopbits
1 speed 38400 flowcontrol hardware line 2 modem InOut
speed 38400 flowcontrol hardware line 3 16 line aux 0
line vty 0 4 exec-timeout 0 0 password ww ! end
```

## 用于其它 Cisco IOS 版本的命令

注意：要使用这些命令，请按照 Cisco IOS 版本的指示，从上述配置中删除突出显示的命令，然后再粘贴这些命令。

## [Cisco IOS 11.3.3.T 到 12.0.5.T](#)

```
aaa authen login default radius local
aaa authen ppp default if-needed radius local
aaa authorization exec default radius if-authenticated
aaa authorization network default radius if-authenticated
```

## [Cisco IOS 12.0.5.T 及更高版本](#)

```
aaa authen login default group radius local
aaa authen ppp default if-needed group radius local
aaa authorization exec default group radius if-authenticated
aaa authorization network default group radius if-authenticated
```

## [调试示例 - RADIUS 和 CHAP](#)

**注意：**在调试输出中，粗斜体文本突出显示了调试中的问题。纯文本表示调试成功。

```
rtpkrb#show debug General OS: AAA Authentication debugging is on AAA Authorization debugging is
on PPP: PPP authentication debugging is on PPP protocol negotiation debugging is on Radius
protocol debugging is on rtpkrb# 4d02h: As1 LCP: I CONFREQ [Closed] id 0 len 20 4d02h: As1 LCP:
ACCM 0x00000000 (0x020600000000) 4d02h: As1 LCP: MagicNumber 0x0000405F (0x05060000405F) 4d02h:
As1 LCP: PFC (0x0702) 4d02h: As1 LCP: ACFC (0x0802) 4d02h: As1 LCP: Lower layer not up,
discarding packet %LINK-3-UPDOWN: Interface Async1, changed state to up 4d02h: As1 PPP: Treating
connection as a dedicated line 4d02h: As1 PPP: Phase is ESTABLISHING, Active Open 4d02h: As1
LCP: O CONFREQ [Closed] id 87 len 25 4d02h: As1 LCP: ACCM 0x000A0000 (0x0206000A0000) 4d02h: As1
LCP: AuthProto CHAP (0x0305C22305) 4d02h: As1 LCP: MagicNumber 0xF5445B55 (0x0506F5445B55)
4d02h: As1 LCP: PFC (0x0702) 4d02h: As1 LCP: ACFC (0x0802) 4d02h: As1 LCP: I CONFACK [REQsent]
id 87 len 25 4d02h: As1 LCP: ACCM 0x000A0000 (0x0206000A0000) 4d02h: As1 LCP: AuthProto CHAP
(0x0305C22305) 4d02h: As1 LCP: MagicNumber 0xF5445B55 (0x0506F5445B55) 4d02h: As1 LCP: PFC
(0x0702) 4d02h: As1 LCP: ACFC (0x0802) 4d02h: As1 LCP: I CONFREQ [ACKRcvd] id 0 len 20 4d02h:
As1 LCP: ACCM 0x00000000 (0x020600000000) 4d02h: As1 LCP: MagicNumber 0x0000405F
(0x05060000405F) 4d02h: As1 LCP: PFC (0x0702) 4d02h: As1 LCP: ACFC (0x0802) 4d02h: As1 LCP: O
CONFACK [ACKRcvd] id 0 len 20 4d02h: As1 LCP: ACCM 0x00000000 (0x020600000000) 4d02h: As1 LCP:
MagicNumber 0x0000405F (0x05060000405F) 4d02h: As1 LCP: PFC (0x0702) 4d02h: As1 LCP: ACFC
(0x0802) 4d02h: As1 LCP: State is Open 4d02h: As1 PPP: Phase is AUTHENTICATING, by this end
4d02h: As1 CHAP: O CHALLENGE id 11 len 27 from "rtpkrb" 4d02h: As1 CHAP: I RESPONSE id 11 len 28
from "chapadd" 4d02h: AAA/AUTHEN: create_user (0x15AD58) user='chapadd' ruser='' port='Async1'
rem_addr='async' authen_type=CHAP service=PPP priv=1 4d02h: AAA/AUTHEN/START (575703226):
port='Async1' list='' action=LOGIN service=PPP 4d02h: AAA/AUTHEN/START (575703226): using
"default" list 4d02h: AAA/AUTHEN (575703226): status = UNKNOWN 4d02h: AAA/AUTHEN/START
(575703226): Method=RADIUS 4d02h: RADIUS: Initial Transmit id 8 171.68.118.101:1645, Access-
Request, len 78 4d02h: Attribute 4 6 0A1F0105 4d02h: Attribute 5 6 00000001 4d02h: Attribute 61
6 00000000 4d02h: Attribute 1 9 63686170 4d02h: Attribute 3 19 0B895D57 4d02h: Attribute 6 6
00000002 4d02h: Attribute 7 6 00000001 Radius server is down - produces ERROR - since user is
not in local database, failover to local FAILs: As1 CHAP: I RESPONSE id 12 len 28 from "chapadd"
As1 AUTH: Duplicate authentication request id=12 already in progress As1 CHAP: I RESPONSE id 12
len 28 from "chapadd" As1 AUTH: Duplicate authentication request id=12 already in progress
RADIUS: Retransmit id 15 As1 CHAP: I RESPONSE id 12 len 28 from "chapadd" As1 AUTH: Duplicate
authentication request id=12 already in progress As1 CHAP: I RESPONSE id 12 len 28 from
"chapadd" As1 AUTH: Duplicate authentication request id=12 already in progress As1 CHAP: I
RESPONSE id 12 len 28 from "chapadd" As1 AUTH: Duplicate authentication request id=12 already in
progress RADIUS: Retransmit id 15 As1 CHAP: I RESPONSE id 12 len 28 from "chapadd" As1 AUTH:
Duplicate authentication request id=12 already in progress As1 CHAP: I RESPONSE id 12 len 28
from "chapadd" As1 AUTH: Duplicate authentication request id=12 already in progress RADIUS:
Retransmit id 15 As1 CHAP: I RESPONSE id 12 len 28 from "chapadd" As1 AUTH: Duplicate
authentication request id=12 already in progress As1 LCP: I TERMREQ [Open] id 1 len 8
(0x000002CE) As1 LCP: O TERMACK [Open] id 1 len 4 As1 PPP: Phase is TERMINATING RADIUS: id 15,
requester hung up. RADIUS: No response for id 15 RADIUS: No response from server AAA/AUTHEN
(1866705040): status = ERROR AAA/AUTHEN/START (1866705040): Method=LOCAL AAA/AUTHEN
(1866705040): status = FAIL As1 CHAP: Unable to validate Response. Username chapadd:
Authentication failure As1 CHAP: O FAILURE id 12 len 26 msg is "Authentication failure"
AAA/AUTHEN: free_user (0x1716B8) user='chapadd' ruser='' port='Async1' rem_addr='async'
```

authen\_type=CHAP service=PPP priv=1 Key in router does not match that of server: RADIUS:  
Received from id 21 171.68.118.101:1645, Access-Reject, len 20 RADIUS: Reply for 21 fails  
decrypt NT client sends 'DOMAIN\user' and Radius server expects 'user': RADIUS: Received from id  
16 171.68.118.101:1645, Access-Reject, len 20 AAA/AUTHEN (2974782384): status = FAIL As1 CHAP:  
Unable to validate Response. Username CISCO\chapadd: Authentication failure As1 CHAP: O FAILURE  
id 13 len 26 msg is "Authentication failure" As1 PPP: Phase is TERMINATING As1 LCP: O TERMREQ  
[Open] id 131 len 4 AAA/AUTHEN: free\_user (0x171700) user='CISCO\chapadd' ruser='' port='Async1'  
rem\_addr='async' authen\_type=CHAP service=PPP priv=1 Radius server refuses user because user is  
set up for pap, user enters bad password, or both userid & password are bad: RADIUS: Received  
from id 17 171.68.118.101:1645, Access-Reject, len 20 AAA/AUTHEN (3898168391): status = FAIL As1  
CHAP: Unable to validate Response. Username ddunlap: Authentication failure As1 CHAP: O FAILURE  
id 14 len 26 msg is "Authentication failure" As1 PPP: Phase is TERMINATING As1 LCP: O TERMREQ  
[Open] id 134 len 4 AAA/AUTHEN: free\_user (0x1716B8) user='ddunlap' ruser='' port='Async1'  
rem\_addr='async' authen\_type=CHAP service=PPP priv=1 User PASSES authentication (i.e.  
username/password is good) but FAILS authorization (profile not set up for Service-Type=Framed &  
Framed-Protocol=PPP): RADIUS: Received from id 19 171.68.118.101:1645, Access-Accept, len 20  
AAA/AUTHEN (2006894701): status = PASS AAA/AUTHOR/LCP As1: Authorize LCP AAA/AUTHOR/LCP: Async1:  
(2370106832): user='noauth' AAA/AUTHOR/LCP: Async1: (2370106832): send AV service=ppp  
AAA/AUTHOR/LCP: Async1: (2370106832): send AV protocol=lcp AAA/AUTHOR/LCP: Async1: (2370106832):  
Method=RADIUS RADIUS: no appropriate authorization type for user. AAA/AUTHOR (2370106832): Post  
authorization status = FAIL AAA/AUTHOR/LCP As1: Denied 4d02h: RADIUS: Received from id 8  
171.68.118.101:1645, Access-Accept, len 32 4d02h: Attribute 6 6 00000002 4d02h: Attribute 7 6  
00000001 4d02h: AAA/AUTHEN (575703226): status = PASS 4d02h: AAA/AUTHOR/LCP As1: Authorize LCP  
4d02h: AAA/AUTHOR/LCP: Async1: (4143416222): user='chapadd' 4d02h: AAA/AUTHOR/LCP: Async1:  
(4143416222): send AV service=ppp 4d02h: AAA/AUTHOR/LCP: Async1: (4143416222): send AV  
protocol=lcp 4d02h: AAA/AUTHOR/LCP: Async1: (4143416222): Method=RADIUS 4d02h: AAA/AUTHOR  
(4143416222): Post authorization status = PASS\_REPL 4d02h: AAA/AUTHOR/LCP As1: Processing AV  
service=ppp 4d02h: As1 CHAP: O SUCCESS id 11 len 4 4d02h: As1 PPP: Phase is UP 4d02h:  
AAA/AUTHOR/FSM As1: (0): Can we start IPCP? 4d02h: AAA/AUTHOR/FSM: Async1: (1916451991):  
user='chapadd' 4d02h: AAA/AUTHOR/FSM: Async1: (1916451991): send AV service=ppp 4d02h:  
AAA/AUTHOR/FSM: Async1: (1916451991): send AV protocol=ip 4d02h: AAA/AUTHOR/FSM: Async1:  
(1916451991): Method=RADIUS 4d02h: AAA/AUTHOR (1916451991): Post authorization status =  
PASS\_REPL 4d02h: AAA/AUTHOR/FSM As1: We can start IPCP 4d02h: As1 IPCP: O CONFREQ [Closed] id 19  
len 10 4d02h: As1 IPCP: Address 10.31.1.5 (0x03060A1F0105) 4d02h: As1 IPCP: I CONFREQ [REQsent]  
id 1 len 34 4d02h: As1 IPCP: Address 0.0.0.0 (0x030600000000) 4d02h: As1 IPCP: PrimaryDNS  
0.0.0.0 (0x810600000000) 4d02h: As1 IPCP: PrimaryWINS 0.0.0.0 (0x820600000000) 4d02h: As1 IPCP:  
SecondaryDNS 0.0.0.0 (0x830600000000) 4d02h: As1 IPCP: SecondaryWINS 0.0.0.0 (0x840600000000)  
4d02h: AAA/AUTHOR/IPCP As1: Start. Her address 0.0.0.0, we want 0.0.0.0 4d02h: AAA/AUTHOR/IPCP  
As1: Processing AV service=ppp 4d02h: AAA/AUTHOR/IPCP As1: Authorization succeeded 4d02h:  
AAA/AUTHOR/IPCP As1: Done. Her address 0.0.0.0, we want 0.0.0.0 4d02h: As1 IPCP: Using pool  
'async' 4d02h: As1 IPCP: Pool returned 15.15.15.15 4d02h: As1 IPCP: O CONFREQ [REQsent] id 1 len  
22 4d02h: As1 IPCP: PrimaryWINS 0.0.0.0 (0x820600000000) 4d02h: As1 IPCP: SecondaryDNS 0.0.0.0  
(0x830600000000) 4d02h: As1 IPCP: SecondaryWINS 0.0.0.0 (0x840600000000) 4d02h: As1 IPCP: I  
CONFACK [REQsent] id 19 len 10 4d02h: As1 IPCP: Address 10.31.1.5 (0x03060A1F0105) 4d02h: As1  
IPCP: I CONFREQ [ACKrcvd] id 2 len 16 4d02h: As1 IPCP: Address 0.0.0.0 (0x030600000000) 4d02h:  
As1 IPCP: PrimaryDNS 0.0.0.0 (0x810600000000) 4d02h: AAA/AUTHOR/IPCP As1: Start. Her address  
0.0.0.0, we want 15.15.15.15 4d02h: AAA/AUTHOR/IPCP As1: Processing AV service=ppp 4d02h:  
AAA/AUTHOR/IPCP As1: Authorization succeeded 4d02h: AAA/AUTHOR/IPCP As1: Done. Her address  
0.0.0.0, we want 15.15.15.15 4d02h: As1 IPCP: O CONFNAK [ACKrcvd] id 2 len 16 4d02h: As1 IPCP:  
Address 15.15.15.15 (0x03060F0F0F0F) 4d02h: As1 IPCP: PrimaryDNS 171.68.118.103 (0x8106AB447667)  
4d02h: As1 IPCP: I CONFREQ [ACKrcvd] id 3 len 16 4d02h: As1 IPCP: Address 15.15.15.15  
(0x03060F0F0F0F) 4d02h: As1 IPCP: PrimaryDNS 171.68.118.103 (0x8106AB447667) 4d02h:  
AAA/AUTHOR/IPCP As1: Start. Her address 15.15.15.15, we want 15.15.15.15 4d02h: AAA/AUTHOR/IPCP:  
Async1: (1096193147): user='chapadd' 4d02h: AAA/AUTHOR/IPCP: Async1: (1096193147): send AV  
service=ppp 4d02h: AAA/AUTHOR/IPCP: Async1: (1096193147): send AV protocol=ip 4d02h:  
AAA/AUTHOR/IPCP: Async1: (1096193147): send AV addr\*15.15.15.15 4d02h: AAA/AUTHOR/IPCP: Async1:  
(1096193147): Method=RADIUS 4d02h: AAA/AUTHOR (1096193147): Post authorization status =  
PASS\_REPL 4d02h: AAA/AUTHOR/IPCP As1: Reject 15.15.15.15, using 15.15.15.15 4d02h:  
AAA/AUTHOR/IPCP As1: Processing AV service=ppp 4d02h: AAA/AUTHOR/IPCP As1: Processing AV  
addr\*15.15.15.15 4d02h: AAA/AUTHOR/IPCP As1: Authorization succeeded 4d02h: AAA/AUTHOR/IPCP As1:  
Done. Her address 15.15.15.15, we want 15.15.15.15 4d02h: As1 IPCP: O CONFACK [ACKrcvd] id 3 len  
16 4d02h: As1 IPCP: Address 15.15.15.15 (0x03060F0F0F0F) 4d02h: As1 IPCP: PrimaryDNS  
171.68.118.103 (0x8106AB447667) 4d02h: As1 IPCP: State is Open %LINEPROTO-5-UPDOWN: Line  
protocol on Interface Async1, changed state to up 4d02h: As1 IPCP: Install route to 15.15.15.15



rtpkrb#

## debug 命令

下列 **debug** 命令用于生成本文档中的调试输出示例。

**注意：** 在发出 **debug** 命令之前，请参阅[有关 Debug 命令的重要信息](#)。

- **debug aaa authentication** - 显示有关 AAA 身份验证的信息。
- **debug aaa authorization** - 显示有关 AAA 授权的信息。
- **debug radius** - 显示与远程身份验证拨入用户服务器 (RADIUS) 相关的详细调试信息。
- **debug ppp negotiation** - 显示在 PPP 启动期间传输的 PPP 数据包，在此启动期间将协商 PPP 选项。

## 相关信息

- [RADIUS 支持页](#)
- [技术支持 - Cisco Systems](#)