如何在 TACACS+ 服务器的拨号接口上应用访问列表

目录

简介

本文档演示如何将访问列表应用到与TACACS+服务器的拨号接口。有两个可能的方法：

- 在路由器上定义编号访问列表并引用服务器上的编号访问列表。大多数Cisco IOS®软件版本都支持此功能。
- 在服务器上定义整个访问列表。此每用户方法需要Cisco IOS软件版本11.3或**更高版**本。

注意：对于ISDN，您必须使用每**用户方**法，并且必须在路由器上配置虚拟配置文件。

先决条件

要求

本文档没有任何特定的要求。

使用的组件

本文档中的信息基于以下软件和硬件版本：

- Cisco IOS软件版本11.1或更高版本（在路由器上定义访问列表）Cisco IOS软件版本11.3或更高版本（在服务器上定义访问列表）

- 思科UNIX安全ACS适用于Windows 2.x及更高版本的思科安全ACSTACACS+ 免费软件

注意：本文档假设之前已配置了拨号访问。本文档不讨论拨号配置的详细信息。有关如何配置网络接入服务器(NAS)进行拨号的信息，请参阅配置NAS以进行基本拨号接入。

本文档中的信息都是基于特定实验室环境中的设备编写的。本文档中使用的所有设备最初均采用原始（默认）配置。如果您使用的是真实网络，请确保您已经了解所有命令的潜在影响。

规则

有关文档规则的详细信息，请参阅 Cisco 技术提示规则。

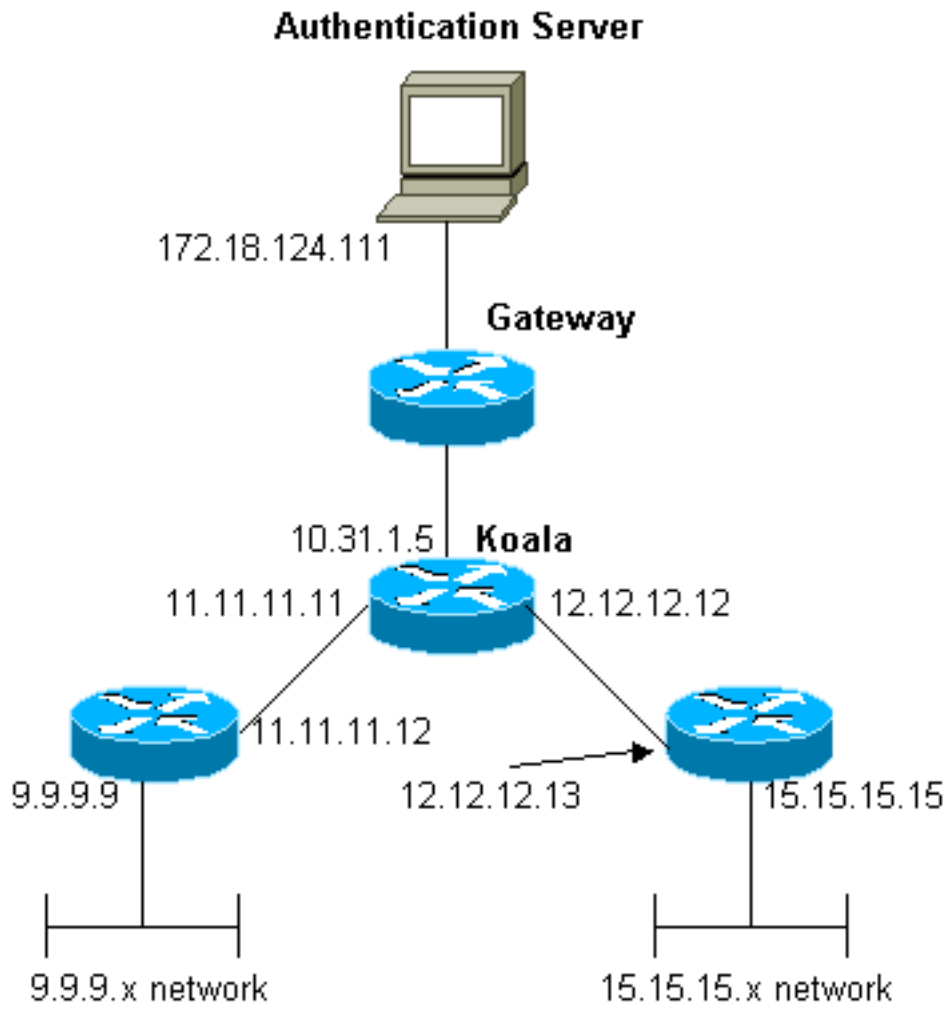
配置

本部分提供有关如何配置本文档所述功能的信息。

注意：使用命令查找工具(仅限注册客户)可查找有关本文档中使用的命令的详细信息。

网络图

本文档使用以下网络设置：



注意：配置允许从“'mypool”接收地址1.1.1.x的用户对网络9.9.9.x和Telnet（TCP流量）15.15.15.x执行ping操作。它不允许用户对网络15.15.15.x执行ping操作或通过Telnet访问网络9.9.9.x。

配置

本文档使用以下配置。

- 运行Cisco IOS软件版本12.0(5)T的Cisco 2500系列路由器
- 思科安全ACS for UNIX 2.3
- 思科Windows 3.2安全ACS

在路由器上定义编号访问列表

运行Cisco IOS软件版本12.0(5)T的Cisco 2500系列路由器

```
Current configuration:
!
version 12.0
service timestamps debug uptime
service timestamps log uptime
no service password-encryption
!
hostname koala
!
aaa new-model
!
!--- These three lines of the configuration !--- are
specific to Cisco IOS Software Release 12.0.5.T and
later. !--- See the Commands for Other Cisco IOS
Releases section for commands !--- for other Cisco IOS
releases. ! aaa authentication login default local group
tacacs+
aaa authentication ppp default if-needed group tacacs+
aaa authorization network default group tacacs+
enable secret 5 $1$mnZQ$g6XdsgVnnYjEa.l7v.Pij1
enable password ww
!
username john password 0 doe
!
ip subnet-zero
!
cns event-service server
!
interface Ethernet0
ip address 10.31.1.5 255.255.255.0
no ip directed-broadcast
no mop enabled
!
interface Serial0
ip address 11.11.11.11 255.255.255.0
no ip directed-broadcast
no ip mroute-cache
no fair-queue
!
interface Serial1
ip address 12.12.12.12 255.255.255.0
no ip directed-broadcast
!
interface Async1
ip unnumbered Ethernet0
no ip directed-broadcast
encapsulation ppp
```

```
no ip route-cache
no ip mroute-cache
async mode dedicated
peer default ip address pool mypool
fair-queue 64 16 0
no cdp enable
ppp authentication chap
!
ip local pool mypool 1.1.1.1 1.1.1.5
ip classless
ip route 0.0.0.0 0.0.0.0 10.31.1.1
ip route 9.9.9.0 255.255.255.0 11.11.11.12
ip route 15.15.15.0 255.255.255.0 12.12.12.13
no ip http server
!
!--- Access list 101 is defined on the NAS. access-list
101 permit icmp 1.1.1.0 0.0.0.255 9.9.9.0 0.0.0.255
access-list 101 permit tcp 1.1.1.0 0.0.0.255 15.15.15.0
0.0.0.255
dialer-list 1 protocol ip permit
dialer-list 1 protocol ipx permit
!
!--- Specify TACACS+ server host and key. tacacs-server
host 172.18.124.111
tacacs-server key cisco
!
line con 0
transport input none
line 1
modem InOut
transport input all
stopbits 1
speed 115200
flowcontrol hardware
line 2 16
line aux 0
line vty 0 4
password ww
!
end
```

用于其它 Cisco IOS 版本的命令

注意：要使用这些命令，请从Cisco 2500系列路由器配置中删除粗体命令，并按照Cisco IOS软件版本的说明将这些命令粘贴到中。

思科IOS软件版本11.3.3.T到12.0.5.T

```
aaa authentication login default tacacs+ local
aaa authentication ppp default if-needed tacacs+ local
aaa authorization network default tacacs+
```

思科IOS软件版本11.1至11.3.3.T

```
aaa authentication login default tacacs+
aaa authentication ppp default if-needed tacacs+
aaa authorization network tacacs+
```

服务器配置 — TACACS+免费软件

```
user = chaprtr {
chap = cleartext chaprtr
service = ppp protocol = ip {
inacl=101
}
}
```

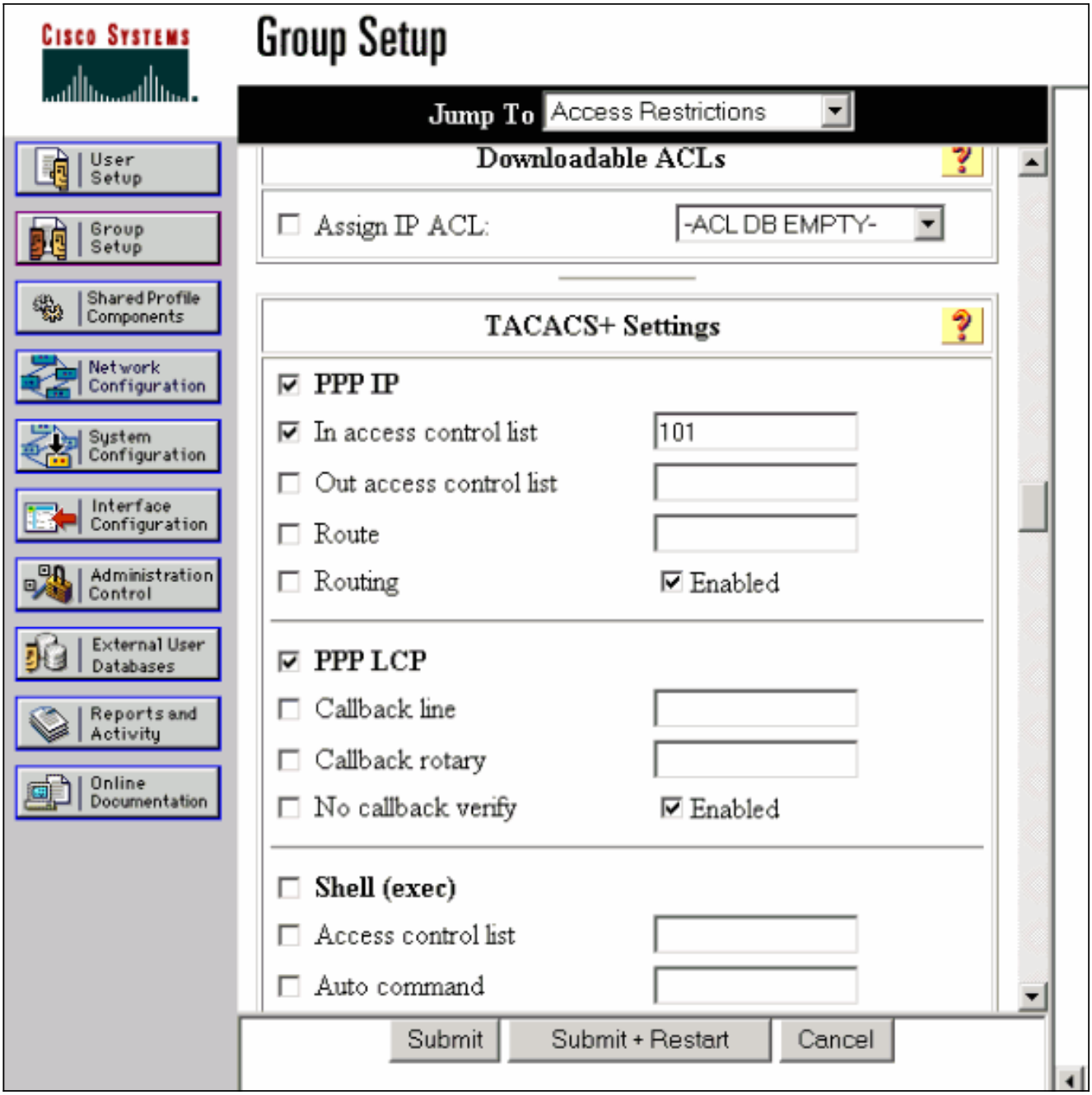
服务器配置 — Cisco Secure UNIX - TACACS+

```
rtp-berry# ./ViewProfile -p 9900 -u chaprtr
User Profile Information
user = chaprtr{
profile_id = 182
set server current-failed-logins = 1
profile_cycle = 2
service=ppp {
protocol=lcp {
}
protocol=ip {
set inacl=101
}
}
password = chap "chaprtr"
}
```

服务器配置 — Cisco Secure ACS for Windows 2.x及更高版本 — TACACS+

要配置Cisco Secure ACS for Windows以指定NAS应应用哪些ACL，请完成以下步骤。

1. 单击**Group Setup**，选择用户所属的组，然后单击**Edit Settings**。
2. 单击**TACACS+ Settings**部分中的**PPP IP**、**In access control list**和**PPP LCP**复选框。在“In access control list”（传入访问控制列表）框中指定要应用的ACL编号（本例中为101）。
3. 选中**Enabled**以启用**PPP IP**和PPP LCP**选项**。



路由器调试示例

```
koala#show debug
General OS:
TACACS access control debugging is on
AAA Authentication debugging is on
AAA Authorization debugging is on
koala#show ip access-lists
Extended IP access list 101
permit icmp 1.1.1.0 0.0.0.255 9.9.9.0 0.0.0.255 log (2 matches)
permit tcp 1.1.1.0 0.0.0.255 15.15.15.0 0.0.0.255 log (11 matches)
koala#
4d05h: As1 AAA/AUTHOR/FSM: (0): LCP succeeds trivially
4d05h: %LINK-3-UPDOWN: Interface Async1, changed state to up
4d05h: AAA: parse name=Async1 idb type=10 tty=1
4d05h: AAA: name=Async1 flags=0x11 type=4 shelf=0 slot=0
adapter=0 port=1 channel=0
4d05h: AAA/MEMORY: create_user (0x54F934) user='chaprtr'
ruser='' port='Async1' rem_addr='async' authen_type=CHAP
```

```
service=PPP priv=1
4d05h: AAA/AUTHEN/START (1203050692): port='Async1' list=''
action=LOGIN service=PPP
4d05h: AAA/AUTHEN/START (1203050692): using "default" list
4d05h: AAA/AUTHEN (1203050692): status = UNKNOWN
4d05h: AAA/AUTHEN/START (1203050692): Method=tacacs+ (tacacs+)
4d05h: TAC+: send AUTHEN/START packet ver=193 id=1203050692
4d05h: TAC+: Using default tacacs server-group "tacacs+" list.
4d05h: TAC+: Opening TCP/IP to 172.18.124.111/49 timeout=5
4d05h: TAC+: Opened TCP/IP handle 0x538778 to 172.18.124.111/49
4d05h: TAC+: 172.18.124.111 (1203050692) AUTHEN/START/LOGIN/CHAP queued
4d05h: TAC+: (1203050692) AUTHEN/START/LOGIN/CHAP processed
4d05h: TAC+: ver=192 id=1203050692 received AUTHEN status = GETPASS
4d05h: TAC+: Closing TCP/IP 0x538778 connection to 172.18.124.111/49
4d05h: TAC+: Opening TCP/IP to 172.18.124.111/49 timeout=5
4d05h: TAC+: Opened TCP/IP handle 0x538BBC to 172.18.124.111/49
4d05h: TAC+: Opened 172.18.124.111 index=1
4d05h: AAA: parse name=Async1 idb type=-1 tty=-1
4d05h: AAA: name=Async1 flags=0x11 type=4 shelf=0 slot=0 adapter=0
port=1 channel=0
4d05h: AAA/MEMORY: create_user (0x19FCF8) user='chaprtr' ruser=''
port='Async1' rem_addr='async' authen_type=CHAP service=PPP priv=1
4d05h: TAC+: rev0 inbound chap for id=1203050692 using id=2966879003
4d05h: TAC+: 172.18.124.111 (2966879003) AUTHEN/START/SENDPASS/CHAP queued
4d05h: TAC+: (2966879003) AUTHEN/START/SENDPASS/CHAP processed
4d05h: TAC+: ver=192 id=2966879003 received AUTHEN status = PASS
4d05h: TAC+: rev0 inbound chap SENDPASS status=PASS for id=1203050692
4d05h: TAC+: rev0 inbound chap MD5 compare OK
4d05h: AAA/MEMORY: free_user (0x19FCF8) user='chaprtr' ruser=''
port='Async1' rem_addr='async' authen_type=CHAP service=PPP priv=1
4d05h: TAC+: Closing TCP/IP 0x538BBC connection to 172.18.124.111/49
4d05h: AAA/AUTHEN (1203050692): status = PASS
4d05h: As1 AAA/AUTHOR/LCP: Authorize LCP
4d05h: As1 AAA/AUTHOR/LCP (3002156107): Port='Async1' list='' service=NET
4d05h: AAA/AUTHOR/LCP: As1 (3002156107) user='chaprtr'
4d05h: As1 AAA/AUTHOR/LCP (3002156107): send AV service=ppp
4d05h: As1 AAA/AUTHOR/LCP (3002156107): send AV protocol=lcp
4d05h: As1 AAA/AUTHOR/LCP (3002156107): found list "default"
4d05h: As1 AAA/AUTHOR/LCP (3002156107): Method=tacacs+ (tacacs+)
4d05h: AAA/AUTHOR/TAC+: (3002156107): user=chaprtr
4d05h: AAA/AUTHOR/TAC+: (3002156107): send AV service=ppp
4d05h: AAA/AUTHOR/TAC+: (3002156107): send AV protocol=lcp
4d05h: TAC+: using previously set server 172.18.124.111 from group tacacs+
4d05h: TAC+: Opening TCP/IP to 172.18.124.111/49 timeout=5
4d05h: TAC+: Opened TCP/IP handle 0x539000 to 172.18.124.111/49
4d05h: TAC+: Opened 172.18.124.111 index=1
4d05h: TAC+: 172.18.124.111 (3002156107) AUTHOR/START queued
4d05h: TAC+: (3002156107) AUTHOR/START processed
4d05h: TAC+: (3002156107): received author response status = PASS_ADD
4d05h: TAC+: Closing TCP/IP 0x539000 connection to 172.18.124.111/49
4d05h: As1 AAA/AUTHOR (3002156107): Post authorization status = PASS_ADD
4d05h: As1 AAA/AUTHOR/FSM: (0): Can we start IPCP?
4d05h: As1 AAA/AUTHOR/FSM (1577158668): Port='Async1' list='' service=NET
4d05h: AAA/AUTHOR/FSM: As1 (1577158668) user='chaprtr'
4d05h: As1 AAA/AUTHOR/FSM (1577158668): send AV service=ppp
4d05h: As1 AAA/AUTHOR/FSM (1577158668): send AV protocol=ip
4d05h: As1 AAA/AUTHOR/FSM (1577158668): found list "default"
4d05h: As1 AAA/AUTHOR/FSM (1577158668): Method=tacacs+ (tacacs+)
4d05h: AAA/AUTHOR/TAC+: (1577158668): user=chaprtr
4d05h: AAA/AUTHOR/TAC+: (1577158668): send AV service=ppp
4d05h: AAA/AUTHOR/TAC+: (1577158668): send AV protocol=ip
4d05h: TAC+: using previously set server 172.18.124.111 from group tacacs+
4d05h: TAC+: Opening TCP/IP to 172.18.124.111/49 timeout=5
4d05h: TAC+: Opened TCP/IP handle 0x539444 to 172.18.124.111/49
```

```
4d05h: TAC+: Opened 172.18.124.111 index=1
4d05h: TAC+: 172.18.124.111 (1577158668) AUTHOR/START queued
4d05h: TAC+: (1577158668) AUTHOR/START processed
4d05h: TAC+: (1577158668): received author response status = PASS_ADD
4d05h: TAC+: Closing TCP/IP 0x539444 connection to 172.18.124.111/49
4d05h: As1 AAA/AUTHOR (1577158668): Post authorization status = PASS_ADD
4d05h: As1 AAA/AUTHOR/FSM: We can start IPCP
4d05h: %LINEPROTO-5-UPDOWN: Line protocol on Interface Async1,
changed state to up
4d05h: As1 AAA/AUTHOR/IPCP: Start. Her address 0.0.0.0, we want 0.0.0.0
4d05h: As1 AAA/AUTHOR/IPCP: Processing AV service=ppp
4d05h: As1 AAA/AUTHOR/IPCP: Processing AV protocol=ip
4d05h: As1 AAA/AUTHOR/IPCP: Processing AV inacl=101
4d05h: As1 AAA/AUTHOR/IPCP: Authorization succeeded
4d05h: As1 AAA/AUTHOR/IPCP: Done. Her address 0.0.0.0, we want 0.0.0.0
4d05h: As1 AAA/AUTHOR/IPCP: Start. Her address 0.0.0.0, we want 1.1.1.2
4d05h: As1 AAA/AUTHOR/IPCP: Processing AV service=ppp
4d05h: As1 AAA/AUTHOR/IPCP: Processing AV protocol=ip
 !--- Apply ACL 101 in the inbound direction. 4d05h: As1 AAA/AUTHOR/IPCP: Processing AV
inacl=101
4d05h: As1 AAA/AUTHOR/IPCP: Authorization succeeded
4d05h: As1 AAA/AUTHOR/IPCP: Done. Her address 0.0.0.0, we want 1.1.1.2
4d05h: As1 AAA/AUTHOR/IPCP: Start. Her address 1.1.1.2, we want 1.1.1.2
4d05h: As1 AAA/AUTHOR/IPCP (1659098608): Port='Async1' list=''
service=NET
4d05h: AAA/AUTHOR/IPCP: As1 (1659098608) user='chaprtr'
4d05h: As1 AAA/AUTHOR/IPCP (1659098608): send AV service=ppp
4d05h: As1 AAA/AUTHOR/IPCP (1659098608): send AV protocol=ip
4d05h: As1 AAA/AUTHOR/IPCP (1659098608): send AV addr*1.1.1.2
4d05h: As1 AAA/AUTHOR/IPCP (1659098608): found list "default"
4d05h: As1 AAA/AUTHOR/IPCP (1659098608): Method=tacacs+ (tacacs+)
4d05h: AAA/AUTHOR/TAC+: (1659098608): user=chaprtr
4d05h: AAA/AUTHOR/TAC+: (1659098608): send AV service=ppp
4d05h: AAA/AUTHOR/TAC+: (1659098608): send AV protocol=ip
4d05h: AAA/AUTHOR/TAC+: (1659098608): send AV addr*1.1.1.2
4d05h: TAC+: using previously set server 172.18.124.111 from
group tacacs+
4d05h: TAC+: Opening TCP/IP to 172.18.124.111/49 timeout=5
4d05h: TAC+: Opened TCP/IP handle 0x538BBC to 172.18.124.111/49
4d05h: TAC+: Opened 172.18.124.111 index=1
4d05h: TAC+: 172.18.124.111 (1659098608) AUTHOR/START queued
4d05h: TAC+: (1659098608) AUTHOR/START processed
4d05h: TAC+: (1659098608): received author response status = PASS_REPL
4d05h: TAC+: Closing TCP/IP 0x538BBC connection to 172.18.124.111/49
4d05h: As1 AAA/AUTHOR (1659098608): Post authorization status = PASS_REPL
4d05h: As1 AAA/AUTHOR/IPCP: Reject 1.1.1.2, using 1.1.1.2
4d05h: As1 AAA/AUTHOR/IPCP: Processing AV service=ppp
4d05h: As1 AAA/AUTHOR/IPCP: Processing AV protocol=ip
4d05h: As1 AAA/AUTHOR/IPCP: Processing AV inacl=101
4d05h: As1 AAA/AUTHOR/IPCP: Processing AV addr*1.1.1.2
4d05h: As1 AAA/AUTHOR/IPCP: Authorization succeeded
4d05h: As1 AAA/AUTHOR/IPCP: Done. Her address 1.1.1.2, we want 1.1.1.2
4d05h: %SEC-6-IPACCESSLOGDP: list 101 permitted icmp 1.1.1.2 ->
9.9.9.9 (0/0), 3 packets
koala#show ip access-lists
Extended IP access list 101
permit icmp 1.1.1.0 0.0.0.255 9.9.9.0 0.0.0.255 log (5 matches)
permit tcp 1.1.1.0 0.0.0.255 15.15.15.0 0.0.0.255 log (11 matches)
koala#
```

在服务器上定义访问列表

注意：Route语句不必从服务器向下传送到路由器。拨号用户通常从路由器获取路由。路由器上是

否存在route语句取决于路由是从服务器向下传递还是从路由器上提取：

```
ip route 9.9.9.0 255.255.255.0 11.11.11.12
ip route 15.15.15.0 255.255.255.0 12.12.12.13
```

在此示例配置中，从服务器向下传递路由仅用于说明目的。

路由器配置

```
Current configuration:
!
version 12.0
service timestamps debug uptime
service timestamps log uptime
no service password-encryption
!
hostname koala
!
aaa new-model
!
!--- These three lines of the configuration !--- are
specific to Cisco IOS Software Release 12.0.5.T and
later. !--- See the Commands for Other IOS Releases
section for !--- commands for other Cisco IOS Software
releases. ! aaa authentication login default group
tacacs+ none
aaa authentication ppp default if-needed group tacacs+
aaa authorization network default group tacacs+
enable secret 5 $1$mnZQ$g6XdsgVnnYjEa.l7v.Pij1
enable password ww
!
username john password 0 doe
!
ip subnet-zero
!
cns event-service server
!
interface Ethernet0
ip address 10.31.1.5 255.255.255.0
no ip directed-broadcast
no mop enabled
!
interface Serial0
ip address 11.11.11.11 255.255.255.0
no ip directed-broadcast
no ip mroute-cache
no fair-queue
!
interface Serial1
ip address 12.12.12.12 255.255.255.0
no ip directed-broadcast
!
interface Async1
ip unnumbered Ethernet0
no ip directed-broadcast
encapsulation ppp
no ip route-cache
no ip mroute-cache
async mode dedicated
peer default ip address pool mypool
fair-queue 64 16 0
no cdp enable
```

```
ppp authentication chap
!
ip local pool mypool 1.1.1.1 1.1.1.5
ip classless
ip route 0.0.0.0 0.0.0.0 10.31.1.1
ip route 172.17.192.0 255.255.255.0 10.31.1.1
ip route 172.18.124.0 255.255.255.0 10.31.1.1
ip route 172.18.125.0 255.255.255.0 10.31.1.1
no ip http server
!
dialer-list 1 protocol ip permit
dialer-list 1 protocol ipx permit
!
tacacs-server host 172.18.124.111
tacacs-server key cisco
!
line con 0
transport input none
line 1
autoselect during-login
autoselect ppp
modem InOut
transport input all
stopbits 1
speed 115200
flowcontrol hardware
line 2 16
line aux 0
line vty 0 4
password ww
!
end
```

用于其它 Cisco IOS 版本的命令

注意：要使用这些命令，请从路由器配置中删除粗体命令，然后按照Cisco IOS软件版本的说明将这些命令粘贴到中。

思科IOS软件版本11.3.3.T到12.0.5.T

```
aaa authentication login default tacacs+ local
aaa authentication ppp default if-needed tacacs+ local
aaa authorization network default tacacs+
```

思科IOS软件版本11.3到11.3.3.T

```
aaa authentication login default tacacs+
aaa authentication ppp default if-needed tacacs+
aaa authorization network tacacs+
```

服务器配置 — TACACS+免费软件

```
user = chaprtr {
chap = cleartext chaprtr
service = ppp protocol = ip {
route#1 = "9.9.9.9 255.255.255.255 11.11.11.12"
route#2 = "15.15.15.15 255.255.255.255 12.12.12.13"
route#3 = "15.15.15.16 255.255.255.255 12.12.12.13"
```

```
inacl#1 = "permit icmp 1.1.1.0 0.0.0.255 9.9.9.0 0.0.0.255"
inacl#2 = "permit tcp 1.1.1.0 0.0.0.255 15.15.15.0 0.0.0.255"
}
}
```

服务器配置 — Cisco Secure UNIX - TACACS+

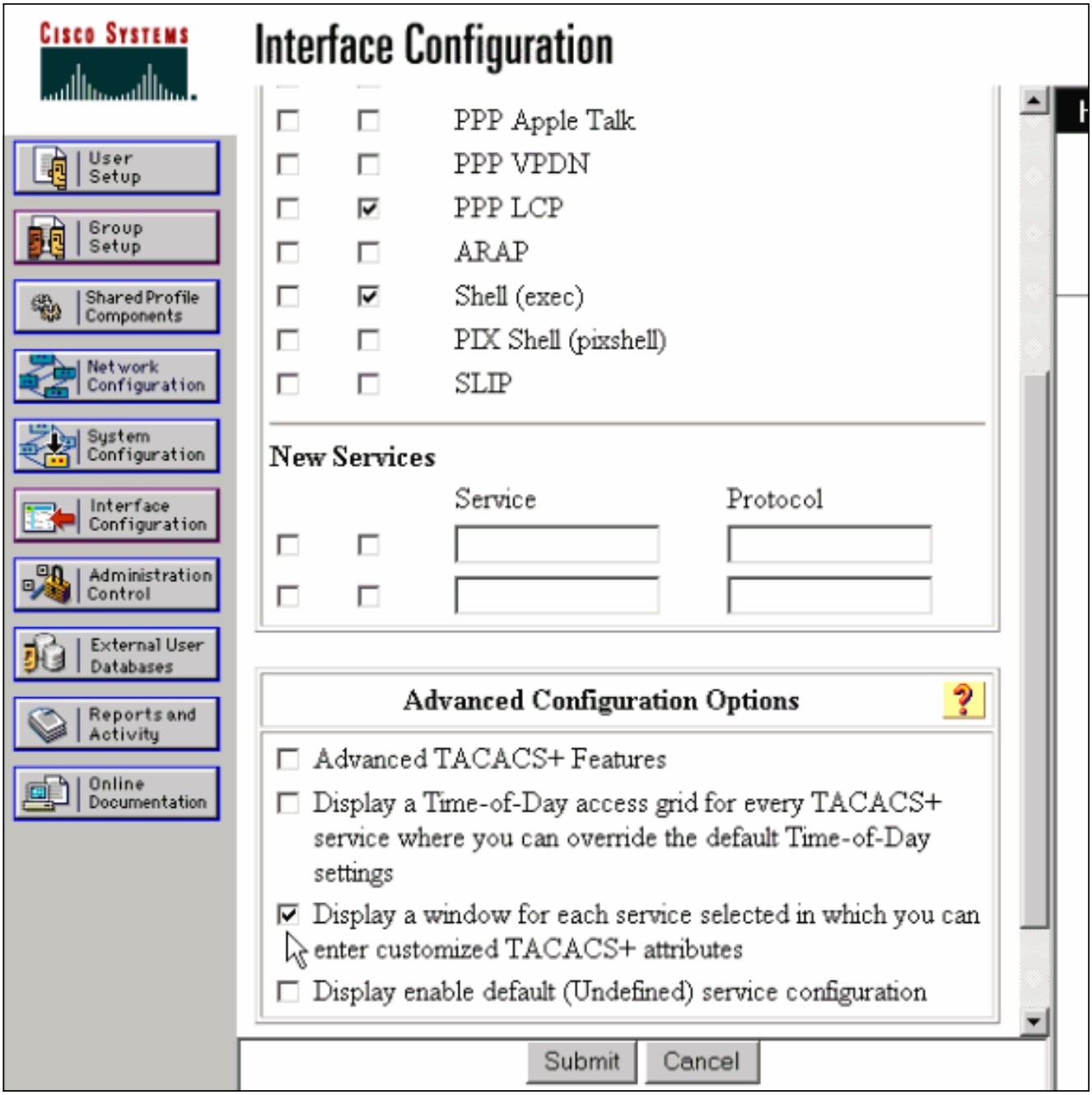
```
rtp-berry# ./ViewProfile -p 9900 -u chaprtr
User Profile Information
user = chaprtr{
profile_id = 183
set server current-failed-logins = 1
profile_cycle = 4
service=ppp {
protocol=lcp {
}
protocol=ip {
set route#1="9.9.9.9 255.255.255.255 11.11.11.12"
set route#2="15.15.15.15 255.255.255.255 12.12.12.13"
set route#3="15.15.15.16 255.255.255.255 12.12.12.13"
set inacl#1="permit icmp 1.1.1.0 0.0.0.255 9.9.9.0 0.0.0.255"
set inacl#2="permit tcp 1.1.1.0 0.0.0.255 15.15.15.0 0.0.0.255"
}
}

password = chap "chaprtr"
}
```

服务器配置 — Cisco Secure Windows 2.x - TACACS+

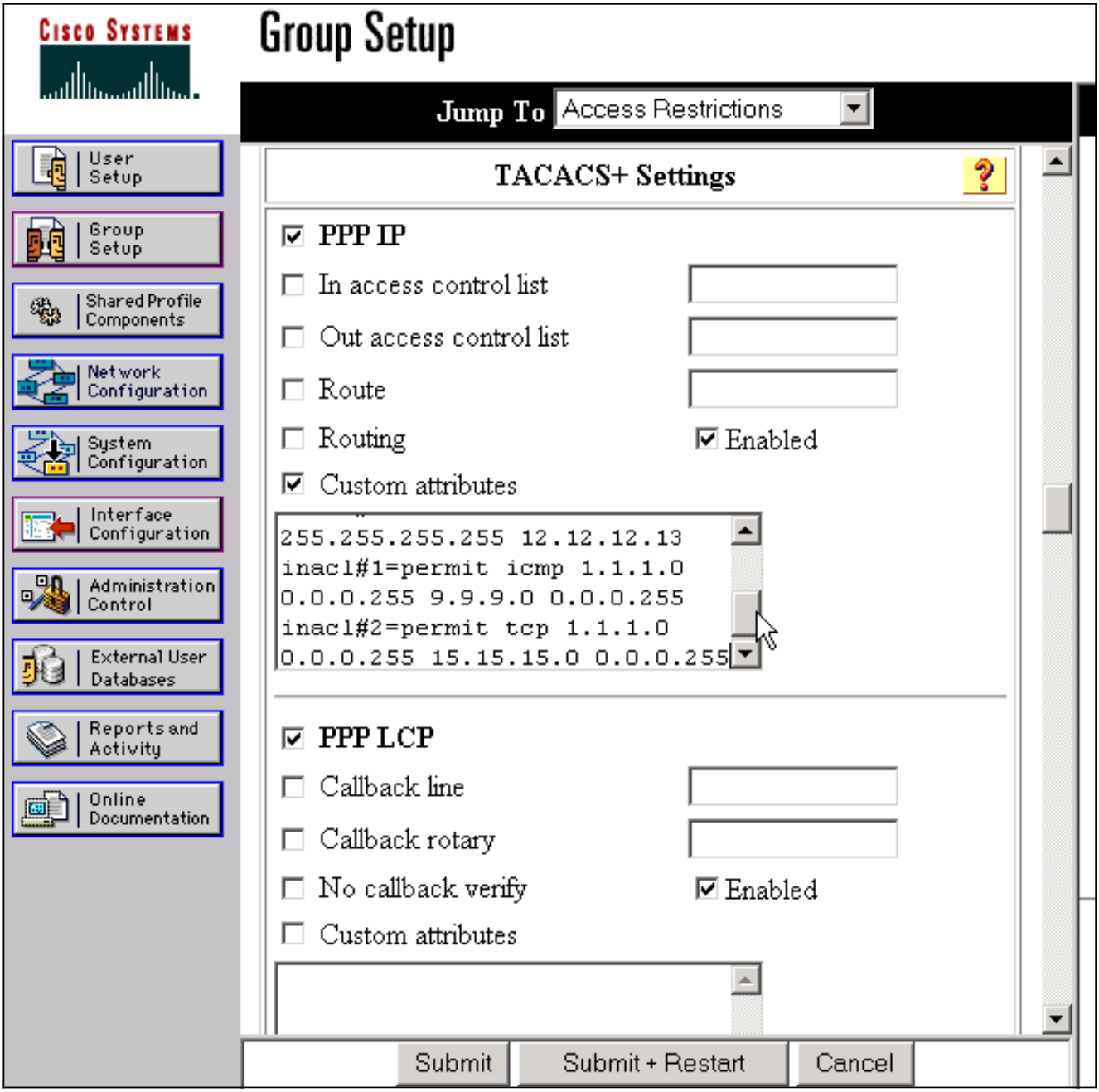
要配置Cisco Secure for Windows以将ACL传递到NAS，请完成以下步骤。

1. 单击**Interface Configuration**并选**择TACACS+ Cisco**。
2. 选中**显示所选每项服务的窗口，您可以在其中在“高级配置选项”部分输**入自定义的TACACS+属性，然后单击**提交**。



3. 单击**Group Setup**，选择用户所属的组，然后单击**Edit Settings**。
4. 转到PPP IP部分，然后从TACACS+ Settings**中单击PPP IP、Custom Attributes**和**Enable**复选框。在“自定义属性”框中输入此处显示的文本，然后单击“**提交”**。

```
route#1=9.9.9.9 255.255.255.255 11.11.11.12
route#2=15.15.15.15 255.255.255.255 12.12.12.13
route#3=15.15.15.16 255.255.255.255 12.12.12.13
inacl#1=permit icmp 1.1.1.0 0.0.0.255 9.9.9.0 0.0.0.255
inacl#2=permit tcp 1.1.1.0 0.0.0.255 15.15.15.0 0.0.0.255
```



路由器调试示例

此用户配置文件用于创建此调试输出。

```
chaprtr
{
login = cleartext cisco
chap = cleartext
chaprtr service = ppp
protocol = ip
{
route#1 = "9.9.9.9 255.255.255.255 11.11.11.12"
route#2 = "15.15.15.15 255.255.255.255 12.12.12.13"
route#3 = "15.15.15.16 255.255.255.255 12.12.12.13"
inacl#1 = "permit icmp 1.1.1.0 0.0.0.255 9.9.9.0 0.0.0.255"
inacl#2 = "permit tcp 1.1.1.0 0.0.0.255 15.15.15.0 0.0.0.255"
}
}
```

```
koala#
*Mar  1 01:22:39.963: As1 LCP: I CONFREQ [Closed] id 0 len 23
*Mar  1 01:22:39.967: As1 LCP:    ACCM 0x00000000 (0x020600000000)
*Mar  1 01:22:39.971: As1 LCP:    MagicNumber 0x000034BD (0x0506000034BD)
*Mar  1 01:22:39.971: As1 LCP:    PFC (0x0702)
*Mar  1 01:22:39.975: As1 LCP:    ACFC (0x0802)
*Mar  1 01:22:39.975: As1 LCP:    Callback 6  (0x0D0306)
*Mar  1 01:22:39.979: As1 LCP: Lower layer not up, Fast Starting
*Mar  1 01:22:39.983: As1 PPP: Treating connection as a dedicated line
*Mar  1 01:22:39.983: As1 PPP: Phase is ESTABLISHING, Active Open [0 sess, 0 load]
*Mar  1 01:22:39.987: As1 AAA/AUTHOR/FSM: (0): LCP succeeds trivially
*Mar  1 01:22:39.991: As1 LCP: O CONFREQ [Closed] id 30 len 25
*Mar  1 01:22:39.995: As1 LCP:    ACCM 0x000A0000 (0x0206000A0000)
*Mar  1 01:22:39.999: As1 LCP:    AuthProto CHAP (0x0305C22305)
*Mar  1 01:22:40.003: As1 LCP:    MagicNumber 0xE069F1B8 (0x0506E069F1B8)
*Mar  1 01:22:40.003: As1 LCP:    PFC (0x0702)
*Mar  1 01:22:40.007: As1 LCP:    ACFC (0x0802)
*Mar  1 01:22:40.011: As1 LCP: O CONFREJ [REQsent] id 0 len 7
*Mar  1 01:22:40.011: As1 LCP:    Callback 6  (0x0D0306)
01:22:40: %LINK-3-UPDOWN: Interface Async1, changed state to up
*Mar  1 01:22:40.139: As1 LCP: I CONFACK [REQsent] id 30 len 25
*Mar  1 01:22:40.143: As1 LCP:    ACCM 0x000A0000 (0x0206000A0000)
*Mar  1 01:22:40.143: As1 LCP:    AuthProto CHAP (0x0305C22305)
*Mar  1 01:22:40.147: As1 LCP:    MagicNumber 0xE069F1B8 (0x0506E069F1B8)
*Mar  1 01:22:40.151: As1 LCP:    PFC (0x0702)
*Mar  1 01:22:40.151: As1 LCP:    ACFC (0x0802)
*Mar  1 01:22:40.155: As1 LCP: I CONFREQ [ACKrcvd] id 1 len 20
*Mar  1 01:22:40.159: As1 LCP:    ACCM 0x00000000 (0x020600000000)
*Mar  1 01:22:40.163: As1 LCP:    MagicNumber 0x000034BD (0x0506000034BD)
*Mar  1 01:22:40.163: As1 LCP:    PFC (0x0702)
*Mar  1 01:22:40.167: As1 LCP:    ACFC (0x0802)
*Mar  1 01:22:40.171: As1 LCP: O CONFACK [ACKrcvd] id 1 len 20
*Mar  1 01:22:40.171: As1 LCP:    ACCM 0x00000000 (0x020600000000)
*Mar  1 01:22:40.175: As1 LCP:    MagicNumber 0x000034BD (0x0506000034BD)
*Mar  1 01:22:40.179: As1 LCP:    PFC (0x0702)
*Mar  1 01:22:40.179: As1 LCP:    ACFC (0x0802)
*Mar  1 01:22:40.183: As1 LCP: State is Open
*Mar  1 01:22:40.183: As1 PPP: Phase is AUTHENTICATING, by this end
[0 sess, 1 load]
*Mar  1 01:22:40.187: As1 CHAP: O CHALLENGE id 10 len 26 from "koala"
*Mar  1 01:22:40.295: As1 LCP: I IDENTIFY [Open] id 2 len 18 magic
0x000034BD MSRASV4.00
*Mar  1 01:22:40.307: As1 LCP: I IDENTIFY [Open] id 3 len 21 magic
0x000034BD MSRAS-1-ZEKIE
*Mar  1 01:22:40.315: As1 CHAP: I RESPONSE id 10 len 28 from "chaprtr"
*Mar  1 01:22:40.323: AAA: parse name=Async1 idb type=10 tty=1
*Mar  1 01:22:40.323: AAA: name=Async1 flags=0x11 type=4 shelf=0 slot=0
adapter=0 port=1 channel=0
*Mar  1 01:22:40.327: AAA/MEMORY: create_user (0x4ED58C) user='chaprtr'
ruser='' port='Async1' rem_addr='async' authen_type=CHAP service=PPP
priv=1
*Mar  1 01:22:40.331: AAA/AUTHEN/START (2439833946): port='Async1'
list='' action=LOGIN service=PPP
*Mar  1 01:22:40.335: AAA/AUTHEN/START (2439833946): using "default" list
*Mar  1 01:22:40.339: AAA/AUTHEN (2439833946): status = UNKNOWN
*Mar  1 01:22:40.339: AAA/AUTHEN/START (2439833946): Method=tacacs+ (tacacs+)
*Mar  1 01:22:40.343: TAC+: send AUTHEN/START packet ver=193 id=2439833946
*Mar  1 01:22:40.347: TAC+: Using default tacacs server-group "tacacs+" list.
*Mar  1 01:22:40.347: TAC+: Opening TCP/IP to 172.18.124.111/49 timeout=5
*Mar  1 01:22:40.359: TAC+: Opened TCP/IP handle 0x4EDDF8 to 172.18.124.111/49
*Mar  1 01:22:40.367: TAC+: 172.18.124.111 (2439833946)
AUTHEN/START/LOGIN/CHAP queued
*Mar  1 01:22:40.667: TAC+: (2439833946) AUTHEN/START/LOGIN/CHAP processed
*Mar  1 01:22:40.671: TAC+: ver=192 id=2439833946 received AUTHEN
```

```
status = GETPASS
*Mar  1 01:22:40.675: TAC+: Closing TCP/IP 0x4EDDF8 connection to
172.18.124.111/49
*Mar  1 01:22:40.679: TAC+: Opening TCP/IP to 172.18.124.111/49 timeout=5
*Mar  1 01:22:40.695: TAC+: Opened TCP/IP handle 0x4EE23C to 172.18.124.111/49
*Mar  1 01:22:40.695: TAC+: Opened 172.18.124.111 index=1
*Mar  1 01:22:40.699: AAA: parse name=Async1 idb type=-1 tty=-1
*Mar  1 01:22:40.703: AAA: name=Async1 flags=0x11 type=4 shelf=0 slot=0
adapter=0 port=1 channel=0
*Mar  1 01:22:40.707: AAA/MEMORY: create_user (0x4EC300) user='chaprtr'
ruser='' port='Async1' rem_addr='async' authen_type=CHAP service=PPP priv=1
*Mar  1 01:22:40.711: TAC+: rev0 inbound chap for id=2439833946 using
id=1730351499
*Mar  1 01:22:40.715: TAC+: 172.18.124.111 (1730351499)
AUTHEN/START/SENDPASS/CHAP queued
*Mar  1 01:22:40.915: TAC+: (1730351499) AUTHEN/START/SENDPASS/CHAP processed
*Mar  1 01:22:40.919: TAC+: ver=192 id=1730351499 received AUTHEN
status = PASS
*Mar  1 01:22:40.923: TAC+: rev0 inbound chap SENDPASS status=PASS
for id=2439833946
*Mar  1 01:22:40.927: TAC+: rev0 inbound chap MD5 compare OK
*Mar  1 01:22:40.927: AAA/MEMORY: free_user (0x4EC300) user='chaprtr'
ruser='' port='Async1' rem_addr='async' authen_type=CHAP service=PPP
priv=1
*Mar  1 01:22:40.935: TAC+: Closing TCP/IP 0x4EE23C connection to
172.18.124.111/49
*Mar  1 01:22:40.939: AAA/AUTHEN (2439833946): status = PASS
*Mar  1 01:22:40.943: As1 AAA/AUTHOR/LCP: Authorize LCP
*Mar  1 01:22:40.947: As1 AAA/AUTHOR/LCP (4250537500): Port='Async1'
list='' service=NET
*Mar  1 01:22:40.947: AAA/AUTHOR/LCP: As1 (4250537500) user='chaprtr'
*Mar  1 01:22:40.951: As1 AAA/AUTHOR/LCP (4250537500): send AV service=ppp
*Mar  1 01:22:40.955: As1 AAA/AUTHOR/LCP (4250537500): send AV protocol=lcp
*Mar  1 01:22:40.955: As1 AAA/AUTHOR/LCP (4250537500): found list "default"
*Mar  1 01:22:40.959: As1 AAA/AUTHOR/LCP (4250537500):
Method=tacacs+ (tacacs+)
*Mar  1 01:22:40.963: AAA/AUTHOR/TAC+: (4250537500): user=chaprtr
*Mar  1 01:22:40.963: AAA/AUTHOR/TAC+: (4250537500): send AV service=ppp
*Mar  1 01:22:40.967: AAA/AUTHOR/TAC+: (4250537500): send AV protocol=lcp
*Mar  1 01:22:40.971: TAC+: using previously set server 172.18.124.111
from group tacacs+
*Mar  1 01:22:40.971: TAC+: Opening TCP/IP to 172.18.124.111/49 timeout=5
*Mar  1 01:22:40.987: TAC+: Opened TCP/IP handle 0x4EE680 to 172.18.124.111/49
*Mar  1 01:22:40.991: TAC+: Opened 172.18.124.111 index=1
*Mar  1 01:22:40.999: TAC+: 172.18.124.111 (4250537500) AUTHOR/START queued
*Mar  1 01:22:41.195: TAC+: (4250537500) AUTHOR/START processed
*Mar  1 01:22:41.199: TAC+: (4250537500): received author response
status = PASS_ADD
*Mar  1 01:22:41.203: TAC+: Closing TCP/IP 0x4EE680 connection to
172.18.124.111/49
*Mar  1 01:22:41.207: As1 AAA/AUTHOR (4250537500): Post authorization
status = PASS_ADD
*Mar  1 01:22:41.215: As1 CHAP: O SUCCESS id 10 len 4
*Mar  1 01:22:41.219: As1 PPP: Phase is UP [0 sess, 0 load]
*Mar  1 01:22:41.223: As1 AAA/AUTHOR/FSM: (0): Can we start IPCP?
*Mar  1 01:22:41.223: As1 AAA/AUTHOR/FSM (2403262371): Port='Async1'
list='' service=NET
*Mar  1 01:22:41.227: AAA/AUTHOR/FSM: As1 (2403262371) user='chaprtr'
*Mar  1 01:22:41.231: As1 AAA/AUTHOR/FSM (2403262371): send AV service=ppp
*Mar  1 01:22:41.231: As1 AAA/AUTHOR/FSM (2403262371): send AV protocol=ip
*Mar  1 01:22:41.235: As1 AAA/AUTHOR/FSM (2403262371): found list "default"
*Mar  1 01:22:41.239: As1 AAA/AUTHOR/FSM (2403262371):
Method=tacacs+ (tacacs+)
*Mar  1 01:22:41.239: AAA/AUTHOR/TAC+: (2403262371): user=chaprtr
```

```
*Mar  1 01:22:41.243: AAA/AUTHOR/TAC+: (2403262371): send AV service=ppp
*Mar  1 01:22:41.243: AAA/AUTHOR/TAC+: (2403262371): send AV protocol=ip
*Mar  1 01:22:41.247: TAC+: using previously set server 172.18.124.111
from group tacacs+
*Mar  1 01:22:41.251: TAC+: Opening TCP/IP to 172.18.124.111/49 timeout=5
*Mar  1 01:22:41.263: TAC+: Opened TCP/IP handle 0x4EEAC4 to
172.18.124.111/49
*Mar  1 01:22:41.267: TAC+: Opened 172.18.124.111 index=1
*Mar  1 01:22:41.275: TAC+: 172.18.124.111 (2403262371) AUTHOR/START queued
*Mar  1 01:22:41.323: As1 CCP: I CONFREQ [Not negotiated] id 4 len 12
*Mar  1 01:22:41.327: As1 CCP:    OUI  (0x0002)
*Mar  1 01:22:41.327: As1 CCP:    MS-PPC supported bits 0x00007080
(0x120600007080)
*Mar  1 01:22:41.335: As1 LCP: O PROTREJ [Open] id 31 len 18 protocol CCP
(0x80FD0104000C0002120600007080)
*Mar  1 01:22:41.339: As1 IPCP: I CONFREQ [Closed] id 5 len 40
*Mar  1 01:22:41.343: As1 IPCP:    CompressType VJ 15 slots CompressSlotID
(0x0206002D0F01)
*Mar  1 01:22:41.347: As1 IPCP:    Address 0.0.0.0 (0x030600000000)
*Mar  1 01:22:41.351: As1 IPCP:    PrimaryDNS 0.0.0.0 (0x810600000000)
*Mar  1 01:22:41.355: As1 IPCP:    PrimaryWINS 0.0.0.0 (0x820600000000)
*Mar  1 01:22:41.359: As1 IPCP:    SecondaryDNS 0.0.0.0 (0x830600000000)
*Mar  1 01:22:41.363: As1 IPCP:    SecondaryWINS 0.0.0.0 (0x840600000000)
*Mar  1 01:22:41.607: TAC+: (2403262371) AUTHOR/START processed
*Mar  1 01:22:41.623: TAC+: (2403262371): received author response
status = PASS_ADD
*Mar  1 01:22:41.627: TAC+: Closing TCP/IP 0x4EEAC4 connection to
172.18.124.111/49
*Mar  1 01:22:41.635: As1 AAA/AUTHOR (2403262371): Post authorization
status = PASS_ADD
*Mar  1 01:22:41.647: As1 AAA/AUTHOR/FSM: We can start IPCP
*Mar  1 01:22:41.651: As1 IPCP: O CONFREQ [Closed] id 7 len 10
*Mar  1 01:22:41.655: As1 IPCP:    Address 10.31.1.5 (0x03060A1F0105)
*Mar  1 01:22:41.659: As1 AAA/AUTHOR/FSM: (0): Can we start CDPCP?
*Mar  1 01:22:41.663: As1 AAA/AUTHOR/FSM (840307497): Port='Async1'
list='' service=NET
*Mar  1 01:22:41.667: AAA/AUTHOR/FSM: As1 (840307497) user='chaprtr'
*Mar  1 01:22:41.671: As1 AAA/AUTHOR/FSM (840307497): send AV service=ppp
*Mar  1 01:22:41.671: As1 AAA/AUTHOR/FSM (840307497): send AV protocol=cdp
*Mar  1 01:22:41.675: As1 AAA/AUTHOR/FSM (840307497): found list "default"
*Mar  1 01:22:41.675: As1 AAA/AUTHOR/FSM (840307497): Method=tacacs+
(tacacs+)
*Mar  1 01:22:41.679: AAA/AUTHOR/TAC+: (840307497): user=chaprtr
*Mar  1 01:22:41.683: AAA/AUTHOR/TAC+: (840307497): send AV service=ppp
*Mar  1 01:22:41.683: AAA/AUTHOR/TAC+: (840307497): send AV protocol=cdp
*Mar  1 01:22:41.687: TAC+: using previously set server 172.18.124.111
from group tacacs+
*Mar  1 01:22:41.691: TAC+: Opening TCP/IP to 172.18.124.111/49 timeout=5
*Mar  1 01:22:41.703: TAC+: Opened TCP/IP handle 0x4EE23C to
172.18.124.111/49
*Mar  1 01:22:41.707: TAC+: Opened 172.18.124.111 index=1
*Mar  1 01:22:41.715: TAC+: 172.18.124.111 (840307497) AUTHOR/START queued
*Mar  1 01:22:41.759: As1 IPCP: I CONFACK [REQsent] id 7 len 10
*Mar  1 01:22:41.763: As1 IPCP:    Address 10.31.1.5 (0x03060A1F0105)
*Mar  1 01:22:41.915: TAC+: (840307497) AUTHOR/START processed
*Mar  1 01:22:41.923: TAC+: (840307497): received author response
status = FAIL
*Mar  1 01:22:41.927: TAC+: Closing TCP/IP 0x4EE23C connection to
172.18.124.111/49
*Mar  1 01:22:41.931: As1 AAA/AUTHOR (840307497): Post authorization
status = FAIL
*Mar  1 01:22:41.935: As1 AAA/AUTHOR/FSM: We cannot start CDPCP
*Mar  1 01:22:41.935: As1 CDPCP: State is Closed
01:22:42: %LINEPROTO-5-UPDOWN: Line protocol on Interface Async1,
```

```
changed state to up
*Mar  1 01:22:42.359: As1 PPP: Outbound cdp packet dropped,
CDPCP is Closed [starting negotiations]
*Mar  1 01:22:42.359: As1 CDPCP: State is Closed
*Mar  1 01:22:42.499: As1 PPP: Outbound cdp packet dropped,
CDPCP is Closed [starting negotiations]
*Mar  1 01:22:42.503: As1 CDPCP: State is Closed
*Mar  1 01:22:42.639: As1 PPP: Outbound cdp packet dropped,
CDPCP is Closed [starting negotiations]
*Mar  1 01:22:42.643: As1 CDPCP: State is Closed
*Mar  1 01:22:42.795: As1 PPP: Outbound cdp packet dropped,
CDPCP is Closed [starting negotiations]
*Mar  1 01:22:42.799: As1 CDPCP: State is Closed
*Mar  1 01:22:43.147: As1 CDPCP: TIMEout: State Closed
*Mar  1 01:22:43.151: As1 CDPCP: State is Listen
*Mar  1 01:22:43.155: As1 IPCP: I CONFREQ [ACKrcvd] id 5 len 40
*Mar  1 01:22:43.159: As1 IPCP:    CompressType VJ 15 slots
CompressSlotID (0x0206002D0F01)
*Mar  1 01:22:43.163: As1 IPCP:    Address 0.0.0.0 (0x030600000000)
*Mar  1 01:22:43.167: As1 IPCP:    PrimaryDNS 0.0.0.0 (0x810600000000)
*Mar  1 01:22:43.171: As1 IPCP:    PrimaryWINS 0.0.0.0 (0x820600000000)
*Mar  1 01:22:43.171: As1 IPCP:    SecondaryDNS 0.0.0.0 (0x830600000000)
*Mar  1 01:22:43.175: As1 IPCP:    SecondaryWINS 0.0.0.0 (0x840600000000)
*Mar  1 01:22:43.179: As1 AAA/AUTHOR/IPCP: Start.  Her address 0.0.0.0,
we want 0.0.0.0
*Mar  1 01:22:43.183: As1 AAA/AUTHOR/IPCP: Processing AV service=ppp
*Mar  1 01:22:43.187: As1 AAA/AUTHOR/IPCP: Processing AV protocol=ip
 !--- The NAS received the route statements and ACLs !--- from the ACS device. *Mar  1
01:22:43.187: As1 AAA/AUTHOR/IPCP: Processing AV route#1=
9.9.9.9 255.255.255.255 11.11.11.12
*Mar  1 01:22:43.191: As1 AAA/AUTHOR/IPCP: Processing AV route#2=
15.15.15.15 255.255.255.255 12.12.12.13
*Mar  1 01:22:43.195: As1 AAA/AUTHOR/IPCP: Processing AV route#3=
15.15.15.16 255.255.255.255 12.12.12.13
*Mar  1 01:22:43.199: As1 AAA/AUTHOR/IPCP: Processing AV inacl#1=
permit icmp 1.1.1.0 0.0.0.255 9.9.9.0 0.0.0.255
*Mar  1 01:22:43.199: As1 AAA/AUTHOR/IPCP: Processing AV inacl#2=
permit tcp 1.1.1.0 0.0.0.255 15.15.15.0 0.0.0.255
*Mar  1 01:22:43.203: As1 AAA/AUTHOR/IPCP: Authorization succeeded
*Mar  1 01:22:43.207: As1 AAA/AUTHOR/IPCP: Done.  Her address 0.0.0.0,
we want 0.0.0.0
*Mar  1 01:22:43.211: As1 IPCP: Pool returned 1.1.1.1
*Mar  1 01:22:43.215: As1 IPCP: O CONFREJ [ACKrcvd] id 5 len 28
*Mar  1 01:22:43.219: As1 IPCP:    CompressType VJ 15 slots
CompressSlotID (0x0206002D0F01)
*Mar  1 01:22:43.223: As1 IPCP:    PrimaryWINS 0.0.0.0 (0x820600000000)
*Mar  1 01:22:43.227: As1 IPCP:    SecondaryDNS 0.0.0.0 (0x830600000000)
*Mar  1 01:22:43.231: As1 IPCP:    SecondaryWINS 0.0.0.0 (0x840600000000)
*Mar  1 01:22:43.339: As1 IPCP: I CONFREQ [ACKrcvd] id 6 len 16
*Mar  1 01:22:43.343: As1 IPCP:    Address 0.0.0.0 (0x030600000000)
*Mar  1 01:22:43.347: As1 IPCP:    PrimaryDNS 0.0.0.0 (0x810600000000)
*Mar  1 01:22:43.351: As1 AAA/AUTHOR/IPCP: Start.  Her address 0.0.0.0,
we want 1.1.1.1
*Mar  1 01:22:43.355: As1 AAA/AUTHOR/IPCP: Processing AV service=ppp
*Mar  1 01:22:43.355: As1 AAA/AUTHOR/IPCP: Processing AV protocol=ip
!--- The NAS applies the route statements and ACLs. *Mar  1 01:22:43.359: As1 AAA/AUTHOR/IPCP:
Processing AV route#1=
9.9.9.9 255.255.255.255 11.11.11.12
*Mar  1 01:22:43.363: As1 AAA/AUTHOR/IPCP: Processing AV route#2=
15.15.15.15 255.255.255.255 12.12.12.13
*Mar  1 01:22:43.363: As1 AAA/AUTHOR/IPCP: Processing AV route#3=
15.15.15.16 255.255.255.255 12.12.12.13
*Mar  1 01:22:43.367: As1 AAA/AUTHOR/IPCP: Processing AV inacl#1=
permit icmp 1.1.1.0 0.0.0.255 9.9.9.0 0.0.0.255
```

```
*Mar  1 01:22:43.371: As1 AAA/AUTHOR/IPCP: Processing AV inacl#2=
permit tcp 1.1.1.0 0.0.0.255 15.15.15.0 0.0.0.255
*Mar  1 01:22:43.375: As1 AAA/AUTHOR/IPCP: Authorization succeeded
*Mar  1 01:22:43.375: As1 AAA/AUTHOR/IPCP: Done.  Her address 0.0.0.0,
we want 1.1.1.1
*Mar  1 01:22:43.383: As1 IPCP: O CONFNAK [ACKrcvd] id 6 len 16
*Mar  1 01:22:43.387: As1 IPCP:    Address 1.1.1.1 (0x030601010101)
*Mar  1 01:22:43.391: As1 IPCP:    PrimaryDNS 172.18.125.3 (0x8106AC127D03)
*Mar  1 01:22:43.499: As1 IPCP: I CONFREQ [ACKrcvd] id 7 len 16
*Mar  1 01:22:43.503: As1 IPCP:    Address 1.1.1.1 (0x030601010101)
*Mar  1 01:22:43.507: As1 IPCP:    PrimaryDNS 172.18.125.3 (0x8106AC127D03)
*Mar  1 01:22:43.511: As1 AAA/AUTHOR/IPCP: Start.  Her address 1.1.1.1,
we want 1.1.1.1
*Mar  1 01:22:43.519: As1 AAA/AUTHOR/IPCP (2646570182): Port='Async1'
list='' service=NET
*Mar  1 01:22:43.519: AAA/AUTHOR/IPCP: As1 (2646570182) user='chaprtr'
*Mar  1 01:22:43.523: As1 AAA/AUTHOR/IPCP (2646570182): send AV service=ppp
*Mar  1 01:22:43.523: As1 AAA/AUTHOR/IPCP (2646570182): send AV protocol=ip
*Mar  1 01:22:43.527: As1 AAA/AUTHOR/IPCP (2646570182): send AV addr*1.1.1.1
*Mar  1 01:22:43.531: As1 AAA/AUTHOR/IPCP (2646570182): found list "default"
*Mar  1 01:22:43.535: As1 AAA/AUTHOR/IPCP (2646570182): Method=tacacs+ (tacacs+)
*Mar  1 01:22:43.539: AAA/AUTHOR/TAC+: (2646570182): user=chaprtr
*Mar  1 01:22:43.539: AAA/AUTHOR/TAC+: (2646570182): send AV service=ppp
*Mar  1 01:22:43.543: AAA/AUTHOR/TAC+: (2646570182): send AV protocol=ip
*Mar  1 01:22:43.543: AAA/AUTHOR/TAC+: (2646570182): send AV addr*1.1.1.1
*Mar  1 01:22:43.547: TAC+: using previously set server 172.18.124.111 from
group tacacs+
*Mar  1 01:22:43.551: TAC+: Opening TCP/IP to 172.18.124.111/49 timeout=5
*Mar  1 01:22:43.563: TAC+: Opened TCP/IP handle 0x4EE23C to 172.18.124.111/49
*Mar  1 01:22:43.567: TAC+: Opened 172.18.124.111 index=1
*Mar  1 01:22:43.575: TAC+: 172.18.124.111 (2646570182) AUTHOR/START queued
*Mar  1 01:22:43.875: TAC+: (2646570182) AUTHOR/START processed
*Mar  1 01:22:43.887: TAC+: (2646570182): received author response
status = PASS_REPL
*Mar  1 01:22:43.891: TAC+: Closing TCP/IP 0x4EE23C connection to
172.18.124.111/49
*Mar  1 01:22:43.899: As1 AAA/AUTHOR (2646570182): Post authorization
status = PASS_REPL
*Mar  1 01:22:43.911: As1 AAA/AUTHOR/IPCP: Reject 1.1.1.1, using 1.1.1.1
*Mar  1 01:22:43.915: As1 AAA/AUTHOR/IPCP: Processing AV service=ppp
*Mar  1 01:22:43.919: As1 AAA/AUTHOR/IPCP: Processing AV protocol=ip
*Mar  1 01:22:43.923: As1 AAA/AUTHOR/IPCP: Processing AV route#1=
9.9.9.9 255.255.255.255 11.11.11.12
*Mar  1 01:22:43.923: As1 AAA/AUTHOR/IPCP: Processing AV route#2=
15.15.15.15 255.255.255.255 12.12.12.13
*Mar  1 01:22:43.927: As1 AAA/AUTHOR/IPCP: Processing AV route#3=
15.15.15.16 255.255.255.255 12.12.12.13
*Mar  1 01:22:43.931: As1 AAA/AUTHOR/IPCP: Processing AV inacl#1=
permit icmp 1.1.1.0 0.0.0.255 9.9.9.0 0.0.0.255
*Mar  1 01:22:43.935: As1 AAA/AUTHOR/IPCP: Processing AV inacl#2=
permit tcp 1.1.1.0 0.0.0.255 15.15.15.0 0.0.0.255
*Mar  1 01:22:43.939: As1 AAA/AUTHOR/IPCP: Processing AV addr*1.1.1.1
*Mar  1 01:22:43.939: As1 AAA/AUTHOR/IPCP: Authorization succeeded
*Mar  1 01:22:43.943: As1 AAA/AUTHOR/IPCP: Done.  Her address 1.1.1.1,
we want 1.1.1.1
*Mar  1 01:22:43.947: As1 IPCP: O CONFACK [ACKrcvd] id 7 len 16
*Mar  1 01:22:43.951: As1 IPCP:    Address 1.1.1.1 (0x030601010101)
*Mar  1 01:22:43.955: As1 IPCP:    PrimaryDNS 172.18.125.3
(0x8106AC127D03)
*Mar  1 01:22:43.959: As1 IPCP: State is Open
*Mar  1 01:22:44.483: As1 IPCP: Install route to 1.1.1.1
koala#
koala#
```

验证

当前没有可用于此配置的验证过程。

故障排除

本部分提供的信息可用于对配置进行故障排除。

故障排除命令

命令输出解释程序（仅限注册用户）(OIT) 支持某些 show 命令。使用 OIT 可查看对 show 命令输出的分析。

注意：在使用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/TACACS+身份验证的信息。
- **debug aaa authorization** — 显示有关AAA/TACACS+授权的信息。
- **debug aaa per-user** — 显示有关从AAA服务器发送的路由器或接入服务器上的每用户配置设置的信息。
- **debug tacacs+ -显示与TACACS+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。**

有关故障排除信息，请参阅对拨号接口上的访问列表进行故障排除。

相关信息

- **用于 Unix 的 Cisco 安全访问控制服务器**
- **用于 Windows 的 Cisco 安全访问控制服务器**