Anwenden von Zugriffslisten auf Wählschnittstellen mit einem TACACS+-Server

Inhalt

Einführung

In diesem Dokument wird veranschaulicht, wie Zugriffslisten auf Wählschnittstellen mit einem TACACS+-Server angewendet werden. Es gibt zwei Möglichkeiten:

- Definieren Sie die nummerierte Zugriffsliste auf dem Router, und verweisen Sie auf die nummerierte Zugriffsliste auf dem Server. Dies wird in den meisten Versionen der Cisco IOS® Software unterstützt.
- Definieren Sie die gesamte Zugriffsliste auf dem Server. Für diese **benutzerspezifische** Methode ist Cisco IOS Software Release 11.3 oder höher erforderlich.

Hinweis: Für ISDN müssen Sie die **benutzerspezifische** Methode verwenden und auf dem Router müssen virtuelle Profile konfiguriert sein.

Voraussetzungen

Anforderungen

Für dieses Dokument bestehen keine speziellen Anforderungen.

Verwendete Komponenten

Die Informationen in diesem Dokument basieren auf den folgenden Software- und Hardwareversionen:

- Cisco IOS Software Release 11.1 oder höher (Zugriffslisten auf dem Router definieren)Cisco IOS Software Release 11.3 oder höher (Zugriffslisten auf dem Server definieren)
- Cisco Secure ACS für UNIXCisco Secure ACS für Windows 2.x und höherTACACS+-Freeware

Hinweis: In diesem Dokument wird davon ausgegangen, dass der DFÜ-Zugriff zuvor konfiguriert wurde. In diesem Dokument werden die Details der Wählkonfiguration nicht erläutert. Weitere Informationen zur Konfiguration eines Netzwerkzugriffsservers (Network Access Server, NAS) für die Einwahl finden Sie unter Konfigurieren des NAS für einfachen Einwahlzugriff.

Die Informationen in diesem Dokument wurden von den Geräten in einer bestimmten Laborumgebung erstellt. Alle in diesem Dokument verwendeten Geräte haben mit einer leeren (Standard-)Konfiguration begonnen. Wenn Ihr Netzwerk in Betrieb ist, stellen Sie sicher, dass Sie die potenziellen Auswirkungen eines Befehls verstehen.

Konventionen

Weitere Informationen zu Dokumentkonventionen finden Sie unter Cisco Technical Tips Conventions (Technische Tipps zu Konventionen von Cisco).
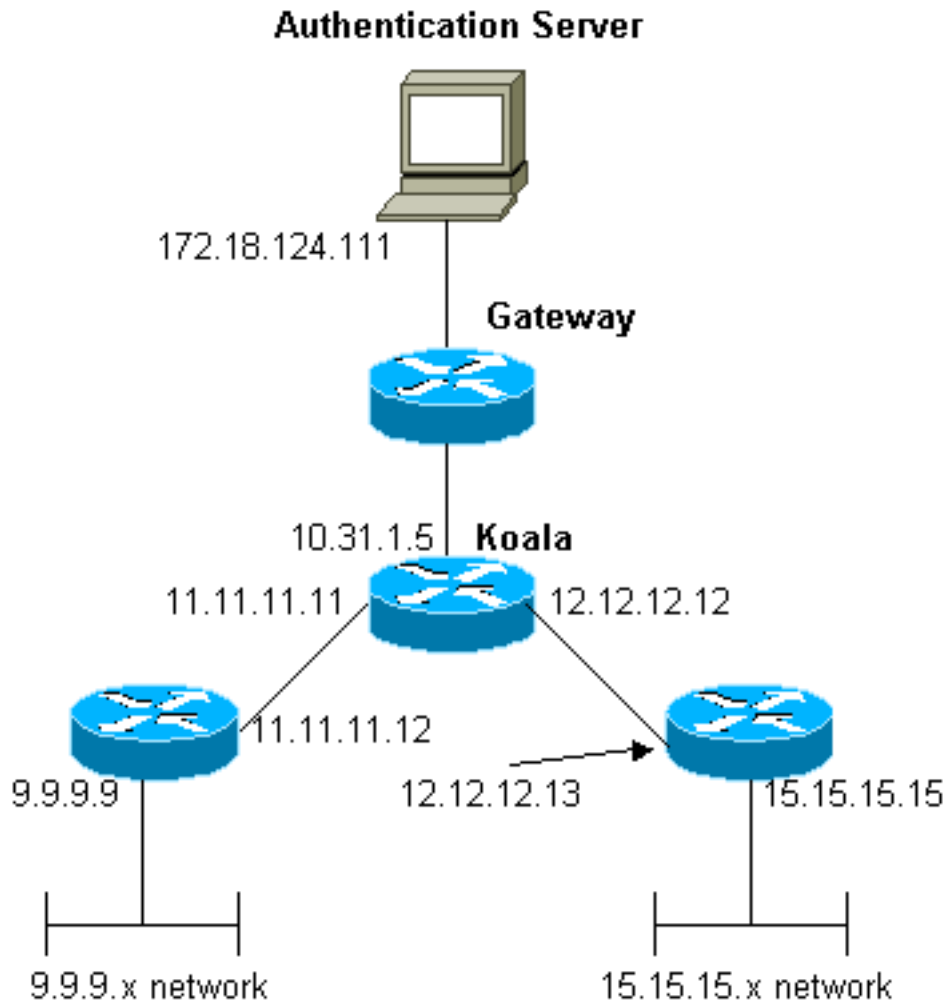
Konfigurieren

In diesem Abschnitt erhalten Sie Informationen zum Konfigurieren der in diesem Dokument beschriebenen Funktionen.

Hinweis: Verwenden Sie das Command Lookup Tool (nur registrierte Kunden), um weitere Informationen zu den in diesem Dokument verwendeten Befehlen zu erhalten.

Netzwerkdiagramm

In diesem Dokument wird die folgende Netzwerkeinrichtung verwendet:

Hinweis: Die Konfigurationen ermöglichen es dem Benutzer, der die Adresse 1.1.1.x von "mypool" an ping (ICMP-Datenverkehr), das Netzwerk 9.9.9.x und Telnet (TCP-Datenverkehr) an das Netzwerk 15.15.15.x empfängt. Der Benutzer kann nicht das Ping-Signal an Netzwerk 15.15.15.x oder Telnet an Netzwerk 9.9.9.x senden.

Konfigurationen

In diesem Dokument werden diese Konfigurationen verwendet.

- Cisco Router der Serie 2500 mit Cisco IOS Software, Version 12.0(5)T
- Cisco Secure ACS für UNIX 2.3
- Cisco Secure ACS für Windows 3.2

Definieren von nummerierten Zugriffslisten auf dem Router

Cisco Router der Serie 2500 mit Cisco IOS Software, Version 12.0(5)T
| ```
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
```

Befehle für andere Cisco IOS-Versionen

Hinweis: Um diese Befehle zu verwenden, entfernen Sie fett formatierte Befehle aus der Konfiguration des Cisco Routers der Serie 2500 und fügen Sie diese Befehle ein, wie in Ihrer Cisco IOS Software-Version beschrieben.

Cisco IOS Software Release 11.3.3.T bis 12.0.5.T

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

Cisco IOS Software Release 11.1 bis 11.3.3.T

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

Serverkonfiguration - TACACS+-Freeware

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

Serverkonfiguration - 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"
}
```

[Serverkonfiguration - Cisco Secure ACS für Windows 2.x und höher - TACACS+](#)

Führen Sie diese Schritte aus, um Cisco Secure ACS für Windows zu konfigurieren und festzulegen, welche ACLs das NAS-Gerät verwenden soll.

1. Klicken Sie auf **Gruppeneinrichtung**, wählen Sie die Gruppe aus, der der Benutzer angehört, und klicken Sie auf **Einstellungen bearbeiten**.
2. Klicken Sie auf die Kontrollkästchen **PPP IP**, **In Access Control List** und **PPP LCP** im Abschnitt TACACS+ Settings (TACACS+-Einstellungen).Geben Sie die anzuwendende ACL-Nummer (in diesem Fall 101) im Feld "In Access Control List" (In Zugriffskontrollliste) an.
3. Aktivieren Sie **Enabled (Aktiviert)**, um die Optionen **PPP IP** und **PPP LCP** zu aktivieren.

```
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#
```

Definieren von Zugriffslisten auf dem Server

Hinweis: Routenanweisungen müssen nicht vom Server an den Router weitergeleitet werden. Der Wähler nimmt normalerweise die Routen vom Router ab. Das Vorhandensein der Routenanweisungen auf dem Router hängt davon ab, ob die Routen vom Server heruntergefahren oder vom Router übernommen werden:

```
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
```

In dieser Beispielkonfiguration dient das Übergeben der Routen vom Server nur zu Illustrationszwecken.

Routerkonfiguration
| ```
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
```

[Befehle für andere Cisco IOS-Versionen](#)

Hinweis: Um diese Befehle zu verwenden, entfernen Sie fett formatierte Befehle aus der [Router-](#)Konfiguration, und fügen Sie diese Befehle gemäß der Cisco IOS Software-Version ein.

Cisco IOS Software Release 11.3.3.T bis 12.0.5.T

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

Cisco IOS Software Release 11.3 bis 11.3.3.T

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

[Serverkonfiguration - TACACS+-Freeware](#)

```
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"
}
}
```

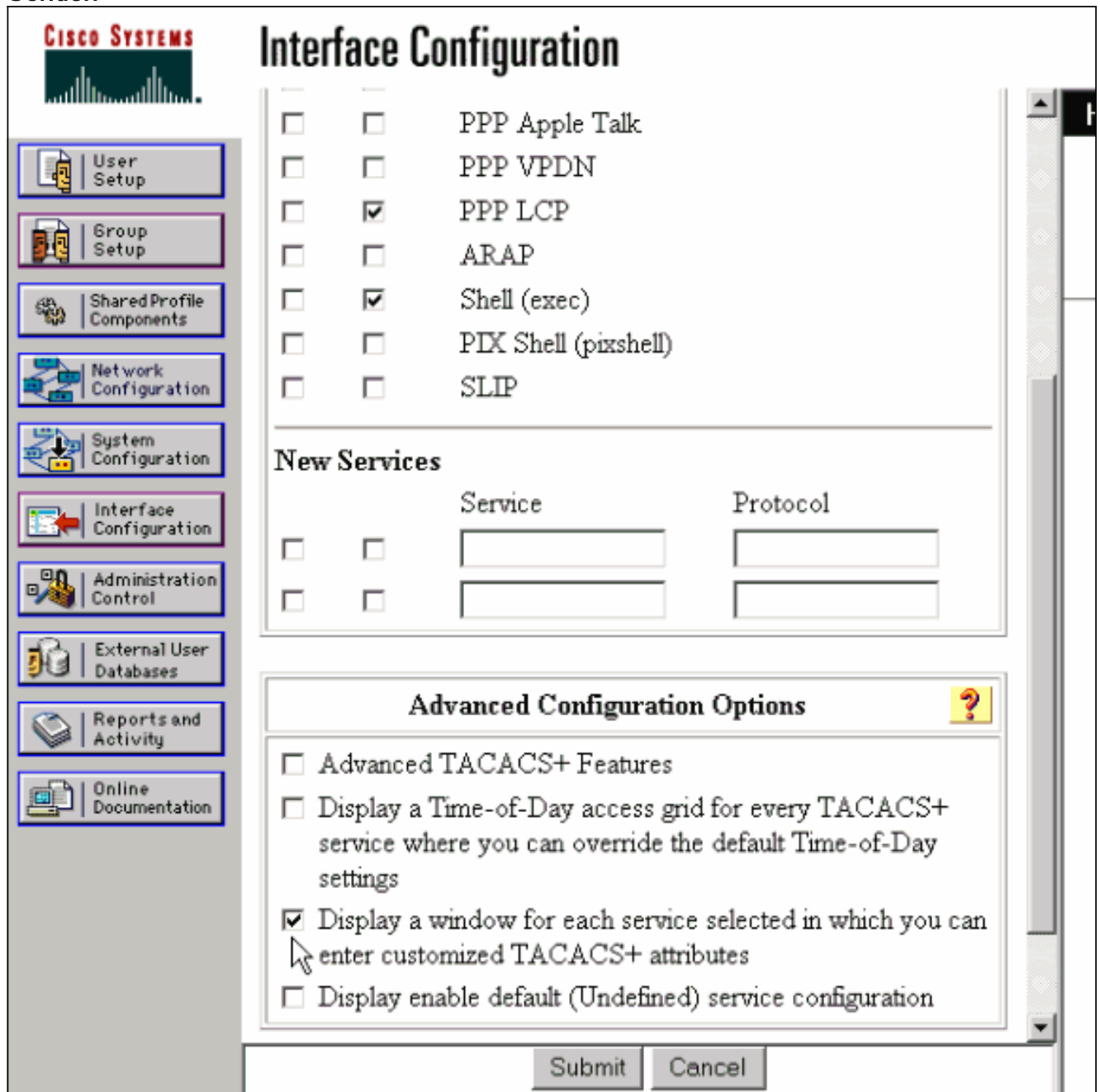## [Serverkonfiguration - Cisco Secure UNIX - TACACS+](#)

```
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"
}
```

[Serverkonfiguration - Cisco Secure Windows 2.x - TACACS+](#)

Führen Sie diese Schritte aus, um Cisco Secure for Windows so zu konfigurieren, dass ACLs an das NAS-Gerät übergeben werden.

1. Klicken Sie auf **Schnittstellenkonfiguration**, und wählen Sie **TACACS+ Cisco aus**.
2. Aktivieren Sie **Fenster für jeden ausgewählten Dienst anzeigen, in dem Sie benutzerdefinierte TACACS+-Attribute** im Abschnitt "Erweiterte Konfigurationsoptionen"

eingeben können, und klicken Sie auf
Senden.

3. Klicken Sie auf **Gruppeneinrichtung**, wählen Sie die Gruppe aus, der der Benutzer angehört, und klicken Sie auf **Einstellungen bearbeiten**.
4. Gehen Sie zum Abschnitt PPP IP, und klicken Sie auf die Kontrollkästchen **PPP IP**, **Custom Attributes** und **Enable** (PPP-IP, benutzerdefinierte Attribute und TACACS+-Einstellungen aktivieren).Geben Sie den hier im Feld Benutzerdefinierte Attribute angezeigten Text ein, und klicken Sie auf **Senden**.

```
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
```

Dieses Benutzerprofil wurde zum Erstellen dieser Debugausgabe verwendet.

```
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#
```

Überprüfen

Für diese Konfiguration ist derzeit kein Überprüfungsverfahren verfügbar.

Fehlerbehebung

Dieser Abschnitt enthält Informationen zur Fehlerbehebung in Ihrer Konfiguration.

Befehle zur Fehlerbehebung

Das Output Interpreter Tool (nur registrierte Kunden) (OIT) unterstützt bestimmte **show**-Befehle. Verwenden Sie das OIT, um eine Analyse der **Ausgabe des** Befehls **show anzuzeigen**.

Hinweis: Beachten Sie vor der Verwendung von **Debug**-Befehlen die Informationen zu Debug-Befehlen.

- **debug aaa authentication**: Zeigt Informationen über die AAA/TACACS+-Authentifizierung an.
- **debug aaa autorization**: Zeigt Informationen über AAA/TACACS+-Autorisierung an.
- **debug aa per user** (**debug aa pro Benutzer**): Zeigt Informationen über die Konfigurationseinstellungen pro Benutzer auf dem Router oder den Zugriffsservern an, die von einem AAA-Server gesendet werden.
- **debug tacacs+**: Zeigt detaillierte Debuginformationen zu TACACS+ an.
- **debug ppp negotiation**: Zeigt PPP-Pakete an, die während des PPP-Starts übertragen werden und über die PPP-Optionen ausgehandelt werden.

Informationen zur Fehlerbehebung finden Sie unter Troubleshooting Access Lists on Dial Interfaces (Problembehebungslisten auf den Wählschnittstellen).

Zugehörige Informationen

- Cisco Secure Access Control Server für UNIX
- Cisco Secure Access Control Server für Windows