

TACACS+ サーバによってダイヤルインターフェイスにアクセス リストを追加する方法

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このドキュメントでは、TACACS+ サーバを使用してダイヤル インターフェイスにアクセス リストを適用する方法について説明します。次の 2 つの方法を使用できます。

- ルータの番号付アクセスリストを定義し、サーバの番号付アクセスリストを参照して下さい。これは Cisco ほとんどの IOS® ソフトウェア リリースでサポートされます。
- 完全なアクセス リストをサーバで定義します。このユーザごとの手法では、Cisco IOS ソフトウェア リリース 11.3 以降が必要です。

注: ISDN に関しては、**per-user method** を使用して下さい、ルータで設定される仮想プロファイルを持たなければなりません。

[前提条件](#)

[要件](#)

このドキュメントに関しては個別の要件はありません。

[使用するコンポーネント](#)

このドキュメントの情報は、次のソフトウェアとハードウェアのバージョンに基づくものです。

- Cisco IOS ソフトウェア リリース 11.1 以降 (アクセス リストをルータで定義) Cisco IOS ソフトウェア リリース 11.3 以降 (アクセス リストをサーバで定義)
- Cisco Secure ACS for UNIXCisco Secure ACS for Windows 2.x およびそれ以降TACACS+ フリーウェア

注: この資料はダイヤル アクセスが前もって設定されたと仮定します。この資料はダイヤル 設定の詳細を説明しません。ダイヤルのためのネットワーク アクセス サーバ (NAS) を設定する方法の情報に関しては[基本的なダイヤルアクセスのための NAS の設定](#)を参照して下さい。

本書の情報は、特定のラボ環境にあるデバイスに基づいて作成されたものです。このドキュメントで使用するすべてのデバイスは、初期 (デフォルト) 設定の状態から起動しています。稼働中のネットワークで作業を行う場合、コマンドの影響について十分に理解したうえで作業してください。

[表記法](#)

ドキュメント表記の詳細は、『[シスコ テクニカル ティップスの表記法](#)』を参照してください。

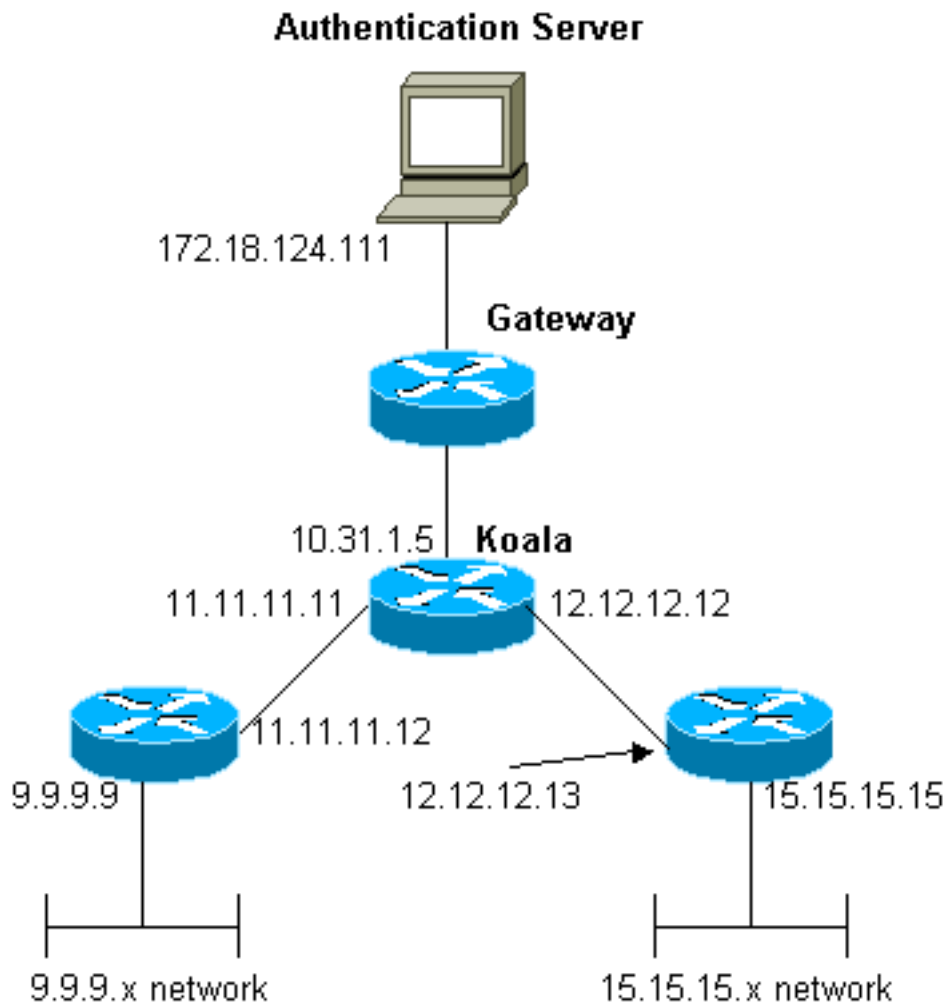
[設定](#)

この項では、このドキュメントで説明する機能の設定に必要な情報を提供します。

注: このドキュメントで使用されているコマンドの詳細を調べるには、[Command Lookup Tool](#) ([登録ユーザ専用](#)) を使用してください。

[ネットワーク図](#)

このドキュメントでは、次のネットワーク構成を使用しています。



注: コンフィギュレーション割り当て (ICMP トラフィック) ネットワーク 9.9.9.x を ping し、ネットワーク 15.15.15.x に (TCP トラフィック) Telnet で接続するために「mypool」からアドレス 1.1.1.x を受け取るユーザ。それはユーザがネットワーク 15.15.15.x を ping するか、またはネットワーク 9.9.9.x に Telnet で接続することを可能にしません。

設定

このドキュメントでは、次の設定を使用します。

- [Cisco IOS ソフトウェア リリース 12.0\(5\)T を実行する Cisco 2500 シリーズ ルータ](#)
- [Cisco Secure ACS for UNIX 2.3](#)
- [Cisco Secure ACS for Windows 3.2](#)

ルータの番号付アクセスリストの定義

Cisco 2500 シリーズ ルータその実行 Cisco IOS ソフトウェア リリース 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.17v.Pijl  
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
```

他の Cisco IOS リリース用のコマンド

注: これらのコマンドを使用するために、太字のコマンドを [Cisco 2500 シリーズ ルータ](#) 設定から削除し、Cisco IOS ソフトウェア リリースによって定められるようにこれらのコマンドを、貼り付けて下さい。

Cisco IOS ソフトウェア リリース 11.3.3.T から 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

```

Cisco IOS ソフトウェア リリース 11.1 から 11.3.3.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 $!$mnZQ$g6XdsgVnnYjEa.l7v.Pijl
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
```

サーバコンフィギュレーション-TACACS+フリーウェア

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.17v.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

```

サーバコンフィギュレーション- Cisco Secure UNIX - TACACS+

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

```

[サーバコンフィギュレーション- Cisco Secure ACS for Windows 2.x およびそれ以降- TACACS+](#)

ACL が加える NAS 必要がある Cisco Secure ACS for Windows を規定 するために設定するためにこれらのステップを完了して下さい。

1. 『Group Setup』 をクリックし、ユーザがに属するグループを選択し、『Edit Settings』 をクリックして下さい。
2. TACACS+ 設定セクションのアクセス制御リストおよび PPP LCP チェックボックスの PPP IP を、クリックして下さい。適用されるべき ACL 数を規定して下さい (この場合 101) 「アクセス制御リストで」ボックスで。

3. PPP IP および PPP LCP オプションを有効にするためにイネーブルになったチェックして下さい。

The image shows the Cisco Systems Group Setup configuration page. The left sidebar contains navigation options: User Setup, Group Setup (highlighted), Shared Profile Components, Network Configuration, System Configuration, Interface Configuration, Administration Control, External User Databases, Reports and Activity, and Online Documentation. The main content area is titled 'Group Setup' and has a 'Jump To' dropdown menu set to 'Access Restrictions'. Below this are two sections: 'Downloadable ACLs' and 'TACACS+ Settings'. In the 'Downloadable ACLs' section, there is a checkbox for 'Assign IP ACL:' and a dropdown menu currently showing '-ACL DB EMPTY-'. The 'TACACS+ Settings' section contains several checkboxes and input fields. Under 'PPP IP', the 'PPP IP' checkbox is checked, and 'In access control list' is checked with the value '101' in the adjacent input field. Other options like 'Out access control list', 'Route', and 'Routing' are unchecked, with 'Routing' set to 'Enabled'. Under 'PPP LCP', the 'PPP LCP' checkbox is checked, and 'No callback verify' is checked with 'Enabled' in the input field. Other options like 'Callback line', 'Callback rotary', and 'Shell (exec)' are unchecked. At the bottom of the page are three buttons: 'Submit', 'Submit + Restart', and 'Cancel'.

ルータのデバッグ例

```
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='chaptr'
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='chaptr' 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='chaptr' 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='chaptr'
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=chaptr
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='chaptr'
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=chaptr
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='chaptrtr'
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=chaptrtr
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#

```

[サーバ上のアクセスリストの定義](#)

注: ルート記述はサーバからルータに通じる必要がありません。ダイヤルユーザは、一般的にルータからルートを選択します。ルータのルート記述の存在はルーティングがサーバから通過するか、またはルータから取られるかどうかによって左右されます:

```
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='chaptr'
ruser='' port='Async1' rem_addr='async' authn_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='chaptr' ruser=''
port='Async1' rem_addr='async' authn_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='chaptr' ruser=''
port='Async1' rem_addr='async' authn_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='chaptr'
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=chaptr
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='chaptrtr'
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=chaptrtr
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='chaptrtr'
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=chaptrtr
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#

```

この設定例では、サーバからのルーティングを通過することは例示専用にあります。

ルータの設定

```

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+
tacacs+ none
aaa authentication ppp default if-needed group tacacs+
aaa authorization network default group tacacs+
enable secret 5 $1$mnZQ$g6XdsgVnnYjEa.l7v.Pijl
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
```

他の Cisco IOS リリース用のコマンド

注: これらのコマンドを使用するために、太字のコマンドを[ルータコンフィギュレーション](#)から削除し、Cisco IOS ソフトウェア リリースによって定められるようにこれらのコマンドを、貼り付けて下さい。

Cisco IOS ソフトウェア リリース 11.3.3.T から 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 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 $1$mznZQ$g6XdsgVnnYjEa.17v.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
```

11.3.3.T による Cisco IOS ソフトウェア リリース 11.3

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

```

サーバコンフィギュレーション-TACACS+フリーウェア

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.17v.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
```

[サーバコンフィギュレーション- Cisco Secure UNIX - TACACS+](#)

Current configuration:

```
!
version 12.0
```

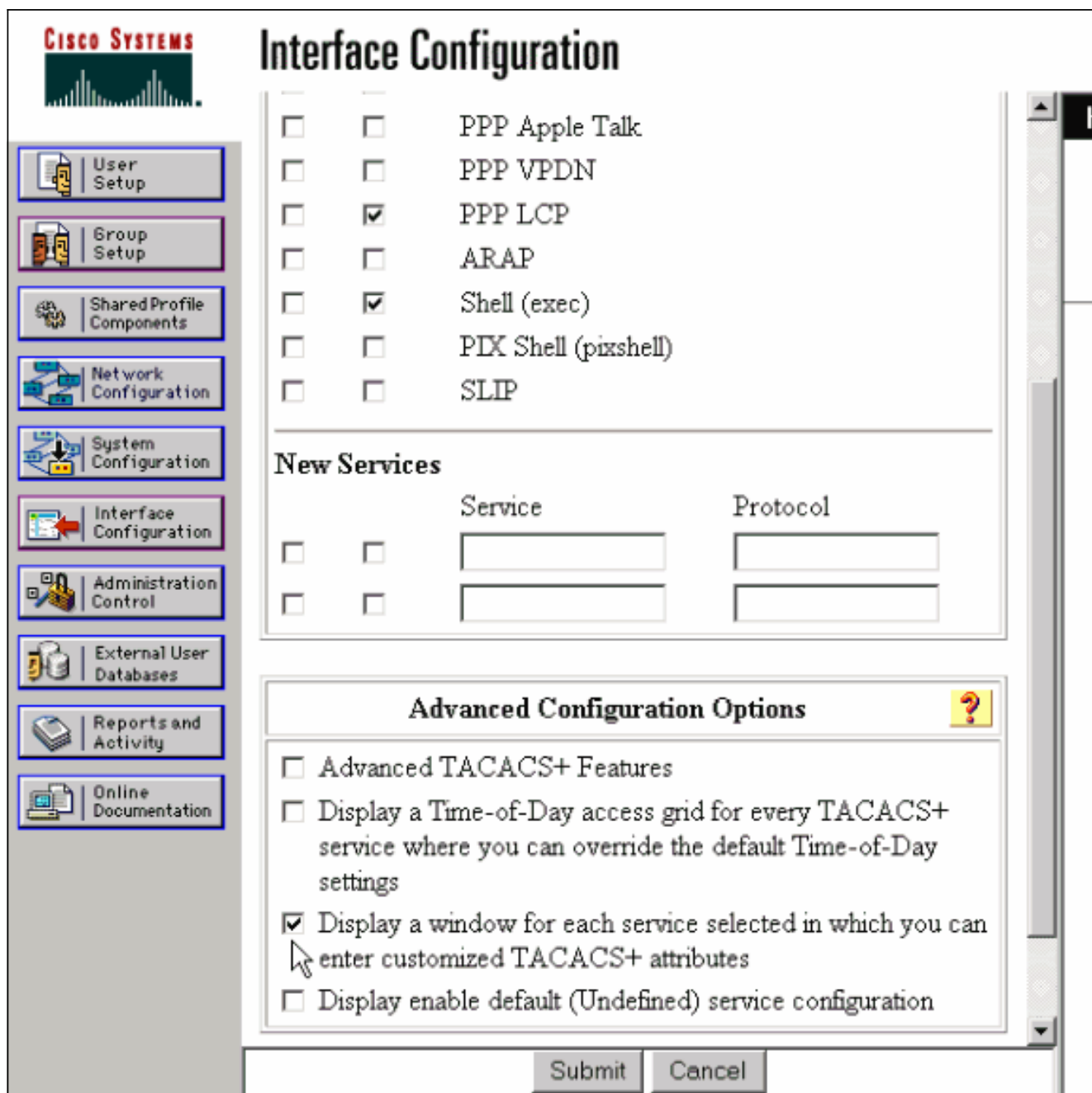
```
service timestamps debug uptime
service timestamps log uptime
no service password-encryption
!
hostname koala
!
aaa new-model
!
!--- These three lines of the configuration !--- are specific to Cisco IOS Software Release
12.0.5.T and later. !--- See the Commands for Other IOS Releases section for !--- 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.17v.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
```

[サーバコンフィギュレーション- Cisco Secure Windows 2.x - TACACS+](#)

Windows のための Cisco Secure を NAS に ACL を渡すために設定するためにこれらのステップを完了して下さい。

1. 『Interface Configuration』 をクリックし、『TACACS+ Cisco』 を選択して下さい。
2. **選択される各サービスが「拡張設定オプションのセクションでカスタマイズされた TACACS+ 属性を入力し、ことができるかどれをであるようにディスプレイをウィンドウ『SUBMIT』 をクリック する確認して下さい。**



3. 『Group Setup』 をクリックし、ユーザがに属するグループを選択し、『Edit Settings』 をクリックして下さい。
4. PPP IP セクションに行き、TACACS+ 設定からの PPP IP、カスタム属性および Enable チェックボックスをクリックして下さい。カスタム属性 ボックスでここに示されているテキストを入力し、『SUBMIT』 をクリックして下さい。

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.17v.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
```

The screenshot shows the Cisco Group Setup web interface. The main heading is "Group Setup" with a "Jump To" dropdown menu set to "Access Restrictions". The left sidebar contains navigation links: User Setup, Group Setup, Shared Profile Components, Network Configuration, System Configuration, Interface Configuration, Administration Control, External User Databases, Reports and Activity, and Online Documentation. The main content area is titled "TACACS+ Settings" and contains two sections: "PPP IP" and "PPP LCP".

TACACS+ Settings

PPP IP

- In access control list
- Out access control list
- Route
- Routing Enabled
- Custom attributes

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

PPP LCP

- Callback line
- Callback rotary
- No callback verify Enabled
- Custom attributes

Buttons at the bottom: Submit, Submit + Restart, Cancel.

ルータのデバッグ例

このユーザプロファイルがこのデバッグ 出力を作成するのに使用されました。

```
chaptrr  
{  
login = cleartext cisco  
chap = cleartext  
chaptrr 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 CONFREQ [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 "chaptrtr"  
*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='chaptrtr'  
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='chaptrtr'
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='chaptrtr'
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='chaptrtr'
*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=chaptrtr
*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: 0 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='chaptrtr'
*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=chaptrtr
*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 PROTREQ [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='chaptrtr'
*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=chaptrtr
*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 CONFREQ [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#

確認

現在、この設定に使用できる確認手順はありません。

トラブルシューティング

ここでは、設定のトラブルシューティングに役立つ情報について説明します。

トラブルシューティングのためのコマンド

[Output Interpreter Tool](#) (OIT) ([登録](#) ユーザ専用) では、特定の **show** コマンドがサポートされています。OIT を使用して、**show** コマンド出力の解析を表示できます。

注: [debug](#) コマンドを使用する前に、『[debug コマンドの重要な情報](#)』を参照してください。

- **debug aaa authentication** : AAA/TACACS+ 認証に関する情報を表示します。
- **debug aaa authorization** — AAA/TACACS+ 許可についての情報を表示する。
- **debug aaa per-user** — AAAサーバから送信される ルータまたはアクセス サーバのユーザごとのコンフィギュレーションの設定についての情報を表示する。
- **debug tacacs+** : TACACS+ に関連する詳細なデバッグ情報を表示します。
- **debug ppp negotiation** - PPP の開始時に送信される PPP パケットを表示します。PPP の開始時には PPP オプションがネゴシエートされます。

トラブルシューティング情報に関しては [ダイヤル インターフェイスのトラブルシューティング アクセス リスト](#) を参照して下さい。

関連情報

- [Cisco Secure Access Control Server for Unix](#)
- [Cisco Secure Access Control Server for Windows](#)