CLI GUIDE

Cisco RV132W ADSL2+ Wireless-N and

RV134W VDSL2 Wireless-AC VPN Router

Command Line Interface (CLI) Reference Guide

Contents

Introduction

The command-line interface (CLI) provides a text-based method for managing and monitoring the Cisco RV132W ADSL2+ Wireless-N VPN and RV134W VDSL2 Wireless-AC VPN routers. This chapter describes how to use the command-line interface and contains the following topics:

- **Accessing the CLI**
- **CLI Command Conventions**
- **Entering Commands**

Accessing the CLI

Connecting via SSH

The command-line interface can be accessed by using SSH or a physical console. To enable SSH, follow these steps:

STEP 1 Log in the web UI of the device. Enter the username/password.

STEP 2 Click **Firewall > Basic Settings**. Check **Enable SSH** to allow login from the LAN side. Check **Enable Remote SSH** to allow login from Internet.

STEP 3 When accessing the device by SSH, username/password is needed. The username/password is same as the GUI password.

After successfully log in to the router, the prompt consists of the router's hostname + last 3 bytes of LAN MAC, followed by a **>**, as shown here:

```
router06000a>
```

To access the SSH, a terminal emulator software like PuTTY or others must be used. We use PuTTY as an example.

PuTTY - Terminal Emulator Software

First, download Putty and install it on your computer. You can download PuTTY from http://www.chiark.greenend.org.uk/~sgtatham/putty/ or another PuTTY download source. The "putty.exe" download is good for basic SSH.

STEP 1 Download PuTTY and save the download to your C:\WINDOWS folder.

STEP 2 If you want to make a link to PuTTY on your desktop:

- Open the C:\WINDOWS folder in Windows Explorer.

- Right click on the putty.exe file and select Send To > Desktop.

STEP 3 Double-click the putty.exe program or the desktop shortcut to launch the application.

STEP 4 Enter your connection settings:

- Host Name: example.com

- Port: 22 (Default)

- Connection Type: SSH (Default)

STEP 5 Click **Open** to start the SSH session.

STEP 6 Accept the connection by clicking **Yes**.

STEP 7 Once the SSH Connection is open, a terminal prompt will ask for your username:

- log in as: Enter your username

STEP 8 Connect with your SSH user of choice.

STEP 9 Next, enter your password. Note that you will NOT see the cursor moving, or any characters typed (such as ******), when typing your password. This is a standard PuTTY security feature. Hit **Enter**.

You are now logged in to your server with SSH.

Connecting to a Console Terminal

The computer must have a terminal emulation software installed. The software may be configured with the following parameters: 115200 baud, 8 data bits, no parity, 1 stop bit, and no mode control.

To connect the router to a terminal or computer, follow these steps:

STEP 1 Connect the end of the light blue console cable with the RJ-45 connector to the light blue console port on the router.

STEP 2 Connect the end of the cable with the DB-9 connector to the terminal or PC. If your terminal or PC has a console port that does not accommodate DB-9 connector, provide an appropriate adapter for that port.

STEP 3 Connect the AC power cord to the power supply.

STEP 4 Connect the power interface cable to the power connector port on the back of the router.

CLI Command Conventions

There are certain command entry standards that apply to all commands. The following table describes the command conventions:

[ ]	In a command line, square brackets indicate an optional entry.
{ }	In a command line, curly brackets indicate a selection of compulsory parameters separated with the | character. One option must be selected.
Italics	Italic text indicates a parameter, variable, and arguments.
Bold	Command names and keywords are shown in **bold.**
Screen Display	Fixed-width font indicates CLI prompts, CLI commands entered, and system messages displayed on the console.

Entering Commands

A CLI command is a series of keywords and arguments. Keywords identify a command, and arguments specify configuration parameters. For example, in the command interfaces **set *appname***, and **set** are keywords, *appname* is an argument that specifies the application name. To enter the commands that require parameters, enter the required parameters after the command keyword.

If the command entered is incomplete, invalid, or has missing or invalid parameters, then the appropriate error message is displayed. This helps with entering the correct command.

NOTE   The commands are not case-sensitive.

All the allowable commands for RV132W & RV134W router are listed in next chapter.

<TAB>	Completes the keyword.
?	Anywhere in the command line to display context-sensitive help.
Enter (or Return)	Syntax-checks and then executes a command. If there is a syntax error, the offending part of the command line is explained.
Ctrl-A	Moves cursor to the beginning of the command line.
Ctrl-E	Moves cursor to the end of the command line.
Ctrl-K	Erases characters from the cursor.
Up Arrow	Displays the previous command in the command history.
Down Arrow	Displays the next command in the command history.
Left Arrow	Moves cursor to the previous character.
Right Arrow	Moves the cursor to the next character.
Backspace	Deletes the previous character.
?-Enter or 'help'	List support commands.

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Basic Commands

The basic CLI commands enable you to manage the basic access rules using the command line interface. All basic commands are listed in this chapter:

?

The **?** command enables you to ask for help with the command line.

Parameter

None**.**

Default Configuration

None.

Example

The following example displays the **?** command which is used to get help using the command line.

---

router06000a>**?**

---

exit

The **exit** command enables you to exit the router with the command line.

Parameter

None.

Default Configuration

None.

Example

The following example displays how to exit the command line.

---

router06000a> **exit**

---

help

The **help** command displays a brief description of the context-sensitive help system. It provides online information about the system commands. Used without parameters, the **help** command lists and briefly describes every system command that the router supports.

Parameter

None.

Default Configuration

None.

Example

The following example is to display the **help** commands using the command line that the router supports.

---

router06000a> **help**

---

logout

The **logout** command enables you to logout of the router with the command line.

Parameter

None.

Default Configuration

None.

Example

The following example displays how to logout of the router.

router06000a> **logout**

quit

The **quit** command enables you to quit the router session using the command line.

Parameter

None.

Default Configuration

None.

Example

The following example displays how to quit the command-line session on the router.

router06000a> **quit**

reboot

The reboot command enables you to reboot the router with the command line.

Parameter

None.

Default Configuration

None.

Example

The following example displays how to reboot the router.

---

router06000a> **reboot**

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Management Commands

The following management commands are used to gather information on a Cisco IOS Software-based router when attempting to learn basic information about a router, or possibly troubleshooting protocol-independent problems. All router management commands are listed in this chapter:

loglevel

The **loglevel** command enables you to manage the log levels. For assistance with the **loglevel** commands**,** use the **help**. All **loglevel** commands are listed here.

loglevel get *appname*

loglevel set *appname loglevel*

loglevel get *appname*

To show the logging level of a specific application, use the **loglevel get** *appname* command.

Parameters

appname - Enter one of the following: httpd, tr69c, smd, ssk, telnetd, sshd, consoled, upnp, dnsproxy, wlmngr, vpn.

Default Configuration

None.

Example

The following example displays the logging level of **tr69c**.

router06000a>**loglevel get tr69c**

loglevel set *appname*

To configure the logging level of a specific application, use the **loglevel set** *appname* command.

Parameters

appname - Enter one of the following: httpd, tr69c, smd, ssk, telnetd, sshd, consoled, upnp, dnsproxy, wlmngr, vpn.

loglevel - Enter one of the following: "None", "Error", "Notice", "Debug**"** (use these exact strings).

Default Configuration

None.

Example

The following example displays the logging level of the application **tr69c**.

router06000a>**loglevel set tr69c Debug**

nslookup

The **nslookup** command is a network administration tool used to lookup and find IP address information in the DNS.

Parameter

host server - Enter the IP address of the DNS server.

Default Configuration

None.

Example

The following example displays the **nslookup** command.

router06000a>**nslookup www.cisco.com 8.8.8.8**

ping

The **ping** command checks the IP-level connectivity to another TCP/IP computer by sending Internet Control Message Protocol (ICMP) Echo Request messages. The receipt of the corresponding Echo Reply messages is displayed, along with round-trip times. The ping command is the primary TCP/IP command used to troubleshoot connectivity, reachability, and name resolution.

Parameters

4, 6 - Specifies the IPv4 or IPv6 name resolution.

c cnt - Specifies the number of Echo Request messages sent.

s size - Specifies the size in bytes of the data sent (default: 56).

I Iface/IP - Specifies the interface or IP address as the source.

W sec - Specifies the number of seconds to wait for the first response (default: 10) (after all -c CNT packets are sent).

w sec - Specifies the number of seconds until the ping exits (default: infinite) (can exit earlier with -c CNT).

q - Quiet, only displays output at start and when finished.

Default Configuration

None.

Example

The following example displays how to check the IP connectivity.

router06000a>**ping 192.168.1.10**

restoredefault

The **restoredefault** command restores the router to factory default settings.

Parameter

None.

Default Configuration

None.

Example

The following example displays the **restoredefault** command used to restore the default settings of your router.

---

router06000a>**restoredefault**

---

save

The **save** command let you save your settings on the router.

Parameter

None.

Default Configuration

None.

Example

The following example displays the **save** command.

---

router06000a>**save**

---

ssh

The **ssh** command is an encrypted network protocol for initiating text-based shell sessions on remote machines in a secure way. The **ssh** commands executed on the command line generate status information regarding the ssh processes. All the **ssh** commands are listed here:

- **ssh** {enable | disable}

- **ssh wan** {enable | disable}

- **ssh show**

ssh {enable | disable}

To enable or disable the ssh, use the **ssh** {enable or disable} command.

Parameters

None.

Default Configuration

None.

Example

The following example displays how to enable the ssh.

---

router06000a>**ssh enable**

---

ssh wan {enable | disable}

To enable or disable SSH access from wan, use the **ssh wan** {enable | disable}

command.

Parameters

None.

Default Configuration

None.

Example

The following example displays how to enable SSH access from the WAN.

router06000a>**ssh wan enable**

ssh show

To display the ssh configuration, us the **ssh show** command.

Parameters

None.

Default Configurations

None.

Example

The following example displays the ssh configuration.

router06000a>**ssh show**

swversion

The **swversion** command displays the version of the firmware that is on the device.

Parameter

None.

Default Configuration

None.

Example

The following example displays the software version of the router.

router06000a>**swversion**

syslog

The **syslog** command provides a transport to allow a device to send event notification messages across various IP networks to syslog servers. The syslog command is listed here.

- **syslog dump**

syslog dump

The **syslog dump** command displays all the syslog outputs.

Parameter

None.

Default Configuration

None.

Example

The following example is to display the syslog outputs.

router06000a> **syslog dump**

traceroute

The **traceroute** command displays the route (path) and measures the transit delays of the packets across an IP.

Parameters

4, 6 - Specifies the IPv4 or IPv6 name resolution.

F - Sets the do not fragment bit.

l - Uses ICMP ECHO instead of UDHP diagrams.

l - Displays the TTL value of the returned packet.

d - Sets the SO_DEBUG options to socket.

n - Prints the numeric addresses.

r - Bypasses the routing tables, and sends directly to host.

v - Verbose.

m - Max time-to-live (max number of hops).

p - Base UDP port number used in probes (default 33434).

q - Number of probes per TTL (default 3).

s - IP address to use as the source address.

t - Type-of-service in probe packets (default 0).

w - Time in seconds to wait for a response (default 3).

g - Loose source route gateway (8 max).

Default Configuration

None.

Example

The following example displays the path.

router06000a>**traceroute 168.95.1.1**

uptime

The **uptime** command shows how long the system has been up.

Parameter

None.

Default Configuration

None.

Example

The following example shows how long the system has been up.

router06000a>**uptime**

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Configuration Commands

The CLI configuration commands allow users to configure, monitor and maintain the router. All CLI configuration commands are listed in this chapter:

dhcpserver

The **dhcpserver** commands allow network devices to automatically obtain a valid IP address from a server. All the **dhcpserver** commands are listed here:

- **dhcpserver config** *vlanID start-IP-address end-IP-address leased-time default-gateway-IP-address*

- **dhcpserver reserving** {add | delete} *vlanID description IP-address MAC-address*

- **dhcpserver show vlan***X*

dhcpserver config *vlanID start-IP-address end-IP-address leased-time default-gateway-IP-address*

To configure the dhcpserver, use the **dhcpserver config** *vlanID start-IP-address end-IP-address leased-time default-gateway-IP-address command.*

Parameters

vlanID - Enter the vlan ID

start-IP-address - Enter the start IP address

end-IP-address - Enter the end IP address

leased-time (hour) - Enter the leased time in hours

default-gateway-IP-address - Enter the default gateway IP address

Default Configuration

None.

Example

The following example displays the **dhcpserver config** command used to configure the dhcpserver.

router06000a>**dhcpserver config 1 192.168.1.99 192.168.1.109 2 192.168.1.1**

dhcpserver reserving {add | delete} *vlanID description IP-address MAC-address*

To add or delete the dhcpserver reserving, use the **dhcpserver reserving** {add | delete} *VLAN- ID description IP-address mac-address* command.

Parameters

dhcpserver reserving add | delete - Enter add or delete to add or delete the DHCP server reservation.

vlanID - Enter the vlan ID.

description - Enter the description.

IP-address - Enter the IP address.

mac-address - Enter the MAC address.

Default Configuration

None.

Example

The following example displays the **dhcpserver reserving add** command to reserve a dhcpserver.

router06000a>**dhcpserver reserving add 1 test 192.168.1.99 00:00:00:00:00:01**

dhcpserver show vlan*X*

Use the dhcpserver show vlan*X* to show the vlan connection to the dhcp server.

Parameters

dhcpserver show vlan*X* - Enter the VLAN ID

Default Configuration

None.

Example

The following example displays the dhcpserver VLAN ID.

---

router06000a>dhcpserver show vlan1

---

lan

The **lan** command is used to configure the IP layer data for the primary LAN interfaces. All the **lan** commands are listed here:

- **lan config --ipaddr** *bridge-name* **primary** *IP-address subnet-mask*
- **lan config --dhcpserve**r *bridge-name* {enable | disable}
- **lan config --dhcpclient** *bridge-name* {enable | disable}
- **lan show** *bridge-name*

lan config --ipaddr *bridge-name* primary *IP-address subnet-mask*

To manage the IP address of the LAN, use the **lan config --ipaddr** *bridge-name* **primary** *IP address subnet mask* command.

Parameters

bridge-name - Enter the bridge name of the IP address

IP-address subnet-mask - Enter the primary IP address and subnet mask.

Default Configuration

None.

Example

The following example displays the **lan config** command.

router06000a> **lan config --ipaddr br0 primary 192.168.1.100 255.255.255.0**

lan config --dhcpserver *bridge-name* {enable | disable}

To manage the dhcpserver of the LAN, use the lan config --dhcpserver *bridge-name* {enable | disable} command.

Parameters

--dhcpserver bridge-name {enable | disable} - Enter the bridge name and **enable** or **disable** to enable or disable the dhcp server.

Default Configuration

None.

Example

The following example displays the LAN configuration for the dhcpserver.

router06000a> **lan config --dhcpserver br0 disable, lan config --dhcpserver br0 enable**

lan config --dhcpclient *bridge-name* {enable | disable}

To manage the dhcpclient of the LAN, use the lan config --dhcpclient *bridge-name* {enable | disable} command.

Parameters

--dhcpclient bridge-name {enable | disable} - Enter the bridge name and **enable** or **disable** to enable or disable the dhcp client.

Default Configuration

None.

Example

The following example displays the LAN configuration for the dhcpclient.

router06000a>**lan config --dhcpclient br1 enable**

lan show *bridge-name*

To display the bridge name of the LAN, use the **lan show** *bridge-name* command.

Parameters

bridge-name - Enter the bridge name.

Default Configuration

None.

Example

The following example displays the bridge name of the LAN.

router06000a>**lan show br1**

lanhosts

The **lanhosts** command displays all the hosts on the lan. All the **lanhosts** commands are listed here:

- **lanhosts show all**
- **lanhosts show vlan***X*

lanhosts show all

To show all the lanhosts command, use the **lanhosts show all** command.

Parameter

None.

Default Configuration

None.

Example

The following example displays the **lanhosts show all** command.

router06000a>**lanhosts show all**

lanhosts show vlan*X*

To show the lanhosts vlan ID, use the **lanhosts show vlan*X*** command**.**

Parameter

lanhosts show vlanX - Enter **lanhosts show vlan*X***.

Default Configuration

None.

Example

The following example displays the **lanhosts show vlan*X*** command.

router06000a>**lanhosts show vlan88**

tr69cfg

The **tr69cfg** command manages the application layer protocol. The tr69cfg commands executed on the command line generate status information regarding tr69cfg processes, or are used to stop and start specific tr69cfg services. All the **tr69cfg** commands are listed here:

- **tr69cfg** {enable | disable}

- **tr69cfg modify --interval** *informinterval* **--acsurl** *acsurl* **--acsuser** *acsuser* **--acspwd** *acspwd* **--cruser** *connrequser* **--crpwd** *connreqpwd*

- **tr69cfg show**

- **tr69cfg informEnable** {enable | disable}

- **tr69cfg debug** {enable | disable}

tr69cfg {enable | disable}

To enable or disable the tr69cfg configuration, use the **tr69cfg** {enable | disable} command.

Parameter

None.

Default Configuration

None.

Example

The following example displays how to enable the tr69cfg.

router06000a>**tr69cfg enable**

tr69cfg modify --interval *informinterval* --acsurl *acsurl* --acsuser *acsuser* --acspwd *acspwd* --cruser *connrequser* --crpwd *connreqpwd*

To modify the tr69 configuration, use the **tr69cfg modify --interval** *informinterval* **--acsurl** *acsurl* **--acsuser** *acsuser* **--acspwd** *acspwd* **--cruser** *connrequser* **--crpwd** *connreqpwd* command**.**

Parameters

informInterval - Enter the number in seconds.

acsurl - Enter the ACS URL.

acsuser - Enter the ACS username.

acspwd - Enter the ACS password.

connrequser - Enter the user name of the connection request user.

connreqpwd - Enter the connection request password.

Default Configuration

None.

Example

The following example displays how to modify the tr69cfg.

router06000a> **tr69cfg modify --interval 1 --acsurl http://1.0.0.1 --acsuser abc --acspwd 123 --cruser def --crpwd 666**

tr69cfg show

To show or hide the tr69cfg configuration, use the **tr69cfg show** command.

Parameter

None.

Default Configuration

None.

Example

The following example displays how to show the status of the tr69cfg.

router06000a>**tr69cfg show**

tr69cfg informEnable {enable | disable}

To enable or disable a tr69cfg session and to periodically send or stop local information use the **tr69cfg informEnable** {enable | disable} command.

Parameter

None.

Default Configuration

None.

Example

The following example displays how to disable the **tr69cfg informEnable**.

router06000a>**tr69cfg informEnable disable**

tr69cfg debug {enable | disable}

To debug the tr69cfg configuration, use the **tr69cfg debug** {enable | disable} command.

Parameter

debug {enable | disable} **-** Enter **enable** or **disable** to enable or disable the service.

Default Configuration

None.

Example

The following example displays how to enable the debug of the tr69cfg.

router06000a>**tr69cfg debug enable**

vlan

The VLAN commands allow geographically dispersed network nodes to communicate as if they were physically on the same network.

- **vlan add --vid** *vlanID* **--desc** *description* **--intervlan-routing** {enable | disable} **--port1** {untagged | tagged | excluded} **--port2** {untagged | tagged | excluded} **--port3** {untagged | tagged | excluded} **--port4** {untagged | tagged | excluded} (RV134W)

- **vlan edit** *bridge-name* **--vid** *vlanID* **--desc** *description* **--intervlan-routing** {enable | disable} **--port1** {untagged | tagged | excluded} **--port2** {untagged | tagged | excluded} **--port3** {untagged | tagged | excluded} **--port4** {untagged | tagged | excluded} (RV134W)

- **vlan delete --vid** *vlanID*

- **vlan show**

vlan add --vid *vlanID* --desc *description* --intervlan-routing {enable | disable} **--port1** {untagged | tagged | excluded} **--port2** {untagged | tagged | excluded} **--port3** {untagged | tagged | excluded} **--port4** {untagged | tagged | excluded} (port4 is for RV134W)

To add a new VLAN, use the **vlan add --vid** *vlanID* **--desc** *description* **--intervlan-routing** {enable | disable} **--port1** {untagged | tagged | excluded} **--port2** {untagged | tagged | excluded} **--port3** {untagged | tagged | excluded} **--port4** {untagged | tagged | excluded} (port 4 is for RV134W)

Parameters

vlanID - Enter the new vlan ID to create a new vlan.

description - Enter the description of the vlan.

--intervlan-routing {enable | disable} - Enable or disable the inter vlan routing feature.

--port 1 - 4 {untagged | tagged | excluded} - Untag, tag or exclude the designated VLAN port (port4 is for RV134W).

Default Configuration

None.

Example

The following example displays the how to add a new VLAN.

---

router06000a>**vlan add --vid 88 --desc 123 --intervlan-routing enable --port1 tagged --port2 tagged --port3 excluded --port4 tagged**

---

vlan edit *bridge-name* --vid *vlanID* --desc *description* --intervlan-routing {enable | disable} **--port1** {untagged | tagged | excluded} **--port2** {untagged | tagged | excluded} **--port3**

{untagged | tagged | excluded} **--port4** {untagged | tagged | excluded} (port4 is for RV134W)

To edit the VLAN, enter the **vlan edit** *bridge-name* **--vid** *vlanID* **--desc** *description* **--intervlan-routing** {enable | disable} **--port1** {untagged | tagged | excluded} **--port2** {untagged | tagged | excluded} **--port3** {untagged | tagged | excluded} **--port4** {untagged | tagged | excluded} (port4 is for RV134W)

Parameters

vlanID - Enter the new VLAN ID.

description - Enter the description of the VLAN.

--intervlan-routing {enable | disable} - Enable or disable the inter VLAN routing feature.

--port1-4 {untagged | tagged | excluded} - Untag, tag or exclude the designated VLAN port (port4 is for RV134W).

Default Configuration

None.

Example

The following example displays how to edit the VLAN.

router06000a> **vlan edit br0 --vid 88 --desc 321 --intervlan-routing disable --port1 excluded --port2 tagged --port3 excluded --port4 tagged**

vlan delete --vid *vlanID*

To delete a VLAN, enter the **vlan delete vid** *vlanID* command.

Parameters

vlanID - Enter the VLAN ID.

Default Configuration

None.

Example

The following example displays how to delete the vlan88.

---

router06000a>**vlan delete --vid 88**

---

vlan show

To show the VLAN, use the **vlan show** command.

Parameters

vlan show - Enter **vlan show**.

Default Configuration

None.

Example

The following example displays the **vlan show** command.

---

router06000a>**vlan show**

---

vpn

The vpn command and subcommands are used for working with various aspects of the vpn. The vpn commands executed on the command line generate status information on vpn processes, or are used to stop and start specific vpn services. All vpn commands are listed here:

- **vpn add --name** *connection-name* **--psk** *pre-shared key* **--rwan** *remote wan IP* **--rlan** *remote lan IP* **--rmask** *remote lan mask* **--lan** *local lan ip* **--lanmask** *local lan mask*

- **vpn stop --name** *connection-name*

- **vpn start --name** *connection-name*

- **vpn restart**

- **vpn restart --name** *connection-name*

- **vpn delete --name** *connection-name*

- **vpn show**

vpn add --name *connection-name* --psk *pre-shared key* --rwan *remote wan IP* --rlan *remote lan IP* --rmask *remote lan mask* --lan *local lan ip* --lanmask *local lan mask*

- To add a vpn connection, use the **vpn add --name** *connection-name* **--psk** *pre-shared key* **--rwan** *remote wan IP* **--rlan** *remote lan IP* **--rmask** *remote lan mask* **--lan** *local lan ip* **--lanmask** *local lan mask* command.

Parameter

connection-name - Enter the connection name of the vpn.

pre-shared key - Enter the pre-shared key.

remote wan IP - Enter the remote WAN IP address.

remote lan IP - Enter the remote LAN IP address.

remote lan mask - Enter the remote LAN subnet mask.

local lan IP - Enter the local LAN IP address.

local lan mask - Enter the local LAN subnet mask.

Default Configuration

None.

Example

The following example displays how to add a vpn connection.

router06000a>**vpn add --name test --psk qacafe123 --rwan 5.0.0.1 --rlan 11.0.0.0 --rmask 255.255.255.0 --lan 192.168.1.0 --lanmask 255.255.255.0**

vpn stop --name *connection-name*

To stop a vpn connection, use the **vpn stop --name** *connection-name* command.

Parameter

connection-name - Enter the connection name.

Default Configuration

None.

Example

The following example displays how to stop the vpn service.

router06000a>**vpn stop --name vpn1**

vpn start --name *connection-name*

To start a vpn service, use the **vpn start --name** *connection-name* command.

Parameter

connection-name - Enter the connection name to start the service.

Default Configuration

None.

Example

The following example displays how to start the vpn service.

router06000a>**vpn start --name vpn1**

vpn restart

To restart the vpn connection, use the **vpn restart** command.

Parameter

vpn restart - Enter **vpn restart**.

Default Configuration

None.

Example

The following example displays how to restart the vpn service.

router06000a>**vpn restart**

vpn restart --name *connection-name*

To restart a vpn service, use the **vpn restart --name** *connection-name*

command.

Parameter

--name *connection-name* - Enter the name of the connection to restart.

Default Configuration

None.

Example

The following example displays how to restart the specified vpn service.

router06000a>**vpn restart --name vpn1**

vpn delete --name *connection-name*

To delete a vpn service, use the **vpn delete --name** *connection-name* command.

Parameter

--name *connection-name* - Enter the name of the connection to delete.

Default Configuration

None.

Example

The following example displays how to delete a vpn whose connection name is 1.

router06000a>**vpn delete --name vpn1**

vpn show

To show the vpn service, use the **vpn show** command.

Parameter

vpn show - Enter **vpn show.**

Default Configuration

None.

Example

The following example displays the **vpn show** command.

router06000a>**vpn show**

wan

The **wan** commands enable you to configure the wan interfaces for the router within the command line. All the wan commands are listed here:

- **wan** {add | edit} **interface atm** *portid.vpi.vci* **--linktype** {eoa | pppoa | ipoa} --**encap** {llc | vcmux} **--atmcat** {ubr | cbr pcr | nrt vbr pcr scr mbs | rtvbr pcr scr mbs}

- **wan delete interface atm** *portid.vpi.vci*

- **wan** {add | edit} **service atm** *portid.vpi.vci* **--protocol** {bridge | ipoe | pppoe | ipoa | pppoa}

- **wan** {add | edit} **service ptm --protocol** {bridge | ipoe | pppoe}

- **wan** {add | edit} **service eth --protocol** {dhcp | static | pppoe | l2tp | pptp}

- **wan delete service atm** *portid.vpi.vci* **--vlan** *vlanID*

- **wan delete service ptm --vlan** *vlanID*

- **wlan delete service eth --vlan** *vlanID*

- **wan show**

- **wan show interface**

Parameters

vlanID: -1 | 2-4094

ethvlanID: -1 | 2-4094

portID: 0 (fast) | 1 (interleaved) (Select DSL latency)

username: [a-zA-Z0-9*_] {1-256}

password: [a-zA-Z0-9*_] {1-256}

timeout: Enter a number from 1 - 9999 (minutes, default: 5).

IPv4address: Enter the IPv4 address [1-254].[0-254].[0-254].[1-254] (e.g. 192.168.1.111).

IPv4netmask: Enter the IPv4 net mask [0-255].[0-255].[0-255].[0-255] (e.g. 255.255.255.0).

IPv4masklen: Enter a number from 0-32.

IPv6address: Enter the IPv6 address i.e. [a-fA-F0-9]{1-4}:[a-fA-F0-9]{1-4}:[a-fA-F0-9]{1-4}:[a-fA-F0-9]{1-4}:[a-fA-F0-9]{1-4}:[a-fA-F0-9]{1-4} (e.g. 2001,2002:200:122:333).

IPv6prefixlen: Enter a number from 1-64.

fqdn: Enter a domain name address (e.g. www.google.com).

pcr: Enter a number from 4000-65534 (Peak Cell Rate).

scr: Enter a number from 4000-65534 (Sustainable Cell Rate).

mbs: Enter a number from 1-1000000 (Maximum Burst Size).

vpi: Enter a number from 0-65535.

vci: Enter a number from 0-65535.

wan {add | edit} interface atm *portid.vpi.vci* --linktype {eoa | pppoa | ipoa} --encap {llc | vcmux} --atmcat {ubr | cbr pcr | nrt vbr pcr scr mbs | rtvbr pcr scr mbs}

To add or edit an existing wan, use the **wan** {add | edit} **interface atm** *portid.vpi.vci* **--linktype** {eoa | pppoa | ipoa} **--encap** {llc | vcmux} **--atmcat** {ubs | cbr pcr | nrt vbr pcr scr mbs | rtvbr pcr scr mbs} command.

Parameter

wan {add | edit} - interface atm *portid.vpi.vci* - Enter the port ID, VPI, and VCI values.

--linktype {eoa | pppoa | ipoa} - Select and enter the protocol.

--encap {llc | vcmux} - Enter the LLC encapsulation or the VC multiplexing.

--atmcat {ubr | cbr pcr | nrt vbr pcr scr mbs | rtvbr pcr scr mbs} - Select and enter the quality of service (QoS).

Default Configuration

None.

Example

The following example displays how to add a wan.

router06000a>**wan add interface atm 0.1.39 --linktype ipoa --encap vcmux --atmcat ubr**

wan delete interface atm *portid.vpi.vci*

To delete an existing wan, use the wan delete interface atm *portid.vpi.vci* *command.*

Parameters

interface atm *portid.vpi.vci* - Enter the port ID.

Default Configuration

None.

Example

The following example displays how to delete a wan.

router06000a>**wan delete interface atm 0.1.39**

wan {add | edit} service atm *portid.vpi.vci* --protocol {bridge | ipoe | pppoe | ipoa | pppoa}

To add or edit a wan connection using the ATM transfer mode, use the **wan** {add | edit} **service atm** *portid.vpi.vci* **--protocol** {bridge | ipoe | pppoe | ipoa | pppoa} command.

Parameters

service atm *portid.vpi.vci* - Enter the port ID.

protocol {bridge | ipoe | pppoe | ipoa | pppoa} - Select and enter the protocol.

Default Configuration

None.

Example

The following example displays how to add a wan using the atm transfer mode.

router06000a>**wan add service atm 0.1.36 --protocol pppoe --vlan 2 --nat enable --username qacafe --password qacafe123 --ip6addr 3001:2/64 --gateway6 3001:1 --dns6 3001:51a:cafe:101**

wan {add | edit} service ptm --protocol {bridge | ipoe | pppoe}

To add or edit a wan connection using the PTM transfer mode, use the **wan** {add | edit} **service ptm --protocol** {bridge | ipoe | pppoe} command.

Parameter

wan {add | edit} - Enter add or edit to add or edit the service.

protocol {bridge | ipoe | pppoe} - Select and enter the protocol.

Default Configuration

None.

Example

The following example displays how to add a wan using the ptm transfer mode.

router06000a>**wan add service ptm --protocol bridge --vlan 55 --nat enable --igmp enable --bindports eth3.**

wan {add | edit} service eth --protocol {dhcp | static | pppoe | l2tp | pptp}

To add or edit a wan Ethernet connection, use the **wan** {add | edit} **service eth --protocol** {dhcp | static | pppoe | l2tp | pptp} command.

Parameter

protocol {dchp | static | pppoe | 12tp | pptp} - Select and enter the protocol.

Default Configuration

None.

Example

The following example displays how to add a wan ethernet connection.

router06000a>**wan add service eth --protocol pppoe --vlan 4 --nat enable --username qacafe --password qacafe123 --ipv6mode 6rd**

wan delete service atm *portid.vpi.vci* --vlan *vlanID*

To delete a wan connection using the atm transfer mode, use the **wan delete service atm** *portid.vpi.vci* **--vlan** *vlanID* command.

Parameter

portid.vpi.vci - Enter the port ID.

vlanID - Enter the vlan ID.

Default Configuration

None.

Example

The following example displays how to delete a wan connection using the atm transfer mode.

router06000a>**wan delete service atm 0.1.36 --vlan 2**

wan delete service ptm --vlan *vlanID*

To delete a wan connection using the ptm transfer mode, use the **wan delete service ptm --vlan** *vlanID* command.

Parameter

--vlan *vlanID* - Enter the VLAN ID.

Default Configuration

None.

Example

The following example displays how to delete a wan connection using the ptm transfer mode.

router06000a>**wan delete service ptm --vlan 56**

wan delete service eth --vlan *ethlanID*

To delete the wan Ethernet service, use the **wan delete service eth --vlan** *ethvlanID* command.

Parameter

ethvlanID - Enter the Ethernet VLAN ID.

Default Configuration

None.

Example

The following example displays how to delete a wan Ethernet service.

router06000a>**wan delete service eth --vlan 6**

wan show

To show the status of the wan, use the **wan show** command.

Parameter

wan show - Enter **wan show**.

Default Configuration

None.

Example

The following example displays the status of the wan.

router06000a>**wan show**

wan show interface

To show the status of the wan, use the **wan show interface** command.

Parameter

wan show interface - Enter **wan show interface**.

Default Configuration

None.

Example

The following example displays the **wan show interface** command.

router06000a>**wan show interface**

wlan

The **wlan** command provides wireless network communication over short distances using radio or infrared signals instead of traditional network cabling. A WLAN typically extends an existing wired local area network. All the wlan commands are listed here:

- **wlan --i** *interface* {enable/disable}

- **wlan --i** *interface* **--ssid** *ssid*

- **wlan --ssid** *ssid* **--mode** *mode* **--band** *band* **--channel** *channel* **--vlan** *vlan ID*

- **wlan --ssid** *ssid* **--smode** disabled

- **wlan --ssid** *ssid* **--smode** wep **--authtype** {0|1} **--encry** {128 | 64} **--key1** *key1* **--key2** *key2* **--key3** *key3* **--key4** *key4* **--txkey** {1 | 2 | 3 | 4}

- **wlan --ssid** *ssid* **--smode** {wpa2_personal | wpa_personal_mixed} **--encry** {TKIP_AES | AES} **--skey** *shared key* **--krenew** *renewal-seconds*

- **wlan --ssid** *ssid* **--smode** {wpa2_enterprise | wpa_enterprise_mixed} **--encry** {TKIP_AES | AES} **--rserver** *radius-server-IP* **--rport** *port* **--skey** *shared-key* **--krenew** *renew-seconds*

Parameters

interface: (For 2.4G) wl0 | wl0.1 | wl0.2 | wl0.3

(For 5G) wl1 | wl1.1 | wl1.2 | wl1.3

mode: bgn-mixed | bg-mixed | gn-mixed | b-only | g-only | n-only | anac-mixed | nac-mixed | a-only

band: 20 | 20/40 | 80

channel: 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 (channels for 2.4G, 0 means auto)

0 | 36 | 40 | 44 | 48 | 52 | 56 | 60 | 64 | 100 | 104 | 108 | 112 | 116 | 132 | 136 | 140 | 149 | 153 | 157 | 161 | 165 (channels for 5G)

key1: [0-9A-Z] (if encry is 64, the length of key1 is 10 characters, if encry is 128, the length of key1 is 26 characters)

key2: the same as key1

key3: the same as key1

key4: the same as key1

vlan ID: 1-4094

IP: [1-254].[0-254].[0-254].[1-254] (e.g. 192.168.1.111)

port: range: 1 - 65535, default: 1812

renewal seconds: (range: 600-7200, default: 3600)

wlan --i *interface* {enable | disable}

To enable or disable a specific SSID, use the **wlan --i** *interface* {enable | disable} command.

Parameters

interface: wl0, wl0.1, wl0.2, wl0.3 are the 1st, 2nd, 3rd, and 4th ssid of 2.4GHz band; wl1, wl1.1, wl1.2, wl1.3 are the 1st, 2nd, 3rd, and 4th ssid of 5GHz band

Default Configuration

None.

Example

The following example displays how to enable the WLAN.

router06000a>**wlan --i wl0 enable**

wlan --i *interface* --ssid *ssid*

SSID is a case sensitive, 32 alphanumeric character unique identifier attached to the header of packets sent over a wireless local-area network (WLAN) that acts as a password when a mobile device tries to connect. SSID differentiates one WLAN from another, so all access points and all devices attempting to connect to a specific WLAN must use the same SSID to enable effective roaming.

To configure the wlan network, use the **wlan --i** *interface* **--ssid** *ssid* command.

Parameters

interface - Enter the wlan interface.

ssid - Enter the SSID.

Default Configuration

None.

Example

The following example configures the wlan *SSID.*

---

router06000a>**wlan --i wl0 --ssid SSID1**

---

wlan --ssid *ssid* --mode *mode* --band *band* --channel *channel* --vlan *vlanID*

To configure the mode, band, channel, and VLAN, use the **wlan --ssid** *ssid* **--mode** *mode* **--band** *band* **--channel** *channel* **--vlan** *vlanID* command.

Parameters

ssid - Enter the SSID

mode - Enter the transfer mode.

band - Enter the wireless channel width.

channel - Enter the channel.

vlanID - Enter the vlan ID.

Default Configuration

None.

Example

The following example displays the wlan configuration for mode, band, channel, and vlan.

---

router06000a> **wlan --ssid test24g2 --mode bgn-mixed --band 20/40 --channel 7 --vlan 1**
router06000a>**wlan --ssid test5g3 --mode anac-mixed --band 80 --channel 40**

---

wlan --ssid *ssid* --smode disable

To disable security for a specific SSID, use the **wlan --ssid** *ssid* **--smode** disable command.

Parameters

ssid - Enter the SSID.

Default Configuration

None.

Example

The following example displays how to disable the security for a specific SSID.

---

router06000a>**wlan --i wl1 disable**

---

wlan --ssid *ssid* --smode *wep* --authtype *{0l1}* --encry *{128 l 64}* --key1 *key1* --key2 *key2* --key3 *key3* --key4 *key4* --txkey *{1 l 2 l 3 l 4}*

To configure the WEP for a specific SSID, use the **wlan --ssid** *ssid* **--smode** *wep* **--authtype** *{0l1}* **--encry** *{128 l 64}* **--key1** *key1* **--key2** *key2* **--key3** *key3* **--key4** *key4* **--txkey** *{1 l 2 l 3 l 4}* command.

Parameters

ssid - Enter the SSID.

--authtype {0l1} - 0 is to open and 1 is to use the preshared key.

--encry {128|64} - Select and enter the encryption

--key1 *key1* --key2 *key2* --key3 *key3* --key4 *key4* - Enter the security keys.

--txkey {1|2|3|4} - Enter the key index

Default Configuration

None.

Example

The following example displays the WLAN WEP configuration for a specific SSID.

---

router06000a> **wlan --ssid test24g2 --smode wep --authtype 0 --encry 64 --key1 111111111 --key2 222222222 --key3 333333333 --key4 4444444444 --txkey 2**
router06000a> **wlan --ssid test5g3 --smode wep --authtype 1 --encry 128 --key1 123456789012345678901234567890123456 --key2 123456789012345678901234567890123457 --key3 123456789012345678901234567890123458 --key4 123456789012345678901234567890123459 --txkey 3**

---

wlan --ssid *ssid* --smode {wpa2_personal | wpa_personal_mixed} --encry {TKIP_AES | AES} --skey *shared key* --krenew *renewal-seconds*

To configure the WPA2-Personal or WPA-Personal-Mixed for a specific SSID, use the **wlan --ssid** *ssid* **--smode** {wpa2_personal | wpa_personal_mixed} **--encry** {TKIP_AES | AES} **--skey** *shared key* **--krenew** *renewal-seconds* command.

Parameters

ssid - Enter the SSID.

--smode {wpa2_personal | wpa_personal_mixed} - Select and enter the security mode.

--encry {TKIP_AES | AES} - Select and enter the encryption type.

--skey *shared key* - Enter an alphanumeric phrase for the shared key

--krenew *renewal-seconds* - Enter the duration of time (600–7200 seconds) between key renewals.

Default Configuration

None.

Example

The following example displays the wlan WPA2 configuration for a specific SSID.

---

router06000a> **wlan --ssid test24g2 --smode wpa2_personal --encry AES --skey sqa2sqa2 --krenew 6688**
router06000a> **wlan --ssid test5g3 --smode wpa_personal_mixed --encry TKIP_AES --skey sqa28888 --krenew 6666**

---

wlan --ssid *ssid* --smode {wpa2_enterprise | wpa_enterprise_mixed} --encry {TKIP_AES | AES} --rserver radius-server-IP --rport *port* --skey *shared-key* --krenew *renew-seconds*

To configure the WPA2-Enterprise or WPA_Enterprise_Mixed for a specific SSID, use the **wlan --ssid** *ssid* **--smode** {wpa2_enterprise | wpa_enterprise_mixed} **--encry** {TKIP_AES | AES} **--rserver** radius-server-IP **--rport** *port* **--skey** *shared-key* **--krenew** *renew-seconds* command.

Parameters

ssid - Enter the SSID.

--smode {wpa2_enterprise | wpa_enterprise_mixed} - Select and enter the security mode.

--encry {TKIP_AES | AES} - Select and enter the encryption mode.

--rserver radius-server-IP - Enter the IP address of the radius server

--rport *port* - Enter the port used to access the radius server.

--skey *shared-key* - Enter an alphanumeric phrase for the shared key.

--krenew *renew-seconds*- Enter the duration of time (600–7200 seconds) between key renewals. The default value is 3600.

Default Configuration

None.

Example

The following example displays the WLAN WPA2 enterprise configuration for a specific SSID.

```
router06000a>wlan --ssid test24g2 --smode wpa2_enterprise  --encry AES --rserver
192.168.1.101 --rport 123 --skey qacafe123 --krenew 677
router06000a> wlan --ssid test5g3 --smode wpa_enterprise_mixed  --encry TKIP_AES --rserver
192.168.1.102 --rport 321 --skey qacafe123 --krenew 688
```

5

Where to Go From Here

Cisco provides a wide range of resources to help you and your customer obtain the full benefits of the Cisco RV132W & RV134W Routers.

Support	
Cisco Support Community	www.cisco.com/go/smallbizsupport
Cisco Support and Resources	www.cisco.com/go/smallbizhelp
Phone Support Contacts	www.cisco.com/en/US/support/ tsd_cisco_small_business _support_center_contacts.html
Cisco Firmware Downloads	www.cisco.com/go/smallbizfirmware Select a link to download firmware for Cisco products. No login is required.
Cisco Open Source Requests	www.cisco.com/go/ smallbiz_opensource_request
Cisco Partner Central (Partner Login Required)	www.cisco.com/web/partners/sell/smb
Product Documentation	
Cisco RV132W/RV134W	www.cisco.com/go/rv132W www.cisco.com/go/rv134W
Warranty Information	www.cisco.com/go/warranty
Regulatory Compliance and Safety Information	http://www.cisco.com/c/en/us/support/routers/ small-business-rv-series-routers/products- installation-guides-list.html