

LANTRONIX®



PremierWave® SE1000 Embedded System on Module Command Reference

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1: About This Guide

This guide describes how to configure the Lantronix® PremierWave® SE1000 system on module (SOM) using the Command Line Interface (CLI) and/or Extensible Markup Language (XML). CLI provides an interactive mode for accessing the device configuration and management interface. It is most suited for system and network administrators comfortable with using similar interfaces on Enterprise IT and Networking products. It is also helpful as a quick tool for access via the product's serial ports or console/management ports.

XML provides an extensible mode for software developers interfacing with the device and system integrators performing batch provisioning/updates.

Chapter Summaries

This table lists and summarizes content of each chapter.

| Chapter | Summary |
|--|--|
| Chapter 2: Overview | Gives an overview of CLI and XML. |
| Chapter 3: Command Line Interface | Lists commands and describes how to use CLI to configure the PremierWave SE1000 system on module. |
| Chapter 4: Configuration Using XML | Lists XCR groups and items and describes how to use XCRs to configure the PremierWave SE1000 system on module. |
| Chapter 5: Commands and Levels | Provides an index of the CLI Command Hierarchy with hyperlinks to the corresponding command details. |

Conventions

The table below lists and describes the conventions used in this book.

| Convention | Description |
|----------------------------------|--|
| Bold text | Default parameters. |
| Italic text | Required values for parameters |
| Brackets [] | Optional parameters. |
| Angle Brackets < > | Possible values for parameters. |
| Pipe | Choice of parameters. |
| Warning | Warning: Means that you are in a situation that could cause equipment damage or bodily injury. Before you work on any equipment, you must be aware of the hazards involved with electrical circuitry and familiar with standard practices for preventing accidents. |
| Note | Note: Means take notice. Notes contain helpful suggestions, information, or references to material not covered in the publication. |
| Caution | Caution: Means you might do something that could result in faulty equipment operation, or loss of data. |
| Screen Font (Courier New) | CLI terminal sessions and examples of CLI input. |

Additional Documentation

Visit the Lantronix website at www.lantronix.com/support/documentation for the latest documentation and the following additional documentation.

| Document | Description |
|---|--|
| <i>PremierWave SE1000 Embedded System on Module User Guide</i> | Describes how to configure and use the PremierWave SE1000 system on module. |
| <i>PremierWave Embedded System on Module Integration Guide</i> | Contains information about the PremierWave hardware and integrating the device into your product. |
| <i>PremierWave Embedded System on Module Quick Start Guide</i> | Instructions for getting the PremierWave SE1000 up and running. |
| <i>PremierWave Embedded System on Module Evaluation Board User Guide</i> | Information for using the PremierWave module on the evaluation board. |
| <i>Com Port Redirector Quick Start and Online Help</i> | Instructions for using the Lantronix Windows-based utility to create virtual com ports. |
| <i>DeviceInstaller Online Help</i> | Instructions for using the Lantronix Windows-based utility to locate the PremierWave SE1000 system on module and to view its current settings. |

2: Overview

The PremierWave SE1000 embedded system on module supports three convenient configuration methods: Web Manager, Command Line Interface (CLI) and Extensible Markup Language (XML). For more information about the Web Manager, see the *PremierWave SE1000 System on Module User Guide* on the Lantronix website.

XML Architecture and Device Control

XML is a fundamental building block for Machine-to-Machine (M2M) and Internet of Things (IoT) networks. The PremierWave SE1000 system on module supports XML configuration records that make configuring the system on module easy for users and administrators. XML configuration records are easy to edit with a standard text editor or an XML editor.

For a brief overview of XML, see [Chapter 4: Configuration Using XML](#). It provides rules on basic XML syntax, a guide to the specific XML tags used, and a guide to using XML configuration records.

Command Line Interface

Making the edge-to-enterprise vision a reality, the PremierWave SE1000 system on module uses industry-standard tools for configuration, communication, and control. For example, the PremierWave SE1000 device uses a command line interface (CLI) whose syntax is very similar to that used by data center equipment such as routers and hubs.

For details of the CLI, see [Chapter 5: Commands and Levels](#). It provides an index of the CLI Command Hierarchy with links to the corresponding command details. The CLI provides commands for configuring, monitoring, and controlling the system on module.

3: Command Line Interface

This chapter describes accessing the PremierWave SE1000 embedded system on module by using Telnet, SSH, or serial ports to configure the device, navigating the Command Line Interface (CLI), typing keyboard shortcuts, and moving between the levels.

It contains the following sections:

- ◆ [Configuration Using Telnet](#)
- ◆ [Configuration Using Serial Lines](#)
- ◆ [Navigating the CLI Hierarchy](#)
- ◆ [Using Keyboard Shortcuts and CLI](#)
- ◆ [Understanding the CLI Level Hierarchy](#)

Refer to [Chapter 5: Commands and Levels](#) for a complete list of levels, commands, and descriptions.

Configuration Using Telnet

To access and configure the SOM by using a Telnet session over the network, you must first establish a Telnet connection. You can also establish a Telnet connection by clicking the Telnet Configuration tab in the Lantronix DeviceInstaller utility. See the DeviceInstaller Online Help for more information, available on our website www.lantronix.com/support/downloads.

To access the PremierWave SE1000 system on module by using Telnet, perform the following steps.

1. Click **Start > Run**. The Run dialog box displays.
2. Type `cmd` in the dialog box and press **OK**.
3. Type `telnet x.x.x.x` (`x.x.x.x` is the IP address) in a Windows/Linux command prompt.
The PremierWave SE1000 device is online when the command prompt (`>`) displays. You are at the root level of the CLI.

Note: Depending on the level of security, a password may be required.

Configuration Using Serial Lines

Serial Port Command Line Mode

The serial port can be configured to operate in command mode permanently or to be triggered under specified conditions. See the `line <line> Level` command description for more information.

In order to configure and manage the device, connect the computer via a Serial (RS232) cable to the PremierWave USB port and run a terminal emulation program (e.g., Tera Term). Reference the *PremierWave SE1000 Embedded System on Module User Guide* for additional information on connecting the serial port prior to configuration.

If the connecting device does not have a serial port available, then the PremierWave SOM USB device port can be used. The user must ensure that they have the appropriate FTDI drivers installed on their device. Please reference the *PremierWave SE1000 Embedded System on Module User Guide* for additional information on connecting a USB device port prior to configuration.

Boot to CLI and Device Recovery

Serial Recovery mode will temporarily override the line and tunnel settings for the serial line to allow configuration changes to be made. The line and tunnel settings will be restored once the user exits the Serial Recovery mode CLI.

To configure the Lantronix locally using a serial port:

1. Connect a terminal or a PC running a terminal emulation program to one of the device server's serial ports.
2. Configure the terminal to the following settings:
 - ◆ 9600 baud
 - ◆ 8-bit
 - ◆ No parity
 - ◆ 1 stop bit
 - ◆ No flow control.
3. Power off the device.
4. Press and hold down the exclamation point (!) key.
5. Power on the device. After about 1 seconds, the exclamation point will display on the terminal or PC screen.
6. Type xyz within 5 seconds to display the CLI prompt.

Navigating the CLI Hierarchy

The CLI is organized into a hierarchy of levels. Each level has a group of commands for a specific purpose. For example, to configure a setting for the FTP server, one would navigate to the FTP level, which is under the configuration level.

- ◆ To move to a different level—Enter the name of the level from within its parent level. For example, to enter the tunnel level, type `tunnel <number>` at the enable prompt. This displays: `<enable> tunnel <number>#`.
- ◆ To exit and return to one level higher—Type `exit` and press the **Enter** key. Typing `exit` at the login level or the enable level will close the CLI session. If Line - Command Mode is specified as Always, a new session starts immediately.
- ◆ To view the current configuration at any level—Type `show`.
- ◆ To view the list of commands available at the current level—Type the question mark "?". Items within `< >` (e.g. `<string>`) are required parameters.
- ◆ To view the available commands and explanations—Type the asterisk (*).

- ◆ To view the list of commands available for a partial command—Type the partial command followed by the question mark "?". For example: `<tunnel-1>#show?` displays a list of all show commands at the tunnel level.
- ◆ To view available commands and their explanations for a partial command—Type the partial command followed by the asterisk (*). For example: `<tunnel-1>#show*` displays a list of all show commands and descriptions at the tunnel level.
- ◆ To view the last 20 commands entered at the CLI—Type `show history`.

Using Keyboard Shortcuts and CLI

One useful shortcut built into the PremierWave SE1000 system on module is that the complete text of a command does not have to be entered to issue a command. Typing just enough characters to uniquely identify a command, then hitting enter, can be used as a short cut for a command. For example, at the enable level, "sh" can be used for the "show" command.

Tab Completion is also available using the **Tab** and **Enter** keys on the keyboard. Typing the first few characters of a command, then hitting the **Tab** key displays the first command that begins with those characters. Hitting the **Tab** key again displays the next command that begins with the original characters typed. You can press **Enter** to execute the command or you can backspace to edit any parameters.

The following key combinations are allowed when configuring the SOM using the CLI:

Table 3-1 Keyboard Shortcuts

| Key Combination | Description |
|-----------------|--|
| Ctrl + a | Places cursor at the beginning of a line |
| Ctrl + b | Backspaces one character |
| Ctrl + d | Deletes one character |
| Ctrl + e | Places cursor at the end of the line |
| Ctrl + f | Moves cursor forward one character |
| Ctrl + k | Deletes from the current position to the end of the line |
| Ctrl + l | Redraws the command line |
| Ctrl + n | Displays the next line in the history |
| Ctrl + p | Displays the previous line in the history |
| Ctrl + u | Deletes entire line and places cursor at start of prompt |
| Ctrl + w | Deletes one word back |
| Ctrl + z | Exits the current CLI level |
| Esc + b | Moves cursor back one word |
| Esc + f | Moves cursor forward one word |

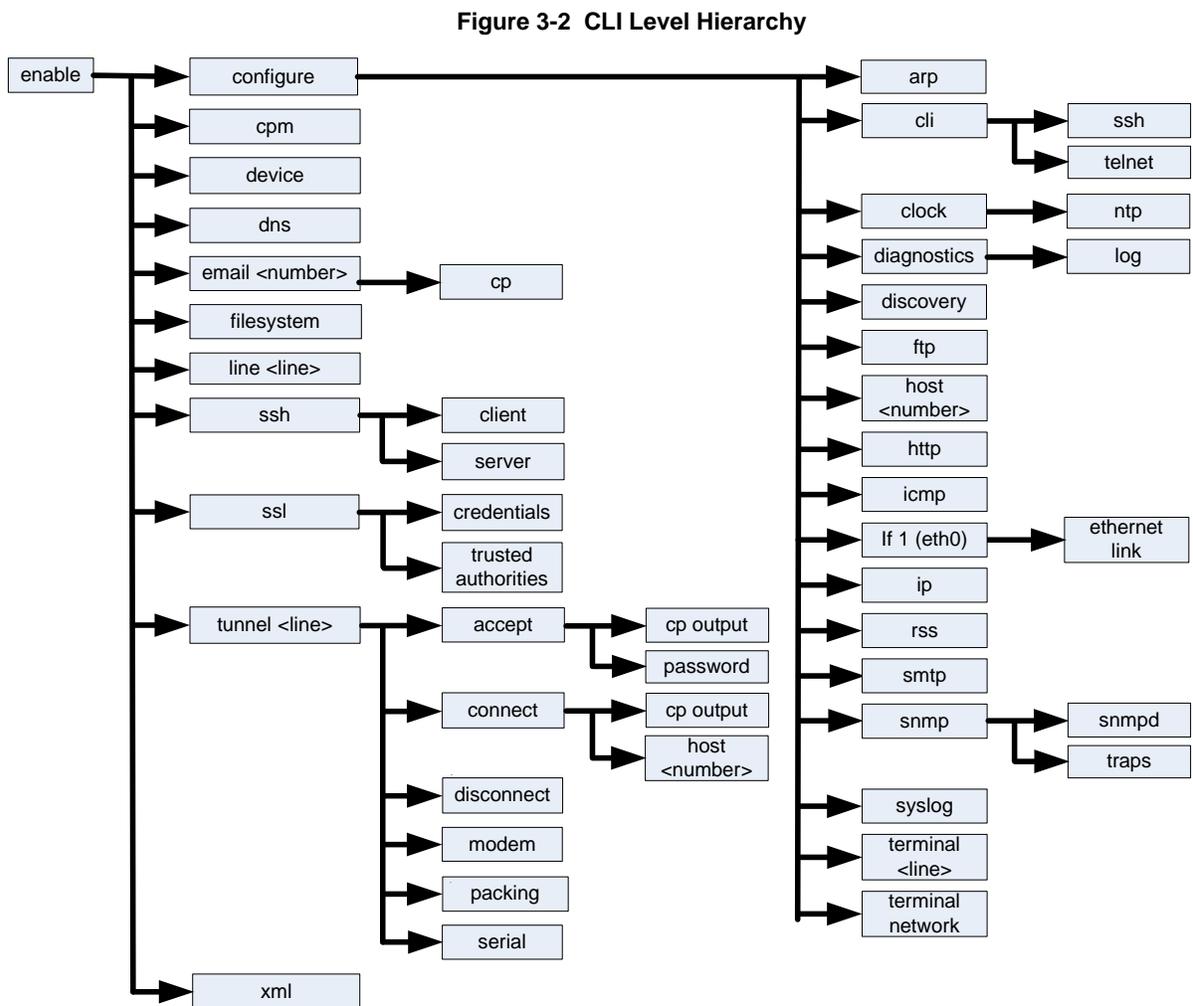
Understanding the CLI Level Hierarchy

The CLI hierarchy is a series of levels. Arranging commands in a hierarchy of levels provides a way to organize and group similar commands, provide different levels of security, and reduce the complexity and number of commands and options presented to a user at one time.

When you start a command line session, you begin at the login level. This level can be password protected and provides access to high level status, a few diagnostic commands, and the enable level. Further device information and configuration are accessed via the enable level.

The enable level can also be password protected and is the gateway to full configuration and management of the system on module. There are commands for gathering and effecting all elements of device status and configuration, as well as commands that take you to additional levels. For instance, tunnel specific status and configuration is found under the "tunnel" level, and network specific status and configuration commands are found under the "configuration" level.

An overview of the levels in the PremierWave SE1000 SOM is presented in [Figure 3-2 CLI Level Hierarchy](#) below.



Commands at the login level (see [Figure 3-3 Login Level Commands](#) below) do not affect current configuration settings and are not displayed initially. If you type `?`, you will see the login sub-commands. These commands provide diagnostic and status information only.

Figure 3-3 Login Level Commands

```

>?
clrscrn                               exit
iperf <params>                        ping <host>
ping <host> <count>                  ping <host> <count> <timeout>
show                                   show history
show lines                             trace route <host>
trace route <host> <protocol>        enable

>

```

Note: To configure the PremierWave SE1000 system on module, you must be in the enable level and any of its sub-levels. [Figure 3-4](#) below shows the enable level commands.

Figure 3-4 Enable Level Commands

```

>enable
(enable)#?
auto show interfaces                  auto show processes
clrscrn                               configure
connect                               connect line <line>
cpm                                    device
disable                               dns
email <number>                       exit
filesystem                           iperf <params>
kill ssh <session>                   kill telnet <session>
line <line>                           ping <host>
ping <host> <count>                  ping <host> <count> <timeout>
reload                                reload factory defaults
show                                   show history
show interfaces                       show ip sockets
show lines                             show processes
show sessions                         ssh
ssh <optClientUsername> <host>      ssh <optClientUsername> <host> <port>
ssl                                    telnet <host>
telnet <host> <port>                 trace route <host>
trace route <host> <protocol>        tunnel <line>
write                                  xml

(enable)#

```

See the [Chapter 5: Commands and Levels](#) at the end of this document for a complete list of levels, commands, and descriptions.

4: Configuration Using XML

The PremierWave SE1000 system on module provides an Extensible Markup Language (XML) interface that you can use to configure SOM devices. Every configuration setting that can be issued from the system on module Web Manager and CLI can be specified using XML.

The SOM can import and export configuration settings as an XML document known as an XML Configuration Record (XCR). An XCR can be imported or exported via the CLI, a Web browser, FTP, or the system on module filesystem. An XCR can contain many configuration settings or just a few. For example, it might change all of the configurable parameters for a SOM, or it may only change the baud rate for a single serial line. Using XCRs is a straightforward and flexible way to manage the configuration of multiple system on module devices.

XML Configuration Record Document Type Definition

An XML document type definition (DTD) is a description of the structure and content of an XML document. It verifies that a document is valid. XCRs are exported using the DTD as shown in [Figure 4-1 DTD for XCRs](#).

Figure 4-1 DTD for XCRs

```
<!DOCTYPE configrecord [  
<!ELEMENT configrecord (configgroup+)>  
<!ELEMENT configgroup (configitem+,configgroup*)>  
<!ELEMENT configitem (value+)>  
<!ELEMENT value (#PCDATA)>  
<!ATTLIST configrecord version CDATA #IMPLIED>  
<!ATTLIST configgroup name CDATA #IMPLIED>  
<!ATTLIST configgroup instance CDATA #IMPLIED>  
<!ATTLIST configitem name CDATA #IMPLIED>  
<!ATTLIST value name CDATA #IMPLIED>  

```

The PremierWave SE1000 system on module DTD rules state the following:

- ◆ The XML document element is a `<configrecord>` element. This is the root element.
- ◆ A `<configrecord>` must have one or more `<configgroup>` elements and can have a `version` attribute.
- ◆ A `<configgroup>` must have one or more `<configitem>` elements and can have `name` and `instance` attributes.
- ◆ A `<configitem>` element must have one or more `<value>` elements and can have a `name` attribute.
- ◆ A `<value>` element can have only data and can have a `name` attribute.
- ◆ The `name` attribute identifies a group, item, or value. It is always a quoted string.
- ◆ The `instance` attribute identifies the specific option, like the serial port number. The "instance" attribute is always a quoted string.

Note:

- ◆ The name for each `<configgroup>` (specified with the `name` attribute) is the group name listed in the Web Manager XCR groups or with the "xcr list" CLI command. See the PremierWave SE1000 System on Module User Guide for more information about the XCR groups.
- ◆ An empty or missing `<value>` element in each present `<configgroup>` clears the setting to its default.

Quick Tour of XML Syntax

Declaration

The first line, `<?xml version="1.0" standalone="yes"?>`, is called the XML declaration. It is required and indicates the XML version in use (normally version 1.0). The remainder of the file consists of nested XML elements, some of which have attributes and content.

Element Start and End Tags

An element typically consists of two tags: start tag and an end tag that surrounds text and other elements (element content). The start tag consists of a name surrounded by angle brackets, for example `<configrecord>`. The end tag consists of the same name surrounded by angle brackets, but with a forward slash preceding the name, for example `</configrecord>`. The element content can also contain other "child" elements.

Element Attributes

The XML element attributes that are name-value pairs included in the start tag after the element name. The values must always be quoted, using single or double quotes. Each attribute name should appear only once in an element.

[Figure 4-2](#) shows an XML example which consists of a declaration (first line), nested elements with attributes and content.

Figure 4-2 XML Example

```
<configrecord version="0.1.0.0T0">
  <configgroup name="telnet">
    <configitem name="state">
      <value>enable</value></
    <configitem>
      <configitem name="port">
        <value>23 </value>
      </configitem>
      <configitem name="max sessions">
        <value>3 </value>
      </configitem>
      <configitem name="authentication">
        <value>disable</value>
      </configitem>
    </configgroup>
  </configrecord>
```

The PremierWave device uses the attributes in the following subsections to label the group configuration settings.

Record, Group, Item, and Value Tags

A `<configgroup>` is a logical grouping of configuration parameters and must contain one or more `<configitem>` elements. It must have a name attribute and may have an instance attribute.

A `<configitem>` is a specific grouping of configuration parameters relevant to its parent group. An item takes the name attribute and must contain one or more value elements. For example, the line group might have parameters such as baud rate, data bits, and parity.

A value may specify the value of a configuration parameter. It may contain the name attribute. In this example, a value of 9600 might be specified for baud rate; 7 may be specified for data bits, and even may be specified for parity.

A name attribute identifies the group, item, or value. It is always quoted (as are all XML attributes). For example, a group that contains serial port parameters has the name "line".

An instance attribute identifies which of several instances is being addressed. It is always quoted. For example, the serial port name (in the line configgroup) has the instance "1" to indicate serial port 1 or "2" to specify serial port 2.

The following figures show examples of XML configuration records and the use of the `<configrecord>`, `<configgroup>`, `<configitem>`, and `<value>` XML elements.

Figure 4-3 XML Example

```
<configrecord version="0.1.0.0T0">
  <configgroup name="arp">
    <configitem name="arp delete">
      <value name="ip address"/>
    </configitem>
    <configitem name="arp entry">
      <value name="ip address"/>
      <value name="mac address"/>
    </configitem>
  </configgroup>
</configrecord>
```

Figure 4-4 XML Example of Multiple Named Values

```
<?xml version="1.0" standalone="yes"?>
  <configgroup name = "ethernet" instance = "eth0">
    <configitem name = "speed">
      <value>Auto</value>
    </configitem>
    <configitem name = "duplex">
      <value>Auto</value>
    </configitem>
  </configgroup>
```

Figure 4-5 XML Example of Multiple Items

```

<configgroup name="ssh server">
  <configitem name="host rsa keys">
    <value name="public key"/>
    <value name="private key"/>
  </configitem>
  <configitem name="host dsa keys">
    <value name="public key"/>
    <value name="private key"/>
  </configitem>
  <configitem name="delete authorized users">
    <value>disable</value>
  </configitem>
  <configitem name="authorized user delete">
    <value name="name"/>
  </configitem>
  <configitem name="authorized user" instance="">
    <value name="password"/>
    <value name="public rsa key"/>
    <value name="public dsa key"/>
  </configitem>
</configgroup>

```

Figure 4-6 XML Example with Multiple Groups

```

<?xml version="1.0" standalone="yes"?>
<configgroup name = "telnet">
  <configitem name = "state">
    <value>enable</value>
  </configitem>
  <configitem name = "authentication">
    <value>disable</value>
  </configitem>
</configgroup>
<configgroup name = "ssh">
  <configitem name = "state">
    <value>enable</value>
  </configitem>
</configgroup>

```

Importing and Exporting an XML Configuration File

An XCR can be imported or exported using the following methods:

- ◆ Filesystem-XCRs can be saved to the SOM file system and imported or accessed as needed. See [Best Practices on page 18](#) or the Filesystem Browser section in the *PremierWave SE1000 Embedded System on Module User Guide*.
- ◆ CLI-XCRs can be imported (captured) or exported (dumped) directly to a Telnet, SSH, or serial line CLI session. Capturing an XCR can be started by pasting a valid XCR directly into the CLI prompt. The PremierWave SE1000 SOM immediately processes the configuration record, changing any settings specified. This can be done on any level, including the root. Special tags in the XML allow for providing root and enable level passwords so that this can also be done at the password prompt.
- ◆ Web browser-Web Manager can be used to import and export an XCR to the system on module file system. It can also be used to import an XCR from an external source such as your local hard drive.
- ◆ FTP-The SOM FTP server can export and import XCRs when an FTP get or put command on the filename (pwse1000.xcr for export, pwse1000_import.xcr for import; both are under the pwxc directory) is requested. On export (FTP get of pwse1000.xcr), the FTP server obtains the current XCR from the PremierWave SE1000 device and sends it as a file. On import (FTP put of pwse1000_import.xcr), the FTP server processes the file by sending it directly to the XML engine. In both cases the filesystem is not accessed. The files pwse1000.xcr and pwse1000_import.xcr are not read from or written to the file system. See FTP in the *PremierWave SE1000 System on Module User Guide*.

Best Practices

You can import or export an entire XCR, or just a portion of it, by specifying the group name and/or group instances. In the examples below, import and export operations are performed from the CLI on the local filesystem and require a XCR on the local filesystem. The Web Manager provides the same functionality.

Caution: *Using Microsoft Word to edit and save an XCR will change the format of the file and make it incompatible with the PremierWave SE1000 SOM. This is true even if the file is saved as Plain Text (.txt) or an XML Document (.xml). Notepad, a third party text editor, or a specialized XML editor should be used instead.*

Importing

The following syntax can be used to import configurations from a file:

```
xcr import <file>
xcr import <file> <groups and/or group:instances>
```

The first line imports all groups specified in the XML config record named in <file>. Any filename is valid, and the file name and extension are not important.

In the second line:

- ◆ Instance follows group with a colon (see the third example on the next page).
- ◆ Multiple groups are separated with a comma.

- ◆ Any white space requires the list of groups to be quoted.
- ◆ Only the named groups get imported, even if the XCR contains additional XCR groups.

The following syntax can be used to export configurations to a file on the system on modules file system:

```
xcr export <file>
xcr export <file> <groups and/or group:instances>
```

The same guidelines above regarding importing configurations also apply to exporting configurations. If no groups are specified, then the export command will export all configuration settings to the file. If instances are specified after the groups, only those group instances are written. If no instance is specified, all instances of that group are written.

Exporting

The following example exports only the accept mode tunneling settings for line 1 to the file "tunnel_1.xcr" on the SOM filesystem:

```
xcr export tunnel_1.xcr "tunnel accept:1"
```

The following example exports only the connect mode tunneling settings for all ports to the file "tunnel_all.xcr" on the PremierWave filesystem:

```
xcr export tunnel_all.xcr "tunnel connect"
```

The following example imports only the settings for line 2 from an XCR named "factory_config.xcr" on the system on module filesystem. If "factory_config.xcr" has other configuration settings, they are ignored:

```
xcr import factory_config.xcr "line:2"
```

The following example imports only line settings for all ports from a configuration record on the PremierWave filesystem named "foobar.xcr":

```
xcr import foobar.xcr "line"
```

To import only disconnect mode tunnel settings for port 1 and all serial line tunnel settings for port 2 from an XML configuration record named "production.xcr" that contains these settings (and possibly more), issue the following command:

```
xcr import production.xcr "tunnel disconnect:1"
```

The following example imports all tunneling settings and line settings for all serial ports from a file named xcr_file:

```
xcr import xcr_file "tunnel accept, tunnel connect, tunnel
disconnect, tunnel modem, tunnel packing, tunnel serial, tunnel
start, tunnel stop, line"
```

The following example exports only accept mode tunneling settings on serial port 1, and line settings on serial port 2 to a file named tunnel_config_t1_l2.xcr on the filesystem.

```
xcr export tunnel_config_t1_l2.xcr "tunnel accept:1, line:2"
```

The following example exports connect mode tunneling and line settings for all ports to the file tunnel_config.xcr on the PremierWave filesystem:

```
xcr export tunnel_config.xcr "tunnel, line"
```

XML Configuration Groups

Table 4-7 lists the PremierWave SE1000 SOM XCR groups in alphabetical order. This table indicates the various group items, as well as some possible value names and options.

Note: Any instance of **<** in the table may be read as "less than" and any instance of **>** may be read as "greater than".

Table 4-7 XCR Groups

| Group Name | Group Item | Value Name | Value Options | Additional Information |
|--|---------------------------------------|--------------|-----------------------|--|
| arp | arp delete | ip address | | Remove an entry from the ARP table. Specify the entry by its IP address. |
| | arp entry | ip address | | |
| | | mac address | | |
| cli | enable level password | | | Value is SECRET, hidden from user view. |
| | inactivity timeout | | | Default: 15 minutes |
| | line authentication | | enable, disable | Default: disable |
| | login password | | | Value is SECRET, hidden from user view. Default: PASS |
| | quit connect line | | | Accepts text containing control characters, for example, &#60;control&#62 ;A represents control-A Default: <control>L |
| clock time and zone | time set | day of month | | |
| | | hours | | |
| | | minutes | | |
| | | month | | |
| | | seconds | | |
| | | year | | |
| | time zone | offset | | |
| | zone | | | |
| clock | synchronization method | | manual, sntp, network | default: manual |
| | ntp | | | |
| cp group ("Instance" attribute is a line number) | cp ("Instance" attribute is a number) | bit | | |
| | | type | | |
| | | assert low | | |
| | state | | | |

| Group Name (continued) | Group Item | Value Name | Value Options | Additional Information |
|--|----------------------------|---------------|-------------------------------------|--|
| device | firmware version | | | Read only. |
| | long name | | | |
| | serial number | | | Read only. |
| | short name | | | |
| diagnostics | log | output | | |
| | | max length | | |
| discovery | state | | enable, disable | |
| | upnp state | | enable, disable | |
| | upnp port | | | |
| email ("Instance" attribute is a number.) | cc | | | |
| | cp | group | | |
| | | trigger value | | |
| | message file | | | |
| | priority | | urgent, high, normal, low, very low | Default: normal |
| | reply to | | | |
| | subject | | | |
| | to | | | |
| ethernet ("Instance" attribute is "eth0".) | duplex | | auto, half, full | Default: auto |
| | speed | | auto, 10, 100 | Default: auto |
| ftp server | state | | enable, disable | Default: enable |
| host ("Instance" attribute is a number.) | name | | | |
| | protocol | | telnet, ssh | Default: telnet |
| | ssh username | | | |
| | remote address | | | |
| | remote port | | | Default: 0 |
| http authentication uri | user delete | name | | Deletes an HTTP Authentication URI user. The value element is used to specify the user for deletion. |
| | | | | |
| | type | | | |
| | user (instance is "admin") | password | | |

| Group Name (continued) | Group Item | Value Name | Value Options | Additional Information |
|--|------------------------|------------|----------------------|---|
| http server | state | | enable, disable | Default: enable |
| | port | | <None>, ... | Default: 80 |
| | secure port | | <None>, ... | Default: 443 |
| | secure protocols | | ssl3, tls1.0, tls1.1 | May contain zero, one, or more of the values, separated by commas. Default: ssl3, tls1.0, tls1.1 |
| | secure credentials | | | |
| | max timeout | | | Default: 10 seconds |
| | max bytes | | | Default: 40960 |
| | logging state | | enable, disable | Default: enable |
| | max log entries | | | Default: 50 |
| | log format | | | Default: %h %t "%r" %s %B "%{Referer}i" "%{User-Agent}i" |
| | authentication timeout | | | Default: 30 minutes |
| | icmp | state | | enable, disable |
| interface ("Instance" attribute is "eth0") | bootp | | enable, disable | Default: disable |
| | dhcp | | enable, disable | Default: enable |
| | ip address | | <None>, ... | Accepts an IP address and mask as either: (1) IP address only (192.168.1.1) gets a default mask, (2) CIDR (192.168.1.1/24), or (3) Explicit mask (192.168.1.1 255.255.255.0). |
| | default gateway | | <None>, ... | Accepts in IP address in dotted notation, like 192.168.1.1. |
| | hostname | | | |
| | domain | | | |
| | dhcp client id | | | |
| | primary dns | | <None>, ... | Accepts in IP address in dotted notation, like 192.168.1.1. |
| | secondary dns | | <None>, ... | Accepts in IP address in dotted notation, like 192.168.1.1. |
| | mtu | | | Default: 1500 bytes |
| ip | ip time to live | | | Default: 64 hops |
| | multicast time to live | | | Default: 1 hops |

| Group Name (continued) | Group Item | Value Name | Value Options | Additional Information |
|---|--------------|------------|--|--|
| line (<i>"Instance"</i> attribute is a number.) | name | | | |
| | interface | | rs232, rs485 half-duplex, rs485 full-duplex, usb-cdc-acm | Default: |
| | termination | | enable, disable | Default: disable |
| | state | | enable, disable | Default: depends on instance |
| | protocol | | none, tunnel | Default: |
| | baud rate | | | Default: 9600 bits per second |
| | parity | | even, none, odd | Default: none |
| | data bits | | 7, 8 | Default: 8 |
| | stop bits | | 1, 2 | Default: 1 |
| | flow control | | none, hardware, software | Default: none |
| | xon char | | | Accepts a control character, for example, <code>&#60;control&#62;A</code> represents control-A Default: <code><control>Q</code> |
| | xoff char | | | Accepts a control character, for example, <code>&#60;control&#62;A</code> represents control-A Default: <code><control>S</code> |
| | gap timer | | <code>&#60;None&#62;, ...</code> | Default: <code><None></code> |
| | threshold | | | Default: 56 bytes |
| rss | feed | | enable, disable | Default: disable |
| | persist | | enable, disable | Default: disable |
| | max entries | | | Default: 100 |

| Group Name (continued) | Group Item | Value Name | Value Options | Additional Information |
|---|--------------------|------------|--------------------------------|---|
| serial command mode ("Instance" attribute is a number.) | mode | | always, serial string, disable | Default: disable |
| | echo serial string | | enable, disable | Default: enable |
| | serial string | | | Sets a string that can be entered at boot time to enter command mode. This text may specify binary characters. Within [] use binary decimal up to 255 or hex up to 0xFF. Within {} specify decimal milliseconds time delay. |
| | signon message | | | Sets a sign-on message that is sent from the serial port when the device boots and when the line is in command mode. This text may specify binary characters. Within [] use binary decimal up to 255 or hex up to 0xFF. |
| | wait time | | | Default: 5000 milliseconds |
| smtp | from address | | | |
| | overriding domain | | | |
| | password | | | |
| | server address | | | |
| | server port | | | Default: 25 |
| | username | | | |

| Group Name (continued) | Group Item | Value Name | Value Options | Additional Information | |
|-------------------------|--------------|-------------------------|-----------------|------------------------|-----------------|
| snmp | snmpd | state | | | |
| | | version | | | |
| | | read community | | | |
| | | write community | | | |
| | | username | | | |
| | | security | | | |
| | | authentication protocol | | | |
| | | authentication password | | | |
| | | privacy protocol | | | |
| | | privacy password | | | |
| | | system contact | | | |
| | | system name | | | |
| | | system description | | | |
| | | system location | | | |
| | traps | community | | | Default: public |
| | | primary destination | | | |
| | | secondary destination | | | |
| | | version | | | |
| | | username | | | |
| | | security | | | |
| authentication protocol | | | | | |
| authentication password | | | | | |
| ssh | state | | enable, disable | Default: enable | |
| | port | | | Default: 22 | |
| | max sessions | | | Default: 3 | |

| Group Name (continued) | Group Item | Value Name | Value Options | Additional Information | |
|------------------------|---|------------------------------|-----------------|--|--|
| ssh client | delete known hosts | | enable, disable | If enabled, deletes any existing hosts before adding "known host". | |
| | known host delete | name | | Specify the known host to delete. | |
| | known host | public rsa key | | | |
| | | public dsa key | | | |
| | delete client users | | enable, disable | If enabled, deletes any existing client users before adding "client user". | |
| | client user delete | name | | Specify the user to delete. | |
| | client user | password | | | |
| | | remote command | | | |
| | | public rsa key | | | |
| | | private rsa key | | | |
| | | public dsa key | | | |
| | private dsa key | | | | |
| ssh server | host rsa keys | public key | | | |
| | | private key | | | |
| | host dsa keys | public key | | | |
| | | private key | | | |
| | delete authorized users | | enable, disable | | |
| | authorized user delete | name | | | |
| | authorized user | password | | | |
| | | public rsa key | | | |
| public dsa key | | | | | |
| ssl | credentials ("Instance" attribute is "zdv") | rsa certificate | | | |
| | | rsa certificate type | | | |
| | | rsa pfx password | | | |
| | | rsa private key | | Value is SECRET, hidden from user view. | |
| | | rsa private key type | | | |
| | | rsa private key pfx password | | | |
| | | dsa certificate | | | |
| | | dsa certificate type | | | |
| dsa pfx password | | | | | |

| Group Name (continued) | Group Item | Value Name | Value Options | Additional Information | |
|--|---|------------------------------|--|--|--|
| ssl (continued) | credentials (continued) | dsa private key | | Value is SECRET, hidden from user view. | |
| | | dsa private key type | | | |
| | | dsa private key pfx password | | | |
| | trusted authority ("Instance" attribute is a number) | certificate | | | |
| | | certificate type | | | |
| | | pfx password | | | |
| | intermediate authority ("Instance" attribute is a number) | certificate | | | |
| | | certificate type | | | |
| | | pfx password | | | |
| | delete all credentials | | enable, disable | If enabled, deletes any existing credentials before adding "credentials". | |
| delete all cas | | enable, disable | If enabled, deletes any existing trusted cas before adding "trusted ca". | | |
| syslog | state | | enable, disable | Default: disable | |
| | host | | | | |
| | remote port | | | Default: 514 | |
| | severity log level | | none, emergency, alert, critical, error, warning, notice, information, debug | Default: none | |
| telnet | state | | enable, disable | Default: enable | |
| | port | | | Default: 23 | |
| | max sessions | | | Default: 3 | |
| | authentication | | enable, disable | Default: disable | |
| terminal ("Instance" attribute is a number or "network") | terminal type | | | Default: UNKNOWN | |
| | login connect menu | | enable, disable | Default: disable | |
| | exit connect menu | | enable, disable | Default: disable | |
| | send break | | | Accepts a control character, for example, <code>&#60;control&#62;A</code> represents control-A | |
| | break duration | | | Default: 500 milliseconds | |
| | echo | | enable, disable | Default: enable | |

| Group Name (continued) | Group Item | Value Name | Value Options | Additional Information | |
|---|-----------------------|------------|--|--|---|
| tunnel accept ("Instance" attribute is a number.) | accept mode | | disable, always | Default: always | |
| | start character | | | Accepts a control character, for example, <code>&#60;control&#62;A</code> represents control-A Default: <code><control>B</code> | |
| | flush start character | | enable, disable | Default: enable | |
| | local port | | | Default: 0 | |
| | protocol | | tcp, ssh, telnet, tcp aes, ssl | Default: tcp | |
| | credentials | | | | |
| | tcp keep alive | | <code>&#60;None&#62;;, ...</code> | Default: 45000 milliseconds | |
| | aes encrypt key | | | Value is SECRET, hidden from user view. | |
| | aes decrypt key | | | Value is SECRET, hidden from user view. | |
| | flush serial | | enable, disable | Default: disable | |
| | block serial | | enable, disable | Default: disable | |
| | block network | | enable, disable | Default: disable | |
| | password | password | | | Value is SECRET, hidden from user view. |
| | | prompt | | enable, disable | Default: disable |
| | email connect | | <code>&#60;None&#62;;, ...</code> | Default: <code><None></code> | |
| | email disconnect | | <code>&#60;None&#62;;, ...</code> | Default: <code><None></code> | |
| | cp output | group | | | |
| connection value | | | | | |
| disconnection value | | | | | |
| tunnel connect ("Instance" attribute is a number.) | connect mode | | disable, always, any character, start character, modem control asserted, modem emulation | Default: disable | |
| | start character | | | Accepts a control character, for example, <code>&#60;control&#62;A</code> represents control-A Default: <code><control>B</code> | |
| | flush start character | | enable, disable | Default: enable | |
| | local port | | <code>&#60;Random&#62;;, ...</code> | Default: <code><Random></code> | |

| Group Name (continued) | Group Item | Value Name | Value Options | Additional Information |
|--|--|----------------------|--|---|
| tunnel connect ("Instance" attribute is a number.) (continued) | host ("Instance" attribute is a number) | address | | |
| | | port | <None>;, ... | Default: <None> |
| | | protocol | tcp, udp, ssh, telnet, tcp aes, udp aes, ssl | Default: tcp |
| | | ssh username | | |
| | | credentials | | |
| | | validate certificate | enable, disable | Default: enable |
| | | tcp keep alive | <None>;, ... | Default: 45000 milliseconds |
| | | aes encrypt key | | Value is SECRET, hidden from user view. |
| | | aes decrypt key | | Value is SECRET, hidden from user view. |
| | host mode | | sequential, simultaneous | Default: sequential |
| | reconnect time | | | Default: 15000 milliseconds |
| | flush serial | | enable, disable | Default: disable |
| | block serial | | enable, disable | Default: disable |
| | block network | | enable, disable | Default: disable |
| | email connect | | <None>;, ... | Default: <None> |
| | email disconnect | | <None>;, ... | Default: <None> |
| | cp output | group | | |
| connection value | | | | |
| disconnection value | | | | |
| tunnel disconnect ("Instance" attribute is a number.) | stop character | | | Accepts a control character, for example, <control>A represents control-A |
| | flush stop character | | enable, disable | Default: enable |
| | modem control | | enable, disable | Default: disable |
| | timeout | | | Default: 0 milliseconds |
| | flush serial | | enable, disable | Default: disable |

| Group Name (continued) | Group Item | Value Name | Value Options | Additional Information |
|---|---------------------------------|------------|--|---|
| tunnel modem ("Instance" attribute is a number.) | echo pluses | | enable, disable | Default: disable |
| | echo commands | | enable, disable | Default: enable |
| | verbose response | | enable, disable | Default: enable |
| | response type | | text, numeric | Default: text |
| | error unknown commands | | enable, disable | Default: disable |
| | incoming connection | | disabled, automatic, manual | Default: disabled |
| | connect string | | | |
| | display remote ip | | enable, disable | Default: disable |
| tunnel packing ("Instance" attribute is a number.) | packing mode | | disable, timeout, send character | Default: disable |
| | timeout | | | Default: 1000 milliseconds |
| | threshold | | | Default: 512 bytes |
| | send character | | | Accepts a control character, for example, <code>&#60;control&#62;A</code> represents control-A Default: <code><control> M</code> |
| | trailing character | | | Accepts a control character, for example, <code>&#60;control&#62;A</code> represents control-A |
| tunnel serial ("Instance" attribute is a number.) | dtr | | asserted while connected, continuously asserted, unasserted, truport | Default: asserted while connected |
| xml import control | restore factory configuration | | enable, disable | |
| | delete cpm groups | | | |
| | delete http authentication uris | | enable, disable | Deletes existing HTTP authentication URIs before importing new ones. |
| | http authentication uri delete | name | | Deletes the specified HTTP authentication URI. |
| | reboot | | enable, disable | Reboots after importing. |

XML Status Record Groups and Items

[Table 4-8](#) lists the supported XML Status Record (XSR) groups and items. These groups and items show the status of the device in XML form and can only be exported. The XSR schema differs slightly from the XCR groups and items in that the XSR allows groups within groups.

Note: The Valid Values column of [Table 4-8](#) indicates the default value.

Table 4-8 XSR Group and Items

| Group Name | Item Name | Value Name | Valid Values |
|---|--------------|-------------------|---|
| arp | arp entry | ip address | ip address in format nnn.nnn.nnn.nnn |
| | | mac address | mac address in format xx:xx:xx:xx:xx:xx |
| | | type | dynamic or static |
| | | interface | eth0 or wlan0 |
| clock | time | | real time clock time in format hh:mm:ss <timezone> |
| | date | | real time clock date in format dayofweek day month year |
| | timezone | zone offset | |
| device | product info | product type | Lantronix PremierWave SE1000 |
| | | serial number | 12 hex digits |
| | | firmware version | string in version format like 7.3.0.1R7 |
| | | uptime | elapsed time in format d days hh:mm:ss |
| | | permanent config | saved or unsaved |
| email ("Instance" attribute is "<decimal>") | success | sent | decimal number |
| | | sent with retries | decimal number |
| | failed | | decimal number |
| | queued | | decimal number |
| email log ("Instance" attribute is "<decimal>") | entry | time | timestamp in format d days hh:mm:ss |
| | | log | string |
| hardware | cpu | speed | string |
| | | type | string |
| | memory | flash size | decimal number |
| | | ram size | decimal number |

| Group Name (continued) | Item Name | Value Name | Valid Values |
|------------------------|---|------------------|----------------|
| http | state | | |
| | logging | entries bytes | |
| http log | totals | entries | decimal number |
| | | bytes | decimal number |
| | entry ("Instance" attribute is "<decimal>" or number) | | String |
| icmp | snmp | InMsgs | decimal number |
| | | InErrors | decimal number |
| | | InDestUnreachs | decimal number |
| | | InTimeExcds | decimal number |
| | | InParmProbs | decimal number |
| | | InSrcQuenchs | decimal number |
| | | InRedirects | decimal number |
| | | InEchos | decimal number |
| | | InEchoReps | decimal number |
| | | InTimestamps | decimal number |
| | | InTimestampReps | decimal number |
| | | InAddrMasks | decimal number |
| | | InAddrMaskReps | decimal number |
| | | OutMsgs | decimal number |
| | | OutErrors | decimal number |
| | | OutDestUnreachs | decimal number |
| | | OutTimeExcds | decimal number |
| | | OutParmProbs | decimal number |
| | | OutSrcQuenchs | decimal number |
| | | OutRedirects | decimal number |
| | | OutEchos | decimal number |
| | | OutEchoReps | decimal number |
| | | OutTimestamps | decimal number |
| | | OutTimestampReps | decimal number |
| OutAddrMasks | decimal number | | |
| OutAddrMaskReps | decimal number | | |

| Group Name (continued) | Item Name | Value Name | Valid Values | |
|--|-----------------|-----------------|-----------------|----------------|
| interface ("Instance" attribute is "eth0") | default gateway | status | dotted notation | |
| | ip address | | dotted notation | |
| | generic | status | linkup | |
| | network mask | | dotted notation | |
| | receive | bytes | | decimal number |
| | | packets | | decimal number |
| | | errs | | decimal number |
| | | drop | | decimal number |
| | | fifo | | decimal number |
| | | frame | | decimal number |
| | | compressed | | decimal number |
| | | multicast | | decimal number |
| | transmit | bytes | | decimal number |
| | | packets | | decimal number |
| | | errs | | decimal number |
| | | drop | | decimal number |
| | | fifo | | decimal number |
| | | colls | | decimal number |
| | | carrier | | decimal number |
| | | compressed | | decimal number |
| ip | snmp | Forwarding | decimal number | |
| | | DefaultTTL | decimal number | |
| | | InReceives | decimal number | |
| | | InHdrErrors | decimal number | |
| | | InAddrErrors | decimal number | |
| | | ForwDatagrams | decimal number | |
| | | InUnknownProtos | decimal number | |
| | | InDiscards | decimal number | |
| | | InDelivers | decimal number | |
| | | OutRequests | decimal number | |
| | | OutDiscards | decimal number | |
| | | OutNoRoutes | decimal number | |
| | | ReasmTimeout | decimal number | |
| | | ReasmReqds | decimal number | |
| | | ReasmOKs | decimal number | |
| | | ReasmFails | decimal number | |
| | | FragOKs | decimal number | |
| FragFails | decimal number | | | |
| FragCreates | decimal number | | | |

| Group Name (continued) | Item Name | Value Name | Valid Values |
|---|-------------|--------------------------|---|
| ip (continued) | netstat | InNoRoutes | decimal number |
| | | InTruncatedPkts | decimal number |
| | | InMcastPkts | decimal number |
| | | OutMcastPkts | decimal number |
| | | InBcastPkts | decimal number |
| | | OutBcastPkts | decimal number |
| | | InOctets | decimal number |
| | | OutOctets | decimal number |
| | | InMcastOctets | decimal number |
| | | OutMcastOctets | decimal number |
| | | InBcastOctets | decimal number |
| | | OutBcastOctets | decimal number |
| ip sockets | ip socket | protocol | tcp or udp |
| | | rx queue | decimal number |
| | | tx queue | decimal number |
| | | local address | ip address in format nnn.nnn.nnn.nnn |
| | | local port | decimal number |
| | | remote address | ip address in format nnn.nnn.nnn.nnn |
| | | remote port | decimal number or * |
| | | state | LISTEN, SYN_RECVD, SYN_SENT, ESTABLISHED, CLOSE_WAIT, LAST_ACK, FIN_WAIT_1, FIN_WAIT_2, CLOSING, or TIME_WAIT. |
| line ("Instance" attribute is "<decimal>") | receiver | bytes | decimal number |
| | | breaks | decimal number |
| | | parity errors | decimal number |
| | | framing errors | decimal number |
| | | overrun errors | decimal number |
| | | no receive buffer errors | decimal number |
| | | queued bytes | decimal number |
| | | flow control | go, stop, or n/a |
| | transmitter | bytes | decimal number |
| | | breaks | decimal number |
| | | queued bytes | decimal number |
| | | flow control | go, stop, or n/a |
| | line levels | cts input | asserted or not asserted |
| | | rts output | asserted or not asserted |
| | | dsr input | asserted or not asserted |
| | | dtr output | asserted or not asserted |

| Group Name (continued) | Item Name | Value Name | Valid Values |
|---------------------------------------|---|-------------------|---|
| line (group nested within line above) | state | | enable or disable |
| | protocol | | Tunnel or None. |
| | baud rate | | <decimal> bits per second |
| | parity | | None, Odd, or Even |
| | data bits | | 7 or 8 |
| | stop bits | | 1 or 2 |
| | flow control | | None, Hardware, or Software |
| | xon char | | of form <control> ;Q |
| | xoff char | | of form <control> ;S |
| memory | main heap | total memory | decimal number of bytes |
| | | available memory | decimal number of bytes |
| processes | process ("Instance" attribute is "<decimal>") | stack used | decimal number |
| | | stack size | decimal number |
| | | cpu % | decimal number |
| | | thread name | String |
| query port | last connection | ip address | ip address in format nnn.nnn.nnn.nnn |
| | | port | decimal number |
| | in | discoveries | decimal number |
| | | unknown queries | decimal number |
| | | erroneous packets | decimal number |
| | out | discovery replies | decimal number |
| | | errors | decimal number |
| | status | enabled, disabled | |
| rss | url | | string in the form of a web url |
| | data | entries | decimal number |
| | | bytes | decimal number |
| sessions | line ("Instance" attribute is "<number>") | baud | |
| | | parity | |
| | | data bits | |
| | | stop bits | |
| | | flow control | |

| Group Name (continued) | Item Name | Value Name | Valid Values |
|---------------------------|------------------|----------------|----------------|
| tcp | snmp | RtoAlgorithm | decimal number |
| | | RtoMin | decimal number |
| | | RtoMax | decimal number |
| | | MaxConn | decimal number |
| | | ActiveOpens | decimal number |
| | | PassiveOpens | decimal number |
| | | AttemptFails | decimal number |
| | | EstabResets | decimal number |
| | | CurrEstab | decimal number |
| | | InSegs | decimal number |
| | | OutSegs | decimal number |
| | | RetransSegs | decimal number |
| | | InErrs | decimal number |
| | | OutRsts | decimal number |
| | | netstat | SyncookiesSent |
| | SyncookiesRecv | | decimal number |
| | SyncookiesFailed | | decimal number |
| | EmbryonicRsts | | decimal number |
| | PruneCalled | | decimal number |
| | RcvPruned | | decimal number |
| | OfoPruned | | decimal number |
| | OutOfWindowIcmps | | decimal number |
| | LockDroppedIcmps | | decimal number |
| | ArpFilter | | decimal number |
| | TW | | decimal number |
| | TWRecycled | | decimal number |
| | TWKilled | | decimal number |
| | PAWSPassive | | decimal number |
| | PAWSActive | | decimal number |
| | PAWSEstab | | decimal number |
| | DelayedACKs | | decimal number |
| | DelayedACKLocked | | decimal number |
| | DelayedACKLost | | decimal number |
| | ListenOverflows | | decimal number |
| | ListenDrops | | decimal number |
| | TCPPrequeued | decimal number | |
| TCPDirectCopyFromBacklog | decimal number | | |
| TCPDirectCopyFromPrequeue | decimal number | | |
| TCPPrequeueDropped | decimal number | | |
| TCPHPHits | decimal number | | |

| Group Name (continued) | Item Name | Value Name | Valid Values |
|------------------------|---------------------|---------------------|----------------|
| tcp (continued) | netstat (continued) | TCPHPHitsToUser | decimal number |
| | | TCPPureAcks | decimal number |
| | | TCPHPAcks | decimal number |
| | | TCPRenoRecovery | decimal number |
| | | TCPsackRecovery | decimal number |
| | | TCPsACKReneging | decimal number |
| | | TCPFACKReorder | decimal number |
| | | TCPsACKReorder | decimal number |
| | | TCPRenoReorder | decimal number |
| | | TCPTSReorder | decimal number |
| | | TCPFullUndo | decimal number |
| | | TCPPartialUndo | decimal number |
| | | TCPDSACKUndo | decimal number |
| | | TCPLossUndo | decimal number |
| | | TCPLoss | decimal number |
| | | TCPLostRetransmit | decimal number |
| | | TCPRenoFailures | decimal number |
| | | TCPsackFailures | decimal number |
| | | TCPLossFailures | decimal number |
| | | TCPFastRetrans | decimal number |
| | | TCPForwardRetrans | decimal number |
| | | TCPSlowStartRetrans | decimal number |
| | | TCPTimeouts | decimal number |
| | | TCPRenoRecoveryFail | decimal number |
| | | TCPsackRecoveryFail | decimal number |
| | | TCPSchedulerFailed | decimal number |
| | | TCPRcvCollapsed | decimal number |
| | | TCPDSACKOldSent | decimal number |
| | | TCPDSACKOfoSent | decimal number |
| | | TCPDSACKRecv | decimal number |
| | | TCPDSACKOfoRecv | decimal number |
| | | TCPAbortOnSyn | decimal number |
| | | TCPAbortOnData | decimal number |
| | | TCPAbortOnClose | decimal number |
| | | TCPAbortOnMemory | decimal number |
| | | TCPAbortOnTimeout | decimal number |
| | | TCPAbortOnLinger | decimal number |
| | | TCPAbortFailed | decimal number |
| | | TCPMemoryPressures | decimal number |
| | | TCPsACKDiscard | decimal number |
| TCPDSACKIgnoredOld | decimal number | | |
| TCPDSACKIgnoredNoUndo | decimal number | | |

| Group Name (continued) | Item Name | Value Name | Valid Values |
|---|--|---------------------------|--|
| tcp (continued) | netstat (continued) | TCPSpuriousRTOs | decimal number |
| | | TCPMD5NotFound | decimal number |
| | | TCPMD5Unexpected | decimal number |
| | | TCPsackShifted | decimal number |
| | | TCPsackMerged | decimal number |
| | | TCPsackShiftFallback | decimal number |
| | | TCPBacklogDrop | decimal number |
| | | TCPMinTTLDrop | decimal number |
| | | TCPDeferAcceptDrop | decimal number |
| | | IPReversePathFilter | decimal number |
| | | TCPTimeWaitOverflow | decimal number |
| tunnel ("Instance" attribute is a number.) | aggregate | completed connects | decimal number |
| | | completed accepts | decimal number |
| | | disconnects | decimal number |
| | | dropped connects | decimal number |
| | | dropped accepts | decimal number |
| | | octets from | decimal number |
| | | octets from network | decimal number |
| | | connect 0 connection time | elapsed time in format d days hh:mm:ss |
| | | connect 1 connection time | elapsed time in format d days hh:mm:ss |
| | | connect 2 connection time | elapsed time in format d days hh:mm:ss |
| | | connect 3 connection time | elapsed time in format d days hh:mm:ss |
| | | connect 4 connection time | elapsed time in format d days hh:mm:ss |
| | | connect 5 connection time | elapsed time in format d days hh:mm:ss |
| | | connect 6 connection time | elapsed time in format d days hh:mm:ss |
| | | connect 7 connection time | elapsed time in format d days hh:mm:ss |
| connect 8 connection time | elapsed time in format d days hh:mm:ss | | |
| connect 9 connection time | elapsed time in format d days hh:mm:ss | | |
| connect 10 connection time | elapsed time in format d days hh:mm:ss | | |
| connect 11 connection time | elapsed time in format d days hh:mm:ss | | |
| connect 12 connection time | elapsed time in format d days hh:mm:ss | | |

| Group Name (continued) | Item Name | Value Name | Valid Values |
|--|------------------------|------------------------------|--|
| tunnel ("Instance" attribute is a number.) (continued) | aggregate (continued) | connect 13 connection time | elapsed time in format d days hh:mm:ss |
| | | connect 14 connection time | elapsed time in format d days hh:mm:ss |
| | | connect 15 connection time | elapsed time in format d days hh:mm:ss |
| | | accept connection time | elapsed time in format d days hh:mm:ss |
| | | connect dns address changes | decimal number |
| | | connect dns address invalids | decimal number |
| tunnel modem | echo commands | enable, disable | |
| | verbose response | enable, disable | |
| | response type | | |
| | error unknown commands | enable, disable | |
| | incoming connection | | |
| udp | snmp | InDatagrams | decimal number |
| | | NoPorts | decimal number |
| | | InErrors | decimal number |
| | | OutDatagrams | decimal number |
| | | RcvbufErrors | decimal number |
| | | SndbufErrors | decimal number |
| xsr | out | bytes | decimal number |
| | | lines | decimal number |
| | | elements | decimal number |
| | errors | | decimal number |

5: Commands and Levels

Click the level in the tree structure and it will take you to the command list for that level.

[root](#)

- [enable \(enable\)](#)
 - [configure \(config\)](#)
 - [arp \(config-arp\)](#)
 - [cli \(config-cli\)](#)
 - [ssh \(config-cli-ssh\)](#)
 - [telnet \(config-cli-telnet\)](#)
 - [clock \(config-clock\)](#)
 - [ntp \(config-clock-ntp\)](#)
 - [diagnostics \(config-diagnostics\)](#)
 - [log \(config-diagnostics-log\)](#)
 - [discovery \(config-discovery\)](#)
 - [ftp \(config-ftp\)](#)
 - [host 1 \(config-host:1\)](#)
 - [host 2 \(config-host:2\)](#)
 - [host 3 \(config-host:3\)](#)
 - [host 4 \(config-host:4\)](#)
 - [host 5 \(config-host:5\)](#)
 - [host 6 \(config-host:6\)](#)
 - [host 7 \(config-host:7\)](#)
 - [host 8 \(config-host:8\)](#)
 - [host 9 \(config-host:9\)](#)
 - [host 10 \(config-host:10\)](#)
 - [host 11 \(config-host:11\)](#)
 - [host 12 \(config-host:12\)](#)
 - [host 13 \(config-host:13\)](#)
 - [host 14 \(config-host:14\)](#)
 - [host 15 \(config-host:15\)](#)
 - [host 16 \(config-host:16\)](#)
 - [host 17 \(config-host:17\)](#)
 - [host 18 \(config-host:18\)](#)
 - [host 19 \(config-host:19\)](#)
 - [host 20 \(config-host:20\)](#)
 - [host 21 \(config-host:21\)](#)
 - [host 22 \(config-host:22\)](#)
 - [host 23 \(config-host:23\)](#)
 - [host 24 \(config-host:24\)](#)
 - [host 25 \(config-host:25\)](#)
 - [host 26 \(config-host:26\)](#)
 - [host 27 \(config-host:27\)](#)
 - [host 28 \(config-host:28\)](#)
 - [host 29 \(config-host:29\)](#)
 - [host 30 \(config-host:30\)](#)
 - [host 31 \(config-host:31\)](#)
 - [host 32 \(config-host:32\)](#)
 - [http \(config-http\)](#)
 - [icmp \(config-icmp\)](#)
 - [if 1 \(config-if:eth0\)](#)

- [link \(config-ethernet:eth0\)](#)
- [ip \(config-ip\)](#)
- [rss \(config-rss\)](#)
- [smtp \(config-smtp\)](#)
- [snmp \(config-snmp\)](#)
 - [snmpd \(config-snmp-snmpd\)](#)
 - [traps \(config-snmp-traps\)](#)
- [syslog \(config-syslog\)](#)
- [terminal 1 \(config-terminal:1\)](#)
- [terminal 2 \(config-terminal:2\)](#)
- [terminal 3 \(config-terminal:3\)](#)
- [terminal network \(config-terminal:network\)](#)
- [cpm \(cpm\)](#)
- [device \(device\)](#)
- [dns \(dns\)](#)
- [email 1 \(email:1\)](#)
 - [cp \(email-cp:1\)](#)
- [email 2 \(email:2\)](#)
 - [cp \(email-cp:2\)](#)
- [email 3 \(email:3\)](#)
 - [cp \(email-cp:3\)](#)
- [email 4 \(email:4\)](#)
 - [cp \(email-cp:4\)](#)
- [email 5 \(email:5\)](#)
 - [cp \(email-cp:5\)](#)
- [email 6 \(email:6\)](#)
 - [cp \(email-cp:6\)](#)
- [email 7 \(email:7\)](#)
 - [cp \(email-cp:7\)](#)
- [email 8 \(email:8\)](#)
 - [cp \(email-cp:8\)](#)
- [email 9 \(email:9\)](#)
 - [cp \(email-cp:9\)](#)
- [email 10 \(email:10\)](#)
 - [cp \(email-cp:10\)](#)
- [email 11 \(email:11\)](#)
 - [cp \(email-cp:11\)](#)
- [email 12 \(email:12\)](#)
 - [cp \(email-cp:12\)](#)
- [email 13 \(email:13\)](#)
 - [cp \(email-cp:13\)](#)
- [email 14 \(email:14\)](#)
 - [cp \(email-cp:14\)](#)
- [email 15 \(email:15\)](#)
 - [cp \(email-cp:15\)](#)
- [email 16 \(email:16\)](#)
 - [cp \(email-cp:16\)](#)
- [filesystem \(filesystem\)](#)
- [line 1 \(line:1\)](#)
- [line 2 \(line:2\)](#)
- [line 3 \(line:3\)](#)
- [ssh \(ssh\)](#)
 - [client \(ssh-client\)](#)

- [server \(ssh-server\)](#)
- [ssl \(ssl\)](#)
 - [credentials \(ssl-credentials\)](#)
 - [trusted authorities \(ssl-auth\)](#)
- [tunnel 1 \(tunnel:1\)](#)
 - [accept \(tunnel-accept:1\)](#)
 - [cp output \(tunnel-accept-cp_output:1\)](#)
 - [password \(tunnel-accept-password:1\)](#)
 - [connect \(tunnel-connect:1\)](#)
 - [cp output \(tunnel-connect-cp_output:1\)](#)
 - [host 1 \(tunnel-connect-host:1:1\)](#)
 - [host 2 \(tunnel-connect-host:1:2\)](#)
 - [host 3 \(tunnel-connect-host:1:3\)](#)
 - [host 4 \(tunnel-connect-host:1:4\)](#)
 - [host 5 \(tunnel-connect-host:1:5\)](#)
 - [host 6 \(tunnel-connect-host:1:6\)](#)
 - [host 7 \(tunnel-connect-host:1:7\)](#)
 - [host 8 \(tunnel-connect-host:1:8\)](#)
 - [host 9 \(tunnel-connect-host:1:9\)](#)
 - [host 10 \(tunnel-connect-host:1:10\)](#)
 - [host 11 \(tunnel-connect-host:1:11\)](#)
 - [host 12 \(tunnel-connect-host:1:12\)](#)
 - [host 13 \(tunnel-connect-host:1:13\)](#)
 - [host 14 \(tunnel-connect-host:1:14\)](#)
 - [host 15 \(tunnel-connect-host:1:15\)](#)
 - [host 16 \(tunnel-connect-host:1:16\)](#)
 - [disconnect \(tunnel-disconnect:1\)](#)
 - [modem \(tunnel-modem:1\)](#)
 - [packing \(tunnel-packing:1\)](#)
 - [serial \(tunnel-serial:1\)](#)
- [tunnel 2 \(tunnel:2\)](#)
 - [accept \(tunnel-accept:2\)](#)
 - [cp output \(tunnel-accept-cp_output:2\)](#)
 - [password \(tunnel-accept-password:2\)](#)
 - [connect \(tunnel-connect:2\)](#)
 - [cp output \(tunnel-connect-cp_output:2\)](#)
 - [host 1 \(tunnel-connect-host:2:1\)](#)
 - [host 2 \(tunnel-connect-host:2:2\)](#)
 - [host 3 \(tunnel-connect-host:2:3\)](#)
 - [host 4 \(tunnel-connect-host:2:4\)](#)
 - [host 5 \(tunnel-connect-host:2:5\)](#)
 - [host 6 \(tunnel-connect-host:2:6\)](#)
 - [host 7 \(tunnel-connect-host:2:7\)](#)
 - [host 8 \(tunnel-connect-host:2:8\)](#)
 - [host 9 \(tunnel-connect-host:2:9\)](#)
 - [host 10 \(tunnel-connect-host:2:10\)](#)
 - [host 11 \(tunnel-connect-host:2:11\)](#)
 - [host 12 \(tunnel-connect-host:2:12\)](#)
 - [host 13 \(tunnel-connect-host:2:13\)](#)
 - [host 14 \(tunnel-connect-host:2:14\)](#)
 - [host 15 \(tunnel-connect-host:2:15\)](#)
 - [host 16 \(tunnel-connect-host:2:16\)](#)
 - [disconnect \(tunnel-disconnect:2\)](#)

- [modem \(tunnel-modem:2\)](#)
- [packing \(tunnel-packing:2\)](#)
- [serial \(tunnel-serial:2\)](#)
- [tunnel 3 \(tunnel:3\)](#)
 - [accept \(tunnel-accept:3\)](#)
 - [cp output \(tunnel-accept-cp_output:3\)](#)
 - [password \(tunnel-accept-password:3\)](#)
 - [connect \(tunnel-connect:3\)](#)
 - [cp output \(tunnel-connect-cp_output:3\)](#)
 - [host 1 \(tunnel-connect-host:3:1\)](#)
 - [host 2 \(tunnel-connect-host:3:2\)](#)
 - [host 3 \(tunnel-connect-host:3:3\)](#)
 - [host 4 \(tunnel-connect-host:3:4\)](#)
 - [host 5 \(tunnel-connect-host:3:5\)](#)
 - [host 6 \(tunnel-connect-host:3:6\)](#)
 - [host 7 \(tunnel-connect-host:3:7\)](#)
 - [host 8 \(tunnel-connect-host:3:8\)](#)
 - [host 9 \(tunnel-connect-host:3:9\)](#)
 - [host 10 \(tunnel-connect-host:3:10\)](#)
 - [host 11 \(tunnel-connect-host:3:11\)](#)
 - [host 12 \(tunnel-connect-host:3:12\)](#)
 - [host 13 \(tunnel-connect-host:3:13\)](#)
 - [host 14 \(tunnel-connect-host:3:14\)](#)
 - [host 15 \(tunnel-connect-host:3:15\)](#)
 - [host 16 \(tunnel-connect-host:3:16\)](#)
 - [disconnect \(tunnel-disconnect:3\)](#)
 - [modem \(tunnel-modem:3\)](#)
 - [packing \(tunnel-packing:3\)](#)
 - [serial \(tunnel-serial:3\)](#)
- [xml \(xml\)](#)

Table 5-1 Commands and Levels

| accept (tunnel-accept:3) level commands | |
|---|--|
| accept mode always | Enables the tunneling server to always accept tunneling connections. |
| accept mode any character | Enables the tunneling server to accept tunneling connections only when a character is received through the corresponding line (serial port). |
| accept mode disable | Disables accept mode tunneling. |
| accept mode modem control asserted | Enables the tunneling server to accept tunneling connections when the modem control pin is asserted. |
| accept mode modem emulation | Enables modem emulation for accept mode tunneling. |
| accept mode start character | Enables accept mode tunneling when the configured start character is received on the line. |
| aes decrypt key <hexadecimal> | Sets the accept tunnel AES decrypt key with up to 16 bytes. Each byte is represented by two adjacent hex digits. Bytes may run together or be separated by optional punctuation: 123ABC "12 3A BC" 12,3A,BC 12.3a.bc 12:3a:bc Note that quotes must enclose the value if it contains spaces. |
| aes decrypt key text <text> | Sets the accept tunnel AES decrypt key with up to 16 bytes. Each byte is represented by a single character. Note that quotes must enclose the value if it contains spaces. |
| aes encrypt key <hexadecimal> | Sets the accept tunnel AES encrypt key with up to 16 bytes. Each byte is represented by two adjacent hex digits. Bytes may run together or be separated by optional punctuation: 123ABC "12 3A BC" 12,3A,BC 12.3a.bc 12:3a:bc Note that quotes must enclose the value if it contains spaces. |
| aes encrypt key text <text> | Sets the accept tunnel AES encrypt key with up to 16 bytes. Each byte is represented by a single character. Note that quotes must enclose the value if it contains spaces. |
| block network disable | Forwards (tunnels) network data in accept mode tunneling. |
| block network enable | Discards all data coming in from the accept mode tunnel before forwarding it to the serial interface (generally used for debugging). |
| block serial disable | Forwards (tunnels) serial data in accept mode tunneling. |
| block serial enable | Discards all data coming in from the serial interface before forwarding it to the accept mode tunnel (generally used for debugging). |
| clrscrm | Clears the screen. |
| cp output | Enters the next lower level. |
| credentials <text> | Selects the RSA/DSA certificates by name for the SSL server. |
| default accept mode | Restores the default accept mode as "always". |
| default local port | Uses the default port number as the local port for accept mode tunneling. The default port is 10000 + #, where # is the line number for this tunnel. |
| default protocol | Restores the default protocol as "TCP". |

| | |
|-------------------------------|---|
| default start character | Defaults the accept mode start character. |
| default tcp keep alive | Restores the default 45 second accept mode TCP keep alive timeout. |
| email connect <number> | Sets an email profile to use to send an email alert upon establishing an accept mode tunnel. <number> = the number of the email profile to use. |
| email disconnect <number> | Sets an email profile to use to send an email alert upon closing an accept mode tunnel. <number> = the number of the email profile to use. |
| exit | Returns to the tunnel level. |
| flush serial disable | Characters already in the serial data buffer are retained upon establishing an accept mode tunneling connection. |
| flush serial enable | Flushes the serial data buffer upon establishing an accept mode tunneling connection. |
| flush start character disable | Enables forwarding of the accept start character into the network. |
| flush start character enable | Disables forwarding of the accept start character into the network. |
| kill connection | Disconnects the active accept mode tunneling connection. |
| local port <number> | Sets the port to use for accept mode tunneling. <number> = number of the port to use. |
| no aes decrypt key | Removes the accept tunnel AES decrypt key. |
| no aes encrypt key | Removes the accept tunnel AES encrypt key. |
| no credentials | Clears the RSA/DSA certificate selection. |
| no email connect | Discontinues sending email alerts upon establishing an accept mode tunnel. |
| no email disconnect | Discontinues sending email alerts upon closing an accept mode tunnel. |
| no tcp keep alive | Disables the accept mode TCP keep alive timeout. |
| password | Enters the next lower level. |
| protocol ssh | Uses SSH protocol for accept mode tunneling. |
| protocol ssl | Uses SSL protocol for accept mode tunneling. |
| protocol tcp | Uses TCP protocol for accept mode tunneling. |
| protocol tcp aes | Uses TCP protocol with AES encryption for accept mode tunneling. |
| protocol telnet | Uses Telnet protocol (with IAC) for accept mode tunneling. |
| show | Displays the current configuration. |
| show history | Displays the last 20 commands entered during the current CLI session. |
| show status | Displays tunnel accept status. |
| start character <control> | Sets the accept mode start character. The character may be input as text, control, decimal, or hex. A control character has the form <control>C. A decimal value character has the form \99. A hex value character has the form 0xFF. |
| tcp keep alive <milliseconds> | Enables TCP keep alive for accept mode tunneling and sets the timer. <milliseconds> = timer value, in milliseconds. |

| | |
|--|--|
| write | Stores the current configuration in permanent memory. |
| accept (tunnel-accept:2) level commands | |
| accept mode always | Enables the tunneling server to always accept tunneling connections. |
| accept mode any character | Enables the tunneling server to accept tunneling connections only when a character is received through the corresponding line (serial port). |
| accept mode disable | Disables accept mode tunneling. |
| accept mode modem control asserted | Enables the tunneling server to accept tunneling connections when the modem control pin is asserted. |
| accept mode modem emulation | Enables modem emulation for accept mode tunneling. |
| accept mode start character | Enables accept mode tunneling when the configured start character is received on the line. |
| aes decrypt key <hexadecimal> | Sets the accept tunnel AES decrypt key with up to 16 bytes. Each byte is represented by two adjacent hex digits. Bytes may run together or be separated by optional punctuation: 123ABC "12 3A BC" 12,3A,BC 12.3a.bc 12:3a:bc Note that quotes must enclose the value if it contains spaces. |
| aes decrypt key text <text> | Sets the accept tunnel AES decrypt key with up to 16 bytes. Each byte is represented by a single character. Note that quotes must enclose the value if it contains spaces. |
| aes encrypt key <hexadecimal> | Sets the accept tunnel AES encrypt key with up to 16 bytes. Each byte is represented by two adjacent hex digits. Bytes may run together or be separated by optional punctuation: 123ABC "12 3A BC" 12,3A,BC 12.3a.bc 12:3a:bc Note that quotes must enclose the value if it contains spaces. |
| aes encrypt key text <text> | Sets the accept tunnel AES encrypt key with up to 16 bytes. Each byte is represented by a single character. Note that quotes must enclose the value if it contains spaces. |
| block network disable | Forwards (tunnels) network data in accept mode tunneling. |
| block network enable | Discards all data coming in from the accept mode tunnel before forwarding it to the serial interface (generally used for debugging). |
| block serial disable | Forwards (tunnels) serial data in accept mode tunneling. |
| block serial enable | Discards all data coming in from the serial interface before forwarding it to the accept mode tunnel (generally used for debugging). |
| clrscrn | Clears the screen. |
| cp output | Enters the next lower level. |
| credentials <text> | Selects the RSA/DSA certificates by name for the SSL server. |
| default accept mode | Restores the default accept mode as "always". |
| default local port | Uses the default port number as the local port for accept mode tunneling. The default port is 10000 + #, where # is the line number for this tunnel. |
| default protocol | Restores the default protocol as "TCP". |
| default start character | Defaults the accept mode start character. |

| | |
|-------------------------------|---|
| default tcp keep alive | Restores the default 45 second accept mode TCP keep alive timeout. |
| email connect <number> | Sets an email profile to use to send an email alert upon establishing an accept mode tunnel. <number> = the number of the email profile to use. |
| email disconnect <number> | Sets an email profile to use to send an email alert upon closing an accept mode tunnel. <number> = the number of the email profile to use. |
| exit | Returns to the tunnel level. |
| flush serial disable | Characters already in the serial data buffer are retained upon establishing an accept mode tunneling connection. |
| flush serial enable | Flushes the serial data buffer upon establishing an accept mode tunneling connection. |
| flush start character disable | Enables forwarding of the accept start character into the network. |
| flush start character enable | Disables forwarding of the accept start character into the network. |
| kill connection | Disconnects the active accept mode tunneling connection. |
| local port <number> | Sets the port to use for accept mode tunneling. <number> = number of the port to use. |
| no aes decrypt key | Removes the accept tunnel AES decrypt key. |
| no aes encrypt key | Removes the accept tunnel AES encrypt key. |
| no credentials | Clears the RSA/DSA certificate selection. |
| no email connect | Discontinues sending email alerts upon establishing an accept mode tunnel. |
| no email disconnect | Discontinues sending email alerts upon closing an accept mode tunnel. |
| no tcp keep alive | Disables the accept mode TCP keep alive timeout. |
| password | Enters the next lower level. |
| protocol ssh | Uses SSH protocol for accept mode tunneling. |
| protocol ssl | Uses SSL protocol for accept mode tunneling. |
| protocol tcp | Uses TCP protocol for accept mode tunneling. |
| protocol tcp aes | Uses TCP protocol with AES encryption for accept mode tunneling. |
| protocol telnet | Uses Telnet protocol (with IAC) for accept mode tunneling. |
| show | Displays the current configuration. |
| show history | Displays the last 20 commands entered during the current CLI session. |
| show status | Displays tunnel accept status. |
| start character <control> | Sets the accept mode start character. The character may be input as text, control, decimal, or hex. A control character has the form <control>C. A decimal value character has the form \99. A hex value character has the form 0xFF. |
| tcp keep alive <milliseconds> | Enables TCP keep alive for accept mode tunneling and sets the timer. <milliseconds> = timer value, in milliseconds. |
| write | Stores the current configuration in permanent memory. |

| accept (tunnel-accept:1) level commands | |
|--|--|
| accept mode always | Enables the tunneling server to always accept tunneling connections. |
| accept mode any character | Enables the tunneling server to accept tunneling connections only when a character is received through the corresponding line (serial port). |
| accept mode disable | Disables accept mode tunneling. |
| accept mode modem control asserted | Enables the tunneling server to accept tunneling connections when the modem control pin is asserted. |
| accept mode modem emulation | Enables modem emulation for accept mode tunneling. |
| accept mode start character | Enables accept mode tunneling when the configured start character is received on the line. |
| aes decrypt key <hexadecimal> | Sets the accept tunnel AES decrypt key with up to 16 bytes. Each byte is represented by two adjacent hex digits. Bytes may run together or be separated by optional punctuation: 123ABC "12 3A BC" 12,3A,BC 12.3a.bc 12:3a:bc Note that quotes must enclose the value if it contains spaces. |
| aes decrypt key text <text> | Sets the accept tunnel AES decrypt key with up to 16 bytes. Each byte is represented by a single character. Note that quotes must enclose the value if it contains spaces. |
| aes encrypt key <hexadecimal> | Sets the accept tunnel AES encrypt key with up to 16 bytes. Each byte is represented by two adjacent hex digits. Bytes may run together or be separated by optional punctuation: 123ABC "12 3A BC" 12,3A,BC 12.3a.bc 12:3a:bc Note that quotes must enclose the value if it contains spaces. |
| aes encrypt key text <text> | Sets the accept tunnel AES encrypt key with up to 16 bytes. Each byte is represented by a single character. Note that quotes must enclose the value if it contains spaces. |
| block network disable | Forwards (tunnels) network data in accept mode tunneling. |
| block network enable | Discards all data coming in from the accept mode tunnel before forwarding it to the serial interface (generally used for debugging). |
| block serial disable | Forwards (tunnels) serial data in accept mode tunneling. |
| block serial enable | Discards all data coming in from the serial interface before forwarding it to the accept mode tunnel (generally used for debugging). |
| clrscrm | Clears the screen. |
| cp output | Enters the next lower level. |
| credentials <text> | Selects the RSA/DSA certificates by name for the SSL server. |
| default accept mode | Restores the default accept mode as "always". |
| default local port | Uses the default port number as the local port for accept mode tunneling. The default port is 10000 + #, where # is the line number for this tunnel. |
| default protocol | Restores the default protocol as "TCP". |
| default start character | Defaults the accept mode start character. |
| default tcp keep alive | Restores the default 45 second accept mode TCP keep |

| | |
|--|---|
| | alive timeout. |
| email connect <number> | Sets an email profile to use to send an email alert upon establishing an accept mode tunnel. <number> = the number of the email profile to use. |
| email disconnect <number> | Sets an email profile to use to send an email alert upon closing an accept mode tunnel. <number> = the number of the email profile to use. |
| exit | Returns to the tunnel level. |
| flush serial disable | Characters already in the serial data buffer are retained upon establishing an accept mode tunneling connection. |
| flush serial enable | Flushes the serial data buffer upon establishing an accept mode tunneling connection. |
| flush start character disable | Enables forwarding of the accept start character into the network. |
| flush start character enable | Disables forwarding of the accept start character into the network. |
| kill connection | Disconnects the active accept mode tunneling connection. |
| local port <number> | Sets the port to use for accept mode tunneling. <number> = number of the port to use. |
| no aes decrypt key | Removes the accept tunnel AES decrypt key. |
| no aes encrypt key | Removes the accept tunnel AES encrypt key. |
| no credentials | Clears the RSA/DSA certificate selection. |
| no email connect | Discontinues sending email alerts upon establishing an accept mode tunnel. |
| no email disconnect | Discontinues sending email alerts upon closing an accept mode tunnel. |
| no tcp keep alive | Disables the accept mode TCP keep alive timeout. |
| password | Enters the next lower level. |
| protocol ssh | Uses SSH protocol for accept mode tunneling. |
| protocol ssl | Uses SSL protocol for accept mode tunneling. |
| protocol tcp | Uses TCP protocol for accept mode tunneling. |
| protocol tcp aes | Uses TCP protocol with AES encryption for accept mode tunneling. |
| protocol telnet | Uses Telnet protocol (with IAC) for accept mode tunneling. |
| show | Displays the current configuration. |
| show history | Displays the last 20 commands entered during the current CLI session. |
| show status | Displays tunnel accept status. |
| start character <control> | Sets the accept mode start character. The character may be input as text, control, decimal, or hex. A control character has the form <control>C. A decimal value character has the form \99. A hex value character has the form 0xFF. |
| tcp keep alive <milliseconds> | Enables TCP keep alive for accept mode tunneling and sets the timer. <milliseconds> = timer value, in milliseconds. |
| write | Stores the current configuration in permanent memory. |
| arp (config-arp) level commands | |

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| add <IP address> <MAC address> | Adds an entry to the ARP table, mapping an IP address to a MAC address. <ip address> = IP address to be mapped. <mac address> = MAC address in colon-separated form. |
| clrscrn | Clears the screen. |
| exit | Exits to the configuration level. |
| remove all | Removes all entries from the ARP cache. |
| remove ip <IP address> | Removes an entry from the ARP cache. <ip address> = address of the entry being removed. |
| show cache | Displays the ARP cache table. |
| show history | Displays the last 20 commands entered during the current CLI session. |
| write | Stores the current configuration in permanent memory. |
| cli (config-cli) level commands | |
| clrscrn | Clears the screen. |
| default inactivity timeout | The default inactivity timeout will apply to CLI sessions. |
| default login password | Restores the default CLI login password. |
| default quit connect line | Restores the default string to quit the "connect line", "telnet", and "ssh" commands. |
| enable level password <text> | Sets the enable-level password. |
| exit | Exits to the configuration level. |
| inactivity timeout <minutes> | Sets the inactivity timeout for all CLI sessions. |
| line authentication disable | No password required for Line CLI users. |
| line authentication enable | Challenges the Line CLI user with a password. |
| login password <text> | Sets the CLI login password. |
| no enable level password | Removes the enable-level password. |
| no inactivity timeout | No inactivity timeout will apply to CLI sessions. |
| quit connect line <control> | Sets the string used to quit the "connect line", "telnet", and "ssh" commands. The characters may be input as text or control. A control character has the form <control>C. |
| show | Displays the current configuration. |
| show history | Displays the last 20 commands entered during the current CLI session. |
| ssh | Change to menu level for SSH configuration and status. |
| telnet | Change to menu level for Telnet configuration and status. |
| write | Stores the current configuration in permanent memory. |
| client (ssh-client) level commands | |
| clrscrn | Clears the screen. |
| default user <username> command | Restore the user command to the default login shell |
| delete all known hosts | Remove all known hosts |
| delete all users | Remove all users |
| delete known host <server> | Remove known host |
| delete user <username> | Delete the named user |
| exit | Exits to the ssh level. |
| known host <server> | Set known host RSA or DSA key |
| no known host <server> dsa | Remove known host DSA key |

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| no known host <server> rsa | Remove known host RSA key |
| no user <username> dsa | Remove user DSA key |
| no user <username> rsa | Remove user RSA key |
| show | Show SSH Client settings |
| show history | Displays the last 20 commands entered during the current CLI session. |
| show known host <server> | Show known host RSA and DSA keys |
| show user <username> | Show information for a user |
| user <username> | Set username and RSA or DSA keys |
| user <username> command <command> | Customizes the user command |
| user <username> generate dsa 1024 | Generate DSA public and private keys |
| user <username> generate dsa 512 | Generate DSA public and private keys |
| user <username> generate dsa 768 | Generate DSA public and private keys |
| user <username> generate rsa 1024 | Generate RSA public and private keys |
| user <username> generate rsa 512 | Generate RSA public and private keys |
| user <username> generate rsa 768 | Generate RSA public and private keys |
| user <username> password <password> | Set username with password and optional RSA or DSA keys |
| write | Stores the current configuration in permanent memory. |
| clock (config-clock) level commands | |
| clock set <time(hh:mm:ss)> <day (1-31)> <month text> <year> | Sets the system clock. |
| clock timezone | Shows possible time zone names. |
| clock timezone <time zone> | Sets the timezone to be displayed. Use "clock timezone" to show choices. |
| clrscrn | Clears the screen. |
| default clock timezone | Restores the default timezone, which is UTC. |
| default synchronization method | Restores the default time synchronization method (Manual). |
| exit | Exits to the configuration level. |
| ntp | Enters the next lower level. |
| show | Displays the current configuration. |
| show history | Displays the last 20 commands entered during the current CLI session. |
| show system clock | Displays the system clock. |
| synchronization method manual | Set time manually. |
| synchronization method sntp | Synchronize time with a NTP server. |
| write | Stores the current configuration in permanent memory. |
| configure (config) level commands | |
| arp | Changes to the command level for ARP configuration and status. |
| cli | Change to menu level for CLI configuration and status |
| clock | Change to menu level for Clock configuration and status |
| clrscrn | Clears the screen. |
| diagnostics | Enters the diagnostics level. |

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| discovery | Enters the discovery level. |
| exit | Exits to the enable level. |
| ftp | Enters the ftp level. |
| host <number> | Change to config host level |
| http | Enters the http level. |
| icmp | Changes to the command level for ICMP configuration and status. |
| if <instance> | Changes to the interface configuration level. |
| ip | Changes to the command level for IP configuration and status. |
| kill ssh <session> | Kills SSH session with index from "show sessions" |
| kill telnet <session> | Kills Telnet session with index from "show sessions" |
| rss | Change to menu level for RSS configuration and status |
| show | Displays system information. |
| show history | Displays the last 20 commands entered during the current CLI session. |
| show lines | Displays line information. |
| smtp | Changes to the command level for SMTP configuration and status. |
| snmp | Enters the snmp level. |
| syslog | Enters the syslog level. |
| terminal <line> | Enters the configure-terminal level. <line> = number of the terminal line (serial port) to be configured. |
| terminal network | Enters the configure-terminal level for the network. |
| write | Stores the current configuration in permanent memory. |
| connect (tunnel-connect:3) level commands | |
| block network disable | Forwards (tunnels) network data in connect mode tunneling. |
| block network enable | Discards all data coming in from the connect mode tunnel before forwarding it to the serial interface (generally used for debugging). |
| block serial disable | Forwards (tunnels) serial data in connect mode tunneling. |
| block serial enable | Discards all data coming in from the serial interface before forwarding it to the connect mode tunnel (generally used for debugging). |
| clrscrn | Clears the screen. |
| connect mode always | Enables the tunneling server to always establish tunneling connections. |
| connect mode any character | Enables the tunneling server to establish a tunneling connection when a character is received on the corresponding line (serial port). |
| connect mode disable | Disables connect mode tunneling. |
| connect mode modem control asserted | Enables the tunneling server to make tunneling connections when the modem control pin is asserted. |
| connect mode modem emulation | Enables modem emulation for connect mode tunneling. |
| connect mode start character | Enables connect mode tunneling when the configured start character is received on the line. |
| cp output | Enters the next lower level. |

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| default connect mode | Restores the default connect mode as "disable". |
| default host mode | Connects to the first host in the list that accepts the connection. |
| default local port | Uses a random port number as the local port for establishing tunneling connections to other devices. |
| default reconnect time | Restores the default reconnect time value for connect mode tunneling. |
| default start character | Defaults the connect mode start character. |
| email connect <number> | Sets an email profile to use to send an email alert upon establishing a connect mode tunnel. <number> = the number of the email profile to use. |
| email disconnect <number> | Sets an email profile to use to send an email alert upon closing a connect mode tunnel. <number> = the number of the email profile to use. |
| exit | Returns to the tunnel level. |
| flush serial disable | Characters already in the serial data buffer are retained upon establishing a connect mode tunneling connection. |
| flush serial enable | Flushes the serial data buffer upon establishing a connect mode tunneling connection. |
| flush start character disable | Enables forwarding of the connect start character into the network. |
| flush start character enable | Disables forwarding of the connect start character into the network. |
| host <instance> | Enters the next lower level. Specify the instance for the next lower level. |
| host mode sequential | Connects to the first host in the list that accepts the connection. |
| host mode simultaneous | Selects simultaneous connections to all hosts on the host list. |
| kill connection | Disconnects the active connect mode tunneling connection or connections. |
| local port <number> | Sets a specific port for use as the local port. <number> = the number of the port to use. |
| no email connect | Discontinues sending email alerts upon establishing a connect mode tunnel. |
| no email disconnect | Discontinues sending email alerts upon closing a connect mode tunnel. |
| promote host <number> | Promotes the identified host, exchanging it place with the host above it, to adjust the order of the defined hosts. |
| reconnect time <milliseconds> | Sets the reconnect time value for tunneling connections established by the device in milliseconds. <milliseconds> = timeout in milliseconds. |
| show | Displays the current configuration. |
| show history | Displays the last 20 commands entered during the current CLI session. |
| show status | Displays tunnel connect status. |
| start character <control> | Sets the connect mode start character. The character may be input as text, control, decimal, or hex. A control character has the form <control>C. A decimal value character has the form \99. A hex value character has the form 0xFF. |

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| write | Stores the current configuration in permanent memory. |
| connect (tunnel-connect:2) level commands | |
| block network disable | Forwards (tunnels) network data in connect mode tunneling. |
| block network enable | Discards all data coming in from the connect mode tunnel before forwarding it to the serial interface (generally used for debugging). |
| block serial disable | Forwards (tunnels) serial data in connect mode tunneling. |
| block serial enable | Discards all data coming in from the serial interface before forwarding it to the connect mode tunnel (generally used for debugging). |
| clrscrn | Clears the screen. |
| connect mode always | Enables the tunneling server to always establish tunneling connections. |
| connect mode any character | Enables the tunneling server to establish a tunneling connection when a character is received on the corresponding line (serial port). |
| connect mode disable | Disables connect mode tunneling. |
| connect mode modem control asserted | Enables the tunneling server to make tunneling connections when the modem control pin is asserted. |
| connect mode modem emulation | Enables modem emulation for connect mode tunneling. |
| connect mode start character | Enables connect mode tunneling when the configured start character is received on the line. |
| cp output | Enters the next lower level. |
| default connect mode | Restores the default connect mode as "disable". |
| default host mode | Connects to the first host in the list that accepts the connection. |
| default local port | Uses a random port number as the local port for establishing tunneling connections to other devices. |
| default reconnect time | Restores the default reconnect time value for connect mode tunneling. |
| default start character | Defaults the connect mode start character. |
| email connect <number> | Sets an email profile to use to send an email alert upon establishing a connect mode tunnel. <number> = the number of the email profile to use. |
| email disconnect <number> | Sets an email profile to use to send an email alert upon closing a connect mode tunnel. <number> = the number of the email profile to use. |
| exit | Returns to the tunnel level. |
| flush serial disable | Characters already in the serial data buffer are retained upon establishing a connect mode tunneling connection. |
| flush serial enable | Flushes the serial data buffer upon establishing a connect mode tunneling connection. |
| flush start character disable | Enables forwarding of the connect start character into the network. |
| flush start character enable | Disables forwarding of the connect start character into the network. |
| host <instance> | Enters the next lower level. Specify the instance for the next lower level. |
| host mode sequential | Connects to the first host in the list that accepts the con- |

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| | nection. |
| host mode simultaneous | Selects simultaneous connections to all hosts on the host list. |
| kill connection | Disconnects the active connect mode tunneling connection or connections. |
| local port <number> | Sets a specific port for use as the local port. <number> = the number of the port to use. |
| no email connect | Discontinues sending email alerts upon establishing a connect mode tunnel. |
| no email disconnect | Discontinues sending email alerts upon closing a connect mode tunnel. |
| promote host <number> | Promotes the identified host, exchanging it place with the host above it, to adjust the order of the defined hosts. |
| reconnect time <milliseconds> | Sets the reconnect time value for tunneling connections established by the device in milliseconds. <milliseconds> = timeout in milliseconds. |
| show | Displays the current configuration. |
| show history | Displays the last 20 commands entered during the current CLI session. |
| show status | Displays tunnel connect status. |
| start character <control/> | Sets the connect mode start character. The character may be input as text, control, decimal, or hex. A control character has the form <control>C. A decimal value character has the form \99. A hex value character has the form 0xFF. |
| write | Stores the current configuration in permanent memory. |
| connect (tunnel-connect:1) level commands | |
| block network disable | Forwards (tunnels) network data in connect mode tunneling. |
| block network enable | Discards all data coming in from the connect mode tunnel before forwarding it to the serial interface (generally used for debugging). |
| block serial disable | Forwards (tunnels) serial data in connect mode tunneling. |
| block serial enable | Discards all data coming in from the serial interface before forwarding it to the connect mode tunnel (generally used for debugging). |
| clrscrn | Clears the screen. |
| connect mode always | Enables the tunneling server to always establish tunneling connections. |
| connect mode any character | Enables the tunneling server to establish a tunneling connection when a character is received on the corresponding line (serial port). |
| connect mode disable | Disables connect mode tunneling. |
| connect mode modem control asserted | Enables the tunneling server to make tunneling connections when the modem control pin is asserted. |
| connect mode modem emulation | Enables modem emulation for connect mode tunneling. |
| connect mode start character | Enables connect mode tunneling when the configured start character is received on the line. |
| cp output | Enters the next lower level. |
| default connect mode | Restores the default connect mode as "disable". |

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| default host mode | Connects to the first host in the list that accepts the connection. |
| default local port | Uses a random port number as the local port for establishing tunneling connections to other devices. |
| default reconnect time | Restores the default reconnect time value for connect mode tunneling. |
| default start character | Defaults the connect mode start character. |
| email connect <number> | Sets an email profile to use to send an email alert upon establishing a connect mode tunnel. <number> = the number of the email profile to use. |
| email disconnect <number> | Sets an email profile to use to send an email alert upon closing a connect mode tunnel. <number> = the number of the email profile to use. |
| exit | Returns to the tunnel level. |
| flush serial disable | Characters already in the serial data buffer are retained upon establishing a connect mode tunneling connection. |
| flush serial enable | Flushes the serial data buffer upon establishing a connect mode tunneling connection. |
| flush start character disable | Enables forwarding of the connect start character into the network. |
| flush start character enable | Disables forwarding of the connect start character into the network. |
| host <instance> | Enters the next lower level. Specify the instance for the next lower level. |
| host mode sequential | Connects to the first host in the list that accepts the connection. |
| host mode simultaneous | Selects simultaneous connections to all hosts on the host list. |
| kill connection | Disconnects the active connect mode tunneling connection or connections. |
| local port <number> | Sets a specific port for use as the local port. <number> = the number of the port to use. |
| no email connect | Discontinues sending email alerts upon establishing a connect mode tunnel. |
| no email disconnect | Discontinues sending email alerts upon closing a connect mode tunnel. |
| promote host <number> | Promotes the identified host, exchanging it place with the host above it, to adjust the order of the defined hosts. |
| reconnect time <milliseconds> | Sets the reconnect time value for tunneling connections established by the device in milliseconds. <milliseconds> = timeout in milliseconds. |
| show | Displays the current configuration. |
| show history | Displays the last 20 commands entered during the current CLI session. |
| show status | Displays tunnel connect status. |
| start character <control> | Sets the connect mode start character. The character may be input as text, control, decimal, or hex. A control character has the form <control>C. A decimal value character has the form \99. A hex value character has the form 0xFF. |
| write | Stores the current configuration in permanent memory. |

| cp (email-cp:16) level commands | |
|--|---|
| clrscrn | Clears the screen. |
| exit | Exits to the next higher level. |
| group <text> | Specify a CP group that shall trigger an email. <text> = configurable pin group. |
| no group | Disables the trigger to send an email. |
| no trigger value | Clears the value that shall trigger an email. |
| show | Shows the current configuration. |
| show history | Displays the last 20 commands entered during the current CLI session. |
| trigger value <number> | Specify a value of the CP group that shall trigger an email. <number> = numeric value to watch for from the CP group. Can be specified as hex if prepended with "0x". |
| write | Stores the current configuration in permanent memory. |
| cp (email-cp:15) level commands | |
| clrscrn | Clears the screen. |
| exit | Exits to the next higher level. |
| group <text> | Specify a CP group that shall trigger an email. <text> = configurable pin group. |
| no group | Disables the trigger to send an email. |
| no trigger value | Clears the value that shall trigger an email. |
| show | Shows the current configuration. |
| show history | Displays the last 20 commands entered during the current CLI session. |
| trigger value <number> | Specify a value of the CP group that shall trigger an email. <number> = numeric value to watch for from the CP group. Can be specified as hex if prepended with "0x". |
| write | Stores the current configuration in permanent memory. |
| cp (email-cp:14) level commands | |
| clrscrn | Clears the screen. |
| exit | Exits to the next higher level. |
| group <text> | Specify a CP group that shall trigger an email. <text> = configurable pin group. |
| no group | Disables the trigger to send an email. |
| no trigger value | Clears the value that shall trigger an email. |
| show | Shows the current configuration. |
| show history | Displays the last 20 commands entered during the current CLI session. |
| trigger value <number> | Specify a value of the CP group that shall trigger an email. <number> = numeric value to watch for from the CP group. Can be specified as hex if prepended with "0x". |
| write | Stores the current configuration in permanent memory. |
| cp (email-cp:13) level commands | |
| clrscrn | Clears the screen. |
| exit | Exits to the next higher level. |
| group <text> | Specify a CP group that shall trigger an email. <text> = configurable pin group. |

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| no group | Disables the trigger to send an email. |
| no trigger value | Clears the value that shall trigger an email. |
| show | Shows the current configuration. |
| show history | Displays the last 20 commands entered during the current CLI session. |
| trigger value <number> | Specify a value of the CP group that shall trigger an email. <number> = numeric value to watch for from the CP group. Can be specified as hex if prepended with "0x". |
| write | Stores the current configuration in permanent memory. |
| cp (email-cp:12) level commands | |
| clrscrn | Clears the screen. |
| exit | Exits to the next higher level. |
| group <text> | Specify a CP group that shall trigger an email. <text> = configurable pin group. |
| no group | Disables the trigger to send an email. |
| no trigger value | Clears the value that shall trigger an email. |
| show | Shows the current configuration. |
| show history | Displays the last 20 commands entered during the current CLI session. |
| trigger value <number> | Specify a value of the CP group that shall trigger an email. <number> = numeric value to watch for from the CP group. Can be specified as hex if prepended with "0x". |
| write | Stores the current configuration in permanent memory. |
| cp (email-cp:11) level commands | |
| clrscrn | Clears the screen. |
| exit | Exits to the next higher level. |
| group <text> | Specify a CP group that shall trigger an email. <text> = configurable pin group. |
| no group | Disables the trigger to send an email. |
| no trigger value | Clears the value that shall trigger an email. |
| show | Shows the current configuration. |
| show history | Displays the last 20 commands entered during the current CLI session. |
| trigger value <number> | Specify a value of the CP group that shall trigger an email. <number> = numeric value to watch for from the CP group. Can be specified as hex if prepended with "0x". |
| write | Stores the current configuration in permanent memory. |
| cp (email-cp:10) level commands | |
| clrscrn | Clears the screen. |
| exit | Exits to the next higher level. |
| group <text> | Specify a CP group that shall trigger an email. <text> = configurable pin group. |
| no group | Disables the trigger to send an email. |
| no trigger value | Clears the value that shall trigger an email. |
| show | Shows the current configuration. |
| show history | Displays the last 20 commands entered during the current CLI session. |

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| trigger value <number> | Specify a value of the CP group that shall trigger an email. <number> = numeric value to watch for from the CP group. Can be specified as hex if prepended with "0x". |
| write | Stores the current configuration in permanent memory. |
| cp (email-cp:9) level commands | |
| clrscrn | Clears the screen. |
| exit | Exits to the next higher level. |
| group <text> | Specify a CP group that shall trigger an email. <text> = configurable pin group. |
| no group | Disables the trigger to send an email. |
| no trigger value | Clears the value that shall trigger an email. |
| show | Shows the current configuration. |
| show history | Displays the last 20 commands entered during the current CLI session. |
| trigger value <number> | Specify a value of the CP group that shall trigger an email. <number> = numeric value to watch for from the CP group. Can be specified as hex if prepended with "0x". |
| write | Stores the current configuration in permanent memory. |
| cp (email-cp:8) level commands | |
| clrscrn | Clears the screen. |
| exit | Exits to the next higher level. |
| group <text> | Specify a CP group that shall trigger an email. <text> = configurable pin group. |
| no group | Disables the trigger to send an email. |
| no trigger value | Clears the value that shall trigger an email. |
| show | Shows the current configuration. |
| show history | Displays the last 20 commands entered during the current CLI session. |
| trigger value <number> | Specify a value of the CP group that shall trigger an email. <number> = numeric value to watch for from the CP group. Can be specified as hex if prepended with "0x". |
| write | Stores the current configuration in permanent memory. |
| cp (email-cp:7) level commands | |
| clrscrn | Clears the screen. |
| exit | Exits to the next higher level. |
| group <text> | Specify a CP group that shall trigger an email. <text> = configurable pin group. |
| no group | Disables the trigger to send an email. |
| no trigger value | Clears the value that shall trigger an email. |
| show | Shows the current configuration. |
| show history | Displays the last 20 commands entered during the current CLI session. |
| trigger value <number> | Specify a value of the CP group that shall trigger an email. <number> = numeric value to watch for from the CP group. Can be specified as hex if prepended with "0x". |
| write | Stores the current configuration in permanent memory. |
| cp (email-cp:6) level commands | |

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| clrscrn | Clears the screen. |
| exit | Exits to the next higher level. |
| group <text> | Specify a CP group that shall trigger an email. <text> = configurable pin group. |
| no group | Disables the trigger to send an email. |
| no trigger value | Clears the value that shall trigger an email. |
| show | Shows the current configuration. |
| show history | Displays the last 20 commands entered during the current CLI session. |
| trigger value <number> | Specify a value of the CP group that shall trigger an email. <number> = numeric value to watch for from the CP group. Can be specified as hex if prepended with "0x". |
| write | Stores the current configuration in permanent memory. |
| cp (email-cp:5) level commands | |
| clrscrn | Clears the screen. |
| exit | Exits to the next higher level. |
| group <text> | Specify a CP group that shall trigger an email. <text> = configurable pin group. |
| no group | Disables the trigger to send an email. |
| no trigger value | Clears the value that shall trigger an email. |
| show | Shows the current configuration. |
| show history | Displays the last 20 commands entered during the current CLI session. |
| trigger value <number> | Specify a value of the CP group that shall trigger an email. <number> = numeric value to watch for from the CP group. Can be specified as hex if prepended with "0x". |
| write | Stores the current configuration in permanent memory. |
| cp (email-cp:4) level commands | |
| clrscrn | Clears the screen. |
| exit | Exits to the next higher level. |
| group <text> | Specify a CP group that shall trigger an email. <text> = configurable pin group. |
| no group | Disables the trigger to send an email. |
| no trigger value | Clears the value that shall trigger an email. |
| show | Shows the current configuration. |
| show history | Displays the last 20 commands entered during the current CLI session. |
| trigger value <number> | Specify a value of the CP group that shall trigger an email. <number> = numeric value to watch for from the CP group. Can be specified as hex if prepended with "0x". |
| write | Stores the current configuration in permanent memory. |
| cp (email-cp:3) level commands | |
| clrscrn | Clears the screen. |
| exit | Exits to the next higher level. |
| group <text> | Specify a CP group that shall trigger an email. <text> = configurable pin group. |
| no group | Disables the trigger to send an email. |

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|--|---|
| no trigger value | Clears the value that shall trigger an email. |
| show | Shows the current configuration. |
| show history | Displays the last 20 commands entered during the current CLI session. |
| trigger value <number> | Specify a value of the CP group that shall trigger an email. <number> = numeric value to watch for from the CP group. Can be specified as hex if prepended with "0x". |
| write | Stores the current configuration in permanent memory. |
| cp (email-cp:2) level commands | |
| clrscrn | Clears the screen. |
| exit | Exits to the next higher level. |
| group <text> | Specify a CP group that shall trigger an email. <text> = configurable pin group. |
| no group | Disables the trigger to send an email. |
| no trigger value | Clears the value that shall trigger an email. |
| show | Shows the current configuration. |
| show history | Displays the last 20 commands entered during the current CLI session. |
| trigger value <number> | Specify a value of the CP group that shall trigger an email. <number> = numeric value to watch for from the CP group. Can be specified as hex if prepended with "0x". |
| write | Stores the current configuration in permanent memory. |
| cp (email-cp:1) level commands | |
| clrscrn | Clears the screen. |
| exit | Exits to the next higher level. |
| group <text> | Specify a CP group that shall trigger an email. <text> = configurable pin group. |
| no group | Disables the trigger to send an email. |
| no trigger value | Clears the value that shall trigger an email. |
| show | Shows the current configuration. |
| show history | Displays the last 20 commands entered during the current CLI session. |
| trigger value <number> | Specify a value of the CP group that shall trigger an email. <number> = numeric value to watch for from the CP group. Can be specified as hex if prepended with "0x". |
| write | Stores the current configuration in permanent memory. |
| cp output (tunnel-connect-cp_output:3) level commands | |
| clrscrn | Clears the screen. |
| connection value <number> | Sets the value to output to the CP Group upon connect mode connection. <number> = binary to output (typically 1 or 0). |
| default connection value | Restores the default value for connect mode connection. |
| default disconnection value | Restores the default value for connect mode disconnection. |
| disconnection value <number> | Sets the value to output to the CP Group upon connect mode disconnection. <number> = binary to output (typically 1 or 0). |
| exit | Exits to the next higher level. |

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| group <text> | Configures the CP Group to set upon making or breaking a connect mode connection. <text> = CP Group. |
| no group | Removes the CP Set Group for connect mode. |
| show | Shows the current configuration. |
| show history | Displays the last 20 commands entered during the current CLI session. |
| write | Stores the current configuration in permanent memory. |
| cp output (tunnel-accept-cp_output:3) level commands | |
| clrscrn | Clears the screen. |
| connection value <number> | Sets the value to output to the CP Group upon accept mode connection. <number> = binary to output (typically 1 or 0). |
| default connection value | Restores the default value for accept mode connection. |
| default disconnection value | Restores the default value for accept mode disconnection. |
| disconnection value <number> | Sets the value to output to the CP Group upon accept mode disconnection. <number> = binary to output (typically 1 or 0). |
| exit | Exits to the next higher level. |
| group <text> | Configures the CP Group to set upon making or breaking an accept mode connection. <text> = CP Group. |
| no group | Removes the CP Set Group for accept mode. |
| show | Shows the current configuration. |
| show history | Displays the last 20 commands entered during the current CLI session. |
| write | Stores the current configuration in permanent memory. |
| cp output (tunnel-connect-cp_output:2) level commands | |
| clrscrn | Clears the screen. |
| connection value <number> | Sets the value to output to the CP Group upon connect mode connection. <number> = binary to output (typically 1 or 0). |
| default connection value | Restores the default value for connect mode connection. |
| default disconnection value | Restores the default value for connect mode disconnection. |
| disconnection value <number> | Sets the value to output to the CP Group upon connect mode disconnection. <number> = binary to output (typically 1 or 0). |
| exit | Exits to the next higher level. |
| group <text> | Configures the CP Group to set upon making or breaking a connect mode connection. <text> = CP Group. |
| no group | Removes the CP Set Group for connect mode. |
| show | Shows the current configuration. |
| show history | Displays the last 20 commands entered during the current CLI session. |
| write | Stores the current configuration in permanent memory. |
| cp output (tunnel-accept-cp_output:2) level commands | |
| clrscrn | Clears the screen. |
| connection value <number> | Sets the value to output to the CP Group upon accept mode connection. <number> = binary to output (typically 1 |

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| | or 0). |
| default connection value | Restores the default value for accept mode connection. |
| default disconnection value | Restores the default value for accept mode disconnection. |
| disconnection value <number> | Sets the value to output to the CP Group upon accept mode disconnection. <number> = binary to output (typically 1 or 0). |
| exit | Exits to the next higher level. |
| group <text> | Configures the CP Group to set upon making or breaking an accept mode connection. <text> = CP Group. |
| no group | Removes the CP Set Group for accept mode. |
| show | Shows the current configuration. |
| show history | Displays the last 20 commands entered during the current CLI session. |
| write | Stores the current configuration in permanent memory. |
| cp output (tunnel-connect-cp_output:1) level commands | |
| clrscrn | Clears the screen. |
| connection value <number> | Sets the value to output to the CP Group upon connect mode connection. <number> = binary to output (typically 1 or 0). |
| default connection value | Restores the default value for connect mode connection. |
| default disconnection value | Restores the default value for connect mode disconnection. |
| disconnection value <number> | Sets the value to output to the CP Group upon connect mode disconnection. <number> = binary to output (typically 1 or 0). |
| exit | Exits to the next higher level. |
| group <text> | Configures the CP Group to set upon making or breaking a connect mode connection. <text> = CP Group. |
| no group | Removes the CP Set Group for connect mode. |
| show | Shows the current configuration. |
| show history | Displays the last 20 commands entered during the current CLI session. |
| write | Stores the current configuration in permanent memory. |
| cp output (tunnel-accept-cp_output:1) level commands | |
| clrscrn | Clears the screen. |
| connection value <number> | Sets the value to output to the CP Group upon accept mode connection. <number> = binary to output (typically 1 or 0). |
| default connection value | Restores the default value for accept mode connection. |
| default disconnection value | Restores the default value for accept mode disconnection. |
| disconnection value <number> | Sets the value to output to the CP Group upon accept mode disconnection. <number> = binary to output (typically 1 or 0). |
| exit | Exits to the next higher level. |
| group <text> | Configures the CP Group to set upon making or breaking an accept mode connection. <text> = CP Group. |
| no group | Removes the CP Set Group for accept mode. |
| show | Shows the current configuration. |

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| show history | Displays the last 20 commands entered during the current CLI session. |
| write | Stores the current configuration in permanent memory. |
| cpm (cpm) level commands | |
| add <cp> to <group> | Adds the specified CP to the specified group. <cp> = configurable pin. <group> = the name of the group to which you want to add the CP. |
| add <cp> to <group> <bit> | Adds a specified CP to a specified group at a specified bit position. <cp> = configurable pin. <group> = the name of the group to which you want to add the CP. <bit> = bit position. |
| clrscrn | Clears the screen. |
| create <group> | Creates a configurable pin (CP) group. <group> = the name for the new group. |
| delete <cp> from <group> | Removes a CP from a specified group and sets the CP to its default configuration of input. <cp> = configurable pin. <group> = the name of the group. |
| delete <group> | Removes a group and resets all CPs in that group to the default configuration of input. <group> = the name of the group. |
| disable <group> | Disables the specified group. <group> = the name of the group. |
| enable <group> | Enables a disabled group. <group> = the name of the group. |
| exit | Exits to the enable level. |
| get <group> | Displays the value of the specified group. <group> = the name of the group. |
| set <cp> as input | Configures a CP as an asserted high input. <cp> = configurable pin. |
| set <cp> as input assert low | Configures a CP as an asserted low input. <cp> = configurable pin. |
| set <cp> as output | Configures a CP as an asserted high output. <cp> = configurable pin. |
| set <cp> as output assert low | Configures a CP as an asserted low output. <cp> = configurable pin. |
| set <group> <value> | Assigns a value to the specified group. <group> = the name of the group. <value> = numeric value to assign to the CP group. Can be specified as hex if prepended with "0x". |
| show <group> | Displays group information for specified group. <group> = the name of the group. |
| show cp | Displays configuration and group information for all CPs. |
| show groups | Displays all groups defined and their state. |
| show history | Displays the last 20 commands entered during the current CLI session. |
| write | Stores the current configuration in permanent memory. |
| credentials (ssl-credentials) level commands | |
| clrscrn | Clears the screen. |
| create <credential name> | Create a new credential name |
| delete <credential name> | Delete existing credential by name |

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| edit <credential name> | View or edit an existing profile |
| exit | Exits to the ssl level. |
| show | Show existing credential names |
| show history | Displays the last 20 commands entered during the current CLI session. |
| write | Stores the current configuration in permanent memory. |
| device (device) level commands | |
| auto show tlog | Continuously displays the internal trouble log. |
| clrscrm | Clears the screen. |
| exit | Exit to the enable level. |
| show | Show system information |
| show hardware information | Displays information about the hardware. |
| show history | Displays the last 20 commands entered during the current CLI session. |
| show lines | Show line information |
| show memory | Displays current memory usage information. |
| show task state | Displays current task states. |
| show tlog | Displays the internal trouble log. |
| write | Stores the current configuration in permanent memory. |
| diagnostics (config-diagnostics) level commands | |
| clrscrm | Clears the screen. |
| exit | Returns to the config level. |
| log | Enters the next lower level. |
| show | Displays the current configuration. |
| show history | Displays the last 20 commands entered during the current CLI session. |
| write | Stores the current configuration in permanent memory. |
| disconnect (tunnel-disconnect:3) level commands | |
| clrscrm | Clears the screen. |
| exit | Returns to the tunnel level. |
| flush serial disable | Does not flush serial data upon closing a tunneling connection. |
| flush serial enable | Flushes serial data buffer when a tunneling connection is closed. |
| flush stop character disable | Forwards the stop character from the Line to the network. |
| flush stop character enable | Prevents the stop character from the Line from being forwarded to the network. |
| modem control disable | Does not watch the modem control pin to disconnect. |
| modem control enable | Watches the modem control pin and disconnects if it is not asserted. |
| no stop character | Removes the stop character. |
| no timeout | Disables disconnect after timeout feature for tunneling sessions. |
| show | Displays the current configuration. |
| show history | Displays the last 20 commands entered during the current CLI session. |

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| stop character <control> | Sets the stop character. The character may be input as text, control, decimal, or hex. A control character has the form <control>C. A decimal value character has the form \99. A hex value character has the form 0xFF. |
| timeout <milliseconds> | Disconnects when no data has been received on the line (serial port) for the specified length of time. <milliseconds> = timeout in milliseconds. |
| write | Stores the current configuration in permanent memory. |
| disconnect (tunnel-disconnect:2) level commands | |
| clrscrn | Clears the screen. |
| exit | Returns to the tunnel level. |
| flush serial disable | Does not flush serial data upon closing a tunneling connection. |
| flush serial enable | Flushes serial data buffer when a tunneling connection is closed. |
| flush stop character disable | Forwards the stop character from the Line to the network. |
| flush stop character enable | Prevents the stop character from the Line from being forwarded to the network. |
| modem control disable | Does not watch the modem control pin to disconnect. |
| modem control enable | Watches the modem control pin and disconnects if it is not asserted. |
| no stop character | Removes the stop character. |
| no timeout | Disables disconnect after timeout feature for tunneling sessions. |
| show | Displays the current configuration. |
| show history | Displays the last 20 commands entered during the current CLI session. |
| stop character <control> | Sets the stop character. The character may be input as text, control, decimal, or hex. A control character has the form <control>C. A decimal value character has the form \99. A hex value character has the form 0xFF. |
| timeout <milliseconds> | Disconnects when no data has been received on the line (serial port) for the specified length of time. <milliseconds> = timeout in milliseconds. |
| write | Stores the current configuration in permanent memory. |
| disconnect (tunnel-disconnect:1) level commands | |
| clrscrn | Clears the screen. |
| exit | Returns to the tunnel level. |
| flush serial disable | Does not flush serial data upon closing a tunneling connection. |
| flush serial enable | Flushes serial data buffer when a tunneling connection is closed. |
| flush stop character disable | Forwards the stop character from the Line to the network. |
| flush stop character enable | Prevents the stop character from the Line from being forwarded to the network. |
| modem control disable | Does not watch the modem control pin to disconnect. |
| modem control enable | Watches the modem control pin and disconnects if it is not asserted. |
| no stop character | Removes the stop character. |

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| no timeout | Disables disconnect after timeout feature for tunneling sessions. |
| show | Displays the current configuration. |
| show history | Displays the last 20 commands entered during the current CLI session. |
| stop character <control/> | Sets the stop character. The character may be input as text, control, decimal, or hex. A control character has the form <control>C. A decimal value character has the form \99. A hex value character has the form 0xFF. |
| timeout <milliseconds> | Disconnects when no data has been received on the line (serial port) for the specified length of time. <milliseconds> = timeout in milliseconds. |
| write | Stores the current configuration in permanent memory. |
| discovery (config-discovery) level commands | |
| clear counters | Zeros Query Port counters |
| clrscrn | Clears the screen. |
| default upnp port | Resets the UPnP Server port to its default value (0x77FF). |
| exit | Returns to the config level. |
| no clear counters | Unzeros Query Port counters |
| show | Displays the current configuration. |
| show history | Displays the last 20 commands entered during the current CLI session. |
| show statistics | Displays statistics and information about the discovery services. |
| state disable | Disables the Query Port server. |
| state enable | Enables the Query Port server. |
| upnp port <number> | Sets the port number the UPnP server will use. <number> = port number. |
| upnp state disable | Disables the UPnP server. |
| upnp state enable | Enables the UPnP server. |
| write | Stores the current configuration in permanent memory. |
| dns (dns) level commands | |
| clrscrn | Clears the screen. |
| exit | Exits to the enable level. |
| lookup <host_or_ip> | Return a lookup on the DNS name or IP address. |
| show | Show DNS status. |
| show history | Displays the last 20 commands entered during the current CLI session. |
| write | Stores the current configuration in permanent memory. |
| email 1 (email:1) level commands | |
| auto show statistics | Continuously displays email statistics. |
| cc <text> | Sets Cc addresses for email alerts. <text> = a quoted, semicolon separated list of email addresses. |
| clear log | Clears all entries from the mail log. |
| clear mail counters | Sets the email counters to zero. |
| clrscrn | Clears the screen. |

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| cp | Enters the next lower level. |
| default priority | Sets X-Priority for email alerts to 3 (normal). |
| email <number> | Enters the configure email level. |
| exit | Exits to the enable level. |
| message file <text> | Specifies a text file, the contents of which will be the message body of an email alert. <text> = the name of a local file. |
| no cc | Removes the Cc addresses for email alerts. |
| no clear mail counters | Restores the email counters to the aggregate values. |
| no message file | Removes the file name, so the message body will be empty. |
| no reply to | Removes the Reply To address for email alerts. |
| no subject | Removes subject used for email alerts. |
| no to | Removes the To addresses for email alerts. |
| priority high | Sets X-Priority for email alerts to 2 (high). |
| priority low | Sets X-Priority for email alerts to 4 (low). |
| priority normal | Sets X-Priority for email alerts to 3 (normal). |
| priority urgent | Sets X-Priority for email alerts to 1 (urgent). |
| priority very low | Sets X-Priority for email alerts to 5 (very low). |
| reply to <text> | Sets the Reply To address for email alerts. <text> = email address to place in the Reply To field of the email alert. |
| send | Sends an email using the current settings. |
| show | Displays the current configuration. |
| show history | Displays the last 20 commands entered during the current CLI session. |
| show log | Displays the email log. |
| show statistics | Displays email statistics. |
| subject <text> | Sets the Subject for email alerts. <text> = text to placed as the subject. |
| to <text> | Sets To addresses for email alerts. <text> = a quoted, semicolon separated list of email addresses. |
| write | Stores the current configuration in permanent memory. |
| email 10 (email:10) level commands | |
| auto show statistics | Continuously displays email statistics. |
| cc <text> | Sets Cc addresses for email alerts. <text> = a quoted, semicolon separated list of email addresses. |
| clear log | Clears all entries from the mail log. |
| clear mail counters | Sets the email counters to zero. |
| clrscrn | Clears the screen. |
| cp | Enters the next lower level. |
| default priority | Sets X-Priority for email alerts to 3 (normal). |
| email <number> | Enters the configure email level. |
| exit | Exits to the enable level. |
| message file <text> | Specifies a text file, the contents of which will be the message body of an email alert. <text> = the name of a local file. |

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| no cc | Removes the Cc addresses for email alerts. |
| no clear mail counters | Restores the email counters to the aggregate values. |
| no message file | Removes the file name, so the message body will be empty. |
| no reply to | Removes the Reply To address for email alerts. |
| no subject | Removes subject used for email alerts. |
| no to | Removes the To addresses for email alerts. |
| priority high | Sets X-Priority for email alerts to 2 (high). |
| priority low | Sets X-Priority for email alerts to 4 (low). |
| priority normal | Sets X-Priority for email alerts to 3 (normal). |
| priority urgent | Sets X-Priority for email alerts to 1 (urgent). |
| priority very low | Sets X-Priority for email alerts to 5 (very low). |
| reply to <text> | Sets the Reply To address for email alerts. <text> = email address to place in the Reply To field of the email alert. |
| send | Sends an email using the current settings. |
| show | Displays the current configuration. |
| show history | Displays the last 20 commands entered during the current CLI session. |
| show log | Displays the email log. |
| show statistics | Displays email statistics. |
| subject <text> | Sets the Subject for email alerts. <text> = text to placed as the subject. |
| to <text> | Sets To addresses for email alerts. <text> = a quoted, semicolon separated list of email addresses. |
| write | Stores the current configuration in permanent memory. |
| email 11 (email:11) level commands | |
| auto show statistics | Continuously displays email statistics. |
| cc <text> | Sets Cc addresses for email alerts. <text> = a quoted, semicolon separated list of email addresses. |
| clear log | Clears all entries from the mail log. |
| clear mail counters | Sets the email counters to zero. |
| clrscrn | Clears the screen. |
| cp | Enters the next lower level. |
| default priority | Sets X-Priority for email alerts to 3 (normal). |
| email <number> | Enters the configure email level. |
| exit | Exits to the enable level. |
| message file <text> | Specifies a text file, the contents of which will be the message body of an email alert. <text> = the name of a local file. |
| no cc | Removes the Cc addresses for email alerts. |
| no clear mail counters | Restores the email counters to the aggregate values. |
| no message file | Removes the file name, so the message body will be empty. |
| no reply to | Removes the Reply To address for email alerts. |
| no subject | Removes subject used for email alerts. |
| no to | Removes the To addresses for email alerts. |

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| priority high | Sets X-Priority for email alerts to 2 (high). |
| priority low | Sets X-Priority for email alerts to 4 (low). |
| priority normal | Sets X-Priority for email alerts to 3 (normal). |
| priority urgent | Sets X-Priority for email alerts to 1 (urgent). |
| priority very low | Sets X-Priority for email alerts to 5 (very low). |
| reply to <text> | Sets the Reply To address for email alerts. <text> = email address to place in the Reply To field of the email alert. |
| send | Sends an email using the current settings. |
| show | Displays the current configuration. |
| show history | Displays the last 20 commands entered during the current CLI session. |
| show log | Displays the email log. |
| show statistics | Displays email statistics. |
| subject <text> | Sets the Subject for email alerts. <text> = text to placed as the subject. |
| to <text> | Sets To addresses for email alerts. <text> = a quoted, semicolon separated list of email addresses. |
| write | Stores the current configuration in permanent memory. |
| email 12 (email:12) level commands | |
| auto show statistics | Continuously displays email statistics. |
| cc <text> | Sets Cc addresses for email alerts. <text> = a quoted, semicolon separated list of email addresses. |
| clear log | Clears all entries from the mail log. |
| clear mail counters | Sets the email counters to zero. |
| clrscrn | Clears the screen. |
| cp | Enters the next lower level. |
| default priority | Sets X-Priority for email alerts to 3 (normal). |
| email <number> | Enters the configure email level. |
| exit | Exits to the enable level. |
| message file <text> | Specifies a text file, the contents of which will be the message body of an email alert. <text> = the name of a local file. |
| no cc | Removes the Cc addresses for email alerts. |
| no clear mail counters | Restores the email counters to the aggregate values. |
| no message file | Removes the file name, so the message body will be empty. |
| no reply to | Removes the Reply To address for email alerts. |
| no subject | Removes subject used for email alerts. |
| no to | Removes the To addresses for email alerts. |
| priority high | Sets X-Priority for email alerts to 2 (high). |
| priority low | Sets X-Priority for email alerts to 4 (low). |
| priority normal | Sets X-Priority for email alerts to 3 (normal). |
| priority urgent | Sets X-Priority for email alerts to 1 (urgent). |
| priority very low | Sets X-Priority for email alerts to 5 (very low). |
| reply to <text> | Sets the Reply To address for email alerts. <text> = email address to place in the Reply To field of the email alert. |

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| send | Sends an email using the current settings. |
| show | Displays the current configuration. |
| show history | Displays the last 20 commands entered during the current CLI session. |
| show log | Displays the email log. |
| show statistics | Displays email statistics. |
| subject <text> | Sets the Subject for email alerts. <text> = text to placed as the subject. |
| to <text> | Sets To addresses for email alerts. <text> = a quoted, semicolon separated list of email addresses. |
| write | Stores the current configuration in permanent memory. |
| email 13 (email:13) level commands | |
| auto show statistics | Continuously displays email statistics. |
| cc <text> | Sets Cc addresses for email alerts. <text> = a quoted, semicolon separated list of email addresses. |
| clear log | Clears all entries from the mail log. |
| clear mail counters | Sets the email counters to zero. |
| clrscrn | Clears the screen. |
| cp | Enters the next lower level. |
| default priority | Sets X-Priority for email alerts to 3 (normal). |
| email <number> | Enters the configure email level. |
| exit | Exits to the enable level. |
| message file <text> | Specifies a text file, the contents of which will be the message body of an email alert. <text> = the name of a local file. |
| no cc | Removes the Cc addresses for email alerts. |
| no clear mail counters | Restores the email counters to the aggregate values. |
| no message file | Removes the file name, so the message body will be empty. |
| no reply to | Removes the Reply To address for email alerts. |
| no subject | Removes subject used for email alerts. |
| no to | Removes the To addresses for email alerts. |
| priority high | Sets X-Priority for email alerts to 2 (high). |
| priority low | Sets X-Priority for email alerts to 4 (low). |
| priority normal | Sets X-Priority for email alerts to 3 (normal). |
| priority urgent | Sets X-Priority for email alerts to 1 (urgent). |
| priority very low | Sets X-Priority for email alerts to 5 (very low). |
| reply to <text> | Sets the Reply To address for email alerts. <text> = email address to place in the Reply To field of the email alert. |
| send | Sends an email using the current settings. |
| show | Displays the current configuration. |
| show history | Displays the last 20 commands entered during the current CLI session. |
| show log | Displays the email log. |
| show statistics | Displays email statistics. |
| subject <text> | Sets the Subject for email alerts. <text> = text to placed |

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| | as the subject. |
| to <text> | Sets To addresses for email alerts. <text> = a quoted, semicolon separated list of email addresses. |
| write | Stores the current configuration in permanent memory. |
| email 14 (email:14) level commands | |
| auto show statistics | Continuously displays email statistics. |
| cc <text> | Sets Cc addresses for email alerts. <text> = a quoted, semicolon separated list of email addresses. |
| clear log | Clears all entries from the mail log. |
| clear mail counters | Sets the email counters to zero. |
| clrscrn | Clears the screen. |
| cp | Enters the next lower level. |
| default priority | Sets X-Priority for email alerts to 3 (normal). |
| email <number> | Enters the configure email level. |
| exit | Exits to the enable level. |
| message file <text> | Specifies a text file, the contents of which will be the message body of an email alert. <text> = the name of a local file. |
| no cc | Removes the Cc addresses for email alerts. |
| no clear mail counters | Restores the email counters to the aggregate values. |
| no message file | Removes the file name, so the message body will be empty. |
| no reply to | Removes the Reply To address for email alerts. |
| no subject | Removes subject used for email alerts. |
| no to | Removes the To addresses for email alerts. |
| priority high | Sets X-Priority for email alerts to 2 (high). |
| priority low | Sets X-Priority for email alerts to 4 (low). |
| priority normal | Sets X-Priority for email alerts to 3 (normal). |
| priority urgent | Sets X-Priority for email alerts to 1 (urgent). |
| priority very low | Sets X-Priority for email alerts to 5 (very low). |
| reply to <text> | Sets the Reply To address for email alerts. <text> = email address to place in the Reply To field of the email alert. |
| send | Sends an email using the current settings. |
| show | Displays the current configuration. |
| show history | Displays the last 20 commands entered during the current CLI session. |
| show log | Displays the email log. |
| show statistics | Displays email statistics. |
| subject <text> | Sets the Subject for email alerts. <text> = text to placed as the subject. |
| to <text> | Sets To addresses for email alerts. <text> = a quoted, semicolon separated list of email addresses. |
| write | Stores the current configuration in permanent memory. |
| email 15 (email:15) level commands | |
| auto show statistics | Continuously displays email statistics. |
| cc <text> | Sets Cc addresses for email alerts. <text> = a quoted, |

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| | semicolon separated list of email addresses. |
| clear log | Clears all entries from the mail log. |
| clear mail counters | Sets the email counters to zero. |
| clrscrn | Clears the screen. |
| cp | Enters the next lower level. |
| default priority | Sets X-Priority for email alerts to 3 (normal). |
| email <number> | Enters the configure email level. |
| exit | Exits to the enable level. |
| message file <text> | Specifies a text file, the contents of which will be the message body of an email alert. <text> = the name of a local file. |
| no cc | Removes the Cc addresses for email alerts. |
| no clear mail counters | Restores the email counters to the aggregate values. |
| no message file | Removes the file name, so the message body will be empty. |
| no reply to | Removes the Reply To address for email alerts. |
| no subject | Removes subject used for email alerts. |
| no to | Removes the To addresses for email alerts. |
| priority high | Sets X-Priority for email alerts to 2 (high). |
| priority low | Sets X-Priority for email alerts to 4 (low). |
| priority normal | Sets X-Priority for email alerts to 3 (normal). |
| priority urgent | Sets X-Priority for email alerts to 1 (urgent). |
| priority very low | Sets X-Priority for email alerts to 5 (very low). |
| reply to <text> | Sets the Reply To address for email alerts. <text> = email address to place in the Reply To field of the email alert. |
| send | Sends an email using the current settings. |
| show | Displays the current configuration. |
| show history | Displays the last 20 commands entered during the current CLI session. |
| show log | Displays the email log. |
| show statistics | Displays email statistics. |
| subject <text> | Sets the Subject for email alerts. <text> = text to placed as the subject. |
| to <text> | Sets To addresses for email alerts. <text> = a quoted, semicolon separated list of email addresses. |
| write | Stores the current configuration in permanent memory. |
| email 16 (email:16) level commands | |
| auto show statistics | Continuously displays email statistics. |
| cc <text> | Sets Cc addresses for email alerts. <text> = a quoted, semicolon separated list of email addresses. |
| clear log | Clears all entries from the mail log. |
| clear mail counters | Sets the email counters to zero. |
| clrscrn | Clears the screen. |
| cp | Enters the next lower level. |
| default priority | Sets X-Priority for email alerts to 3 (normal). |

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| email <number> | Enters the configure email level. |
| exit | Exits to the enable level. |
| message file <text> | Specifies a text file, the contents of which will be the message body of an email alert. <text> = the name of a local file. |
| no cc | Removes the Cc addresses for email alerts. |
| no clear mail counters | Restores the email counters to the aggregate values. |
| no message file | Removes the file name, so the message body will be empty. |
| no reply to | Removes the Reply To address for email alerts. |
| no subject | Removes subject used for email alerts. |
| no to | Removes the To addresses for email alerts. |
| priority high | Sets X-Priority for email alerts to 2 (high). |
| priority low | Sets X-Priority for email alerts to 4 (low). |
| priority normal | Sets X-Priority for email alerts to 3 (normal). |
| priority urgent | Sets X-Priority for email alerts to 1 (urgent). |
| priority very low | Sets X-Priority for email alerts to 5 (very low). |
| reply to <text> | Sets the Reply To address for email alerts. <text> = email address to place in the Reply To field of the email alert. |
| send | Sends an email using the current settings. |
| show | Displays the current configuration. |
| show history | Displays the last 20 commands entered during the current CLI session. |
| show log | Displays the email log. |
| show statistics | Displays email statistics. |
| subject <text> | Sets the Subject for email alerts. <text> = text to placed as the subject. |
| to <text> | Sets To addresses for email alerts. <text> = a quoted, semicolon separated list of email addresses. |
| write | Stores the current configuration in permanent memory. |
| email 2 (email:2) level commands | |
| auto show statistics | Continuously displays email statistics. |
| cc <text> | Sets Cc addresses for email alerts. <text> = a quoted, semicolon separated list of email addresses. |
| clear log | Clears all entries from the mail log. |
| clear mail counters | Sets the email counters to zero. |
| clrscrn | Clears the screen. |
| cp | Enters the next lower level. |
| default priority | Sets X-Priority for email alerts to 3 (normal). |
| email <number> | Enters the configure email level. |
| exit | Exits to the enable level. |
| message file <text> | Specifies a text file, the contents of which will be the message body of an email alert. <text> = the name of a local file. |
| no cc | Removes the Cc addresses for email alerts. |
| no clear mail counters | Restores the email counters to the aggregate values. |

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| no message file | Removes the file name, so the message body will be empty. |
| no reply to | Removes the Reply To address for email alerts. |
| no subject | Removes subject used for email alerts. |
| no to | Removes the To addresses for email alerts. |
| priority high | Sets X-Priority for email alerts to 2 (high). |
| priority low | Sets X-Priority for email alerts to 4 (low). |
| priority normal | Sets X-Priority for email alerts to 3 (normal). |
| priority urgent | Sets X-Priority for email alerts to 1 (urgent). |
| priority very low | Sets X-Priority for email alerts to 5 (very low). |
| reply to <text> | Sets the Reply To address for email alerts. <text> = email address to place in the Reply To field of the email alert. |
| send | Sends an email using the current settings. |
| show | Displays the current configuration. |
| show history | Displays the last 20 commands entered during the current CLI session. |
| show log | Displays the email log. |
| show statistics | Displays email statistics. |
| subject <text> | Sets the Subject for email alerts. <text> = text to placed as the subject. |
| to <text> | Sets To addresses for email alerts. <text> = a quoted, semicolon separated list of email addresses. |
| write | Stores the current configuration in permanent memory. |
| email 3 (email:3) level commands | |
| auto show statistics | Continuously displays email statistics. |
| cc <text> | Sets Cc addresses for email alerts. <text> = a quoted, semicolon separated list of email addresses. |
| clear log | Clears all entries from the mail log. |
| clear mail counters | Sets the email counters to zero. |
| clrscrn | Clears the screen. |
| cp | Enters the next lower level. |
| default priority | Sets X-Priority for email alerts to 3 (normal). |
| email <number> | Enters the configure email level. |
| exit | Exits to the enable level. |
| message file <text> | Specifies a text file, the contents of which will be the message body of an email alert. <text> = the name of a local file. |
| no cc | Removes the Cc addresses for email alerts. |
| no clear mail counters | Restores the email counters to the aggregate values. |
| no message file | Removes the file name, so the message body will be empty. |
| no reply to | Removes the Reply To address for email alerts. |
| no subject | Removes subject used for email alerts. |
| no to | Removes the To addresses for email alerts. |
| priority high | Sets X-Priority for email alerts to 2 (high). |
| priority low | Sets X-Priority for email alerts to 4 (low). |

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| priority normal | Sets X-Priority for email alerts to 3 (normal). |
| priority urgent | Sets X-Priority for email alerts to 1 (urgent). |
| priority very low | Sets X-Priority for email alerts to 5 (very low). |
| reply to <text> | Sets the Reply To address for email alerts. <text> = email address to place in the Reply To field of the email alert. |
| send | Sends an email using the current settings. |
| show | Displays the current configuration. |
| show history | Displays the last 20 commands entered during the current CLI session. |
| show log | Displays the email log. |
| show statistics | Displays email statistics. |
| subject <text> | Sets the Subject for email alerts. <text> = text to placed as the subject. |
| to <text> | Sets To addresses for email alerts. <text> = a quoted, semicolon separated list of email addresses. |
| write | Stores the current configuration in permanent memory. |
| email 4 (email:4) level commands | |
| auto show statistics | Continuously displays email statistics. |
| cc <text> | Sets Cc addresses for email alerts. <text> = a quoted, semicolon separated list of email addresses. |
| clear log | Clears all entries from the mail log. |
| clear mail counters | Sets the email counters to zero. |
| clrscrn | Clears the screen. |
| cp | Enters the next lower level. |
| default priority | Sets X-Priority for email alerts to 3 (normal). |
| email <number> | Enters the configure email level. |
| exit | Exits to the enable level. |
| message file <text> | Specifies a text file, the contents of which will be the message body of an email alert. <text> = the name of a local file. |
| no cc | Removes the Cc addresses for email alerts. |
| no clear mail counters | Restores the email counters to the aggregate values. |
| no message file | Removes the file name, so the message body will be empty. |
| no reply to | Removes the Reply To address for email alerts. |
| no subject | Removes subject used for email alerts. |
| no to | Removes the To addresses for email alerts. |
| priority high | Sets X-Priority for email alerts to 2 (high). |
| priority low | Sets X-Priority for email alerts to 4 (low). |
| priority normal | Sets X-Priority for email alerts to 3 (normal). |
| priority urgent | Sets X-Priority for email alerts to 1 (urgent). |
| priority very low | Sets X-Priority for email alerts to 5 (very low). |
| reply to <text> | Sets the Reply To address for email alerts. <text> = email address to place in the Reply To field of the email alert. |
| send | Sends an email using the current settings. |
| show | Displays the current configuration. |

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| show history | Displays the last 20 commands entered during the current CLI session. |
| show log | Displays the email log. |
| show statistics | Displays email statistics. |
| subject <text> | Sets the Subject for email alerts. <text> = text to placed as the subject. |
| to <text> | Sets To addresses for email alerts. <text> = a quoted, semicolon separated list of email addresses. |
| write | Stores the current configuration in permanent memory. |
| email 5 (email:5) level commands | |
| auto show statistics | Continuously displays email statistics. |
| cc <text> | Sets Cc addresses for email alerts. <text> = a quoted, semicolon separated list of email addresses. |
| clear log | Clears all entries from the mail log. |
| clear mail counters | Sets the email counters to zero. |
| clrscrn | Clears the screen. |
| cp | Enters the next lower level. |
| default priority | Sets X-Priority for email alerts to 3 (normal). |
| email <number> | Enters the configure email level. |
| exit | Exits to the enable level. |
| message file <text> | Specifies a text file, the contents of which will be the message body of an email alert. <text> = the name of a local file. |
| no cc | Removes the Cc addresses for email alerts. |
| no clear mail counters | Restores the email counters to the aggregate values. |
| no message file | Removes the file name, so the message body will be empty. |
| no reply to | Removes the Reply To address for email alerts. |
| no subject | Removes subject used for email alerts. |
| no to | Removes the To addresses for email alerts. |
| priority high | Sets X-Priority for email alerts to 2 (high). |
| priority low | Sets X-Priority for email alerts to 4 (low). |
| priority normal | Sets X-Priority for email alerts to 3 (normal). |
| priority urgent | Sets X-Priority for email alerts to 1 (urgent). |
| priority very low | Sets X-Priority for email alerts to 5 (very low). |
| reply to <text> | Sets the Reply To address for email alerts. <text> = email address to place in the Reply To field of the email alert. |
| send | Sends an email using the current settings. |
| show | Displays the current configuration. |
| show history | Displays the last 20 commands entered during the current CLI session. |
| show log | Displays the email log. |
| show statistics | Displays email statistics. |
| subject <text> | Sets the Subject for email alerts. <text> = text to placed as the subject. |
| to <text> | Sets To addresses for email alerts. <text> = a quoted, |

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| | semicolon separated list of email addresses. |
| write | Stores the current configuration in permanent memory. |
| email 6 (email:6) level commands | |
| auto show statistics | Continuously displays email statistics. |
| cc <text> | Sets Cc addresses for email alerts. <text> = a quoted, semicolon separated list of email addresses. |
| clear log | Clears all entries from the mail log. |
| clear mail counters | Sets the email counters to zero. |
| clrscrm | Clears the screen. |
| cp | Enters the next lower level. |
| default priority | Sets X-Priority for email alerts to 3 (normal). |
| email <number> | Enters the configure email level. |
| exit | Exits to the enable level. |
| message file <text> | Specifies a text file, the contents of which will be the message body of an email alert. <text> = the name of a local file. |
| no cc | Removes the Cc addresses for email alerts. |
| no clear mail counters | Restores the email counters to the aggregate values. |
| no message file | Removes the file name, so the message body will be empty. |
| no reply to | Removes the Reply To address for email alerts. |
| no subject | Removes subject used for email alerts. |
| no to | Removes the To addresses for email alerts. |
| priority high | Sets X-Priority for email alerts to 2 (high). |
| priority low | Sets X-Priority for email alerts to 4 (low). |
| priority normal | Sets X-Priority for email alerts to 3 (normal). |
| priority urgent | Sets X-Priority for email alerts to 1 (urgent). |
| priority very low | Sets X-Priority for email alerts to 5 (very low). |
| reply to <text> | Sets the Reply To address for email alerts. <text> = email address to place in the Reply To field of the email alert. |
| send | Sends an email using the current settings. |
| show | Displays the current configuration. |
| show history | Displays the last 20 commands entered during the current CLI session. |
| show log | Displays the email log. |
| show statistics | Displays email statistics. |
| subject <text> | Sets the Subject for email alerts. <text> = text to placed as the subject. |
| to <text> | Sets To addresses for email alerts. <text> = a quoted, semicolon separated list of email addresses. |
| write | Stores the current configuration in permanent memory. |
| email 7 (email:7) level commands | |
| auto show statistics | Continuously displays email statistics. |
| cc <text> | Sets Cc addresses for email alerts. <text> = a quoted, semicolon separated list of email addresses. |
| clear log | Clears all entries from the mail log. |

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| clear mail counters | Sets the email counters to zero. |
| clrscrn | Clears the screen. |
| cp | Enters the next lower level. |
| default priority | Sets X-Priority for email alerts to 3 (normal). |
| email <number> | Enters the configure email level. |
| exit | Exits to the enable level. |
| message file <text> | Specifies a text file, the contents of which will be the message body of an email alert. <text> = the name of a local file. |
| no cc | Removes the Cc addresses for email alerts. |
| no clear mail counters | Restores the email counters to the aggregate values. |
| no message file | Removes the file name, so the message body will be empty. |
| no reply to | Removes the Reply To address for email alerts. |
| no subject | Removes subject used for email alerts. |
| no to | Removes the To addresses for email alerts. |
| priority high | Sets X-Priority for email alerts to 2 (high). |
| priority low | Sets X-Priority for email alerts to 4 (low). |
| priority normal | Sets X-Priority for email alerts to 3 (normal). |
| priority urgent | Sets X-Priority for email alerts to 1 (urgent). |
| priority very low | Sets X-Priority for email alerts to 5 (very low). |
| reply to <text> | Sets the Reply To address for email alerts. <text> = email address to place in the Reply To field of the email alert. |
| send | Sends an email using the current settings. |
| show | Displays the current configuration. |
| show history | Displays the last 20 commands entered during the current CLI session. |
| show log | Displays the email log. |
| show statistics | Displays email statistics. |
| subject <text> | Sets the Subject for email alerts. <text> = text to placed as the subject. |
| to <text> | Sets To addresses for email alerts. <text> = a quoted, semicolon separated list of email addresses. |
| write | Stores the current configuration in permanent memory. |
| email 8 (email:8) level commands | |
| auto show statistics | Continuously displays email statistics. |
| cc <text> | Sets Cc addresses for email alerts. <text> = a quoted, semicolon separated list of email addresses. |
| clear log | Clears all entries from the mail log. |
| clear mail counters | Sets the email counters to zero. |
| clrscrn | Clears the screen. |
| cp | Enters the next lower level. |
| default priority | Sets X-Priority for email alerts to 3 (normal). |
| email <number> | Enters the configure email level. |
| exit | Exits to the enable level. |

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| message file <text> | Specifies a text file, the contents of which will be the message body of an email alert. <text> = the name of a local file. |
| no cc | Removes the Cc addresses for email alerts. |
| no clear mail counters | Restores the email counters to the aggregate values. |
| no message file | Removes the file name, so the message body will be empty. |
| no reply to | Removes the Reply To address for email alerts. |
| no subject | Removes subject used for email alerts. |
| no to | Removes the To addresses for email alerts. |
| priority high | Sets X-Priority for email alerts to 2 (high). |
| priority low | Sets X-Priority for email alerts to 4 (low). |
| priority normal | Sets X-Priority for email alerts to 3 (normal). |
| priority urgent | Sets X-Priority for email alerts to 1 (urgent). |
| priority very low | Sets X-Priority for email alerts to 5 (very low). |
| reply to <text> | Sets the Reply To address for email alerts. <text> = email address to place in the Reply To field of the email alert. |
| send | Sends an email using the current settings. |
| show | Displays the current configuration. |
| show history | Displays the last 20 commands entered during the current CLI session. |
| show log | Displays the email log. |
| show statistics | Displays email statistics. |
| subject <text> | Sets the Subject for email alerts. <text> = text to placed as the subject. |
| to <text> | Sets To addresses for email alerts. <text> = a quoted, semicolon separated list of email addresses. |
| write | Stores the current configuration in permanent memory. |
| email 9 (email:9) level commands | |
| auto show statistics | Continuously displays email statistics. |
| cc <text> | Sets Cc addresses for email alerts. <text> = a quoted, semicolon separated list of email addresses. |
| clear log | Clears all entries from the mail log. |
| clear mail counters | Sets the email counters to zero. |
| clrscrn | Clears the screen. |
| cp | Enters the next lower level. |
| default priority | Sets X-Priority for email alerts to 3 (normal). |
| email <number> | Enters the configure email level. |
| exit | Exits to the enable level. |
| message file <text> | Specifies a text file, the contents of which will be the message body of an email alert. <text> = the name of a local file. |
| no cc | Removes the Cc addresses for email alerts. |
| no clear mail counters | Restores the email counters to the aggregate values. |
| no message file | Removes the file name, so the message body will be empty. |

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| no reply to | Removes the Reply To address for email alerts. |
| no subject | Removes subject used for email alerts. |
| no to | Removes the To addresses for email alerts. |
| priority high | Sets X-Priority for email alerts to 2 (high). |
| priority low | Sets X-Priority for email alerts to 4 (low). |
| priority normal | Sets X-Priority for email alerts to 3 (normal). |
| priority urgent | Sets X-Priority for email alerts to 1 (urgent). |
| priority very low | Sets X-Priority for email alerts to 5 (very low). |
| reply to <text> | Sets the Reply To address for email alerts. <text> = email address to place in the Reply To field of the email alert. |
| send | Sends an email using the current settings. |
| show | Displays the current configuration. |
| show history | Displays the last 20 commands entered during the current CLI session. |
| show log | Displays the email log. |
| show statistics | Displays email statistics. |
| subject <text> | Sets the Subject for email alerts. <text> = text to placed as the subject. |
| to <text> | Sets To addresses for email alerts. <text> = a quoted, semicolon separated list of email addresses. |
| write | Stores the current configuration in permanent memory. |
| enable (enable) level commands | |
| auto show interfaces | Show interface statistics |
| auto show processes | Continuously show thread runtime information |
| clrscrn | Clears the screen. |
| configure | Enters the configuration level. |
| connect | Show name and number for lines. |
| connect line <line> | Begin session on serial port. |
| cpm | Enters the CP Manager level. |
| device | Enters the device level. |
| disable | Exits the enable level. |
| dns | Enters the DNS level. |
| email <number> | Enters the configure email level. |
| exit | Exit from the system |
| filesystem | Enters the filesystem level. |
| iperf <params> | Run iperf with command line parameters passed in quoted string. |
| kill ssh <session> | Kills SSH session with index from "show sessions" |
| kill telnet <session> | Kills Telnet session with index from "show sessions" |
| line <line> | Enters the line level. <line> = number of the line (serial port) to be configured. |
| ping <host> | Ping destination continuously with 5 second timeout |
| ping <host> <count> | Ping destination n times with 5 second timeout |
| ping <host> <count> <timeout> | Ping destination n times with x timeout (in seconds) |
| reload | Reboot system |

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| reload factory defaults | Reload factory defaults to permanent storage |
| show | Show system information |
| show history | Displays the last 20 commands entered during the current CLI session. |
| show interfaces | Show interface statistics |
| show ip sockets | Show UDP/TCP state information |
| show lines | Show line information |
| show processes | Show thread runtime information |
| show sessions | Show active Telnet and SSH Sessions |
| ssh | Enters the SSH configuration level. |
| ssh <optClientUsername> <host> | Begin SSH session on network <host>. The optClientUserName must match an SSH Client: Users configuration entry. Use "" in optClientUserName to prompt for host username and password. |
| ssh <optClientUsername> <host> <port> | Begin SSH session on network <host>:<port>. The optClientUserName must match an SSH Client: Users configuration entry. Use "" in optClientUserName to prompt for host username and password. |
| ssl | Enters the SSL configuration level. |
| telnet <host> | Begin telnet session on network <host>. |
| telnet <host> <port> | Begin telnet session on network <host>:<port>. |
| trace route <host> | Trace route to destination |
| trace route <host> <protocol> | Trace route to destination using TCP, ICMP, or UDP |
| tunnel <line> | Enters the tunnel level. <line> = number of the tunnel line (serial port) to be configured. |
| write | Stores the current configuration in permanent memory. |
| xml | Enters the XML level. |
| filesystem (filesystem) level commands | |
| cat <file> | Show the contents of a file |
| cd <directory> | Change the current directory to the specified directory |
| clrscrn | Clears the screen. |
| cp <source file> <destination file> | Copy an existing file |
| dump <file> | Show contents of a file as a hex dump |
| exit | Exits to the enable level. |
| format | Format the file system and lose all data |
| ls | Show all files and directories in the current directory |
| ls <directory> | Show all files and directories in the specified directory |
| mkdir <directory> | Create a directory |
| mv <source file> <destination file> | Move a file on the file system |
| pwd | Print working directory |
| rm <file> | Remove a file |
| rmdir <directory> | Remove a directory |
| show | Show file system statistics |
| show history | Displays the last 20 commands entered during the current CLI session. |
| show tree | Show all files and directories from current directory |

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| tftp get <source file> <destination file> <host> | Get a file using TFTP |
| tftp get <source file> <destination file> <host> <port> | Get a file using TFTP |
| tftp put <source file> <destination file> <host> | Put a file using TFTP |
| tftp put <source file> <destination file> <host> <port> | Put a file using TFTP |
| touch <file> | Create a file |
| ftp (config-ftp) level commands | |
| clrscrn | Clears the screen. |
| exit | Returns to the config level. |
| show | Displays the current configuration. |
| show history | Displays the last 20 commands entered during the current CLI session. |
| show statistics | Displays the FTP statistics. |
| state disable | Disables the FTP server. |
| state enable | Enables the FTP server. |
| write | Stores the current configuration in permanent memory. |
| host 1 (tunnel-connect-host:3:1) level commands | |
| address <text> | Sets the remote host to establish tunneling connections with. <text> = IP address or host name of the remote host. |
| aes decrypt key <hexadecimal> | Sets the connect tunnel AES decrypt key with up to 16 bytes. Each byte is represented by two adjacent hex digits. Bytes may run together or be separated by optional punctuation: 123ABC "12 3A BC" 12,3A,BC 12.3a.bc 12:3a:bc Note that quotes must enclose the value if it contains spaces. |
| aes decrypt key text <text> | Sets the connect tunnel AES decrypt key with up to 16 bytes. Each byte is represented by a single character. Note that quotes must enclose the value if it contains spaces. |
| aes encrypt key <hexadecimal> | Sets the connect tunnel AES encrypt key with up to 16 bytes. Each byte is represented by two adjacent hex digits. Bytes may run together or be separated by optional punctuation: 123ABC "12 3A BC" 12,3A,BC 12.3a.bc 12:3a:bc Note that quotes must enclose the value if it contains spaces. |
| aes encrypt key text <text> | Sets the connect tunnel AES encrypt key with up to 16 bytes. Each byte is represented by a single character. Note that quotes must enclose the value if it contains spaces. |
| auto show statistics | show connection statistics |
| clrscrn | Clears the screen. |
| credentials <text> | Selects the RSA/DSA certificates by name for the SSL client. |
| default protocol | Restores the default protocol as "TCP". |
| default tcp keep alive | Restores the default 45 second connect mode TCP keep alive timeout. |
| exit | Exits to the next higher level. |
| no address | Removes the remote host address used to establish tunneling connections. |
| no aes decrypt key | Removes the connect tunnel AES decrypt key. |

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| no aes encrypt key | Removes the connect tunnel AES encrypt key. |
| no credentials | Clears the RSA/DSA certificate selection. |
| no port | Removes the remote port used to establish tunnel connections. |
| no ssh username | Removes the SSH user name. |
| no tcp keep alive | Disables the connect mode TCP keep alive timeout. |
| port <number> | Sets the remote port to use for connect mode tunneling. <number> = number of the port to use. |
| protocol ssh | Uses SSH protocol for connect mode tunneling. |
| protocol ssl | Uses SSL protocol for connect mode tunneling. |
| protocol tcp | Uses TCP protocol for connect mode tunneling. |
| protocol tcp aes | Uses TCP protocol with AES encryption for connect mode tunneling. |
| protocol telnet | Uses Telnet protocol (with IAC) for connect mode tunneling. |
| protocol udp | Uses UDP protocol for connect mode tunneling. |
| protocol udp aes | Uses UDP protocol with AES encryption for connect mode tunneling. |
| show | Shows the current configuration. |
| show history | Displays the last 20 commands entered during the current CLI session. |
| show statistics | show connection statistics |
| ssh username <text> | Sets the SSH user name for use when establishing tunneling connections with other devices. <text> = SSH user name. |
| tcp keep alive <milliseconds> | Enables TCP keep alive for connect mode tunneling and sets the timer. <milliseconds> = timer value, in milliseconds. |
| validate certificate disable | Skips verification of the server certificate when connecting. |
| validate certificate enable | Requires verification of the server certificate when connecting. |
| write | Stores the current configuration in permanent memory. |
| host 1 (tunnel-connect-host:2:1) level commands | |
| address <text> | Sets the remote host to establish tunneling connections with. <text> = IP address or host name of the remote host. |
| aes decrypt key <hexadecimal> | Sets the connect tunnel AES decrypt key with up to 16 bytes. Each byte is represented by two adjacent hex digits. Bytes may run together or be separated by optional punctuation: 123ABC "12 3A BC" 12,3A,BC 12.3a.bc 12:3a:bc Note that quotes must enclose the value if it contains spaces. |
| aes decrypt key text <text> | Sets the connect tunnel AES decrypt key with up to 16 bytes. Each byte is represented by a single character. Note that quotes must enclose the value if it contains spaces. |
| aes encrypt key <hexadecimal> | Sets the connect tunnel AES encrypt key with up to 16 bytes. Each byte is represented by two adjacent hex digits. Bytes may run together or be separated by optional punctuation: 123ABC "12 3A BC" 12,3A,BC 12.3a.bc 12:3a:bc Note that quotes must enclose the value if it con- |

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| | tains spaces. |
| aes encrypt key text <text> | Sets the connect tunnel AES encrypt key with up to 16 bytes. Each byte is represented by a single character. Note that quotes must enclose the value if it contains spaces. |
| auto show statistics | show connection statistics |
| clrscrn | Clears the screen. |
| credentials <text> | Selects the RSA/DSA certificates by name for the SSL client. |
| default protocol | Restores the default protocol as "TCP". |
| default tcp keep alive | Restores the default 45 second connect mode TCP keep alive timeout. |
| exit | Exits to the next higher level. |
| no address | Removes the remote host address used to establish tunneling connections. |
| no aes decrypt key | Removes the connect tunnel AES decrypt key. |
| no aes encrypt key | Removes the connect tunnel AES encrypt key. |
| no credentials | Clears the RSA/DSA certificate selection. |
| no port | Removes the remote port used to establish tunnel connections. |
| no ssh username | Removes the SSH user name. |
| no tcp keep alive | Disables the connect mode TCP keep alive timeout. |
| port <number> | Sets the remote port to use for connect mode tunneling. <number> = number of the port to use. |
| protocol ssh | Uses SSH protocol for connect mode tunneling. |
| protocol ssl | Uses SSL protocol for connect mode tunneling. |
| protocol tcp | Uses TCP protocol for connect mode tunneling. |
| protocol tcp aes | Uses TCP protocol with AES encryption for connect mode tunneling. |
| protocol telnet | Uses Telnet protocol (with IAC) for connect mode tunneling. |
| protocol udp | Uses UDP protocol for connect mode tunneling. |
| protocol udp aes | Uses UDP protocol with AES encryption for connect mode tunneling. |
| show | Shows the current configuration. |
| show history | Displays the last 20 commands entered during the current CLI session. |
| show statistics | show connection statistics |
| ssh username <text> | Sets the SSH user name for use when establishing tunneling connections with other devices. <text> = SSH user name. |
| tcp keep alive <milliseconds> | Enables TCP keep alive for connect mode tunneling and sets the timer. <milliseconds> = timer value, in milliseconds. |
| validate certificate disable | Skips verification of the server certificate when connecting. |
| validate certificate enable | Requires verification of the server certificate when connecting. |

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| write | Stores the current configuration in permanent memory. |
| host 1 (tunnel-connect-host:1:1) level commands | |
| address <text> | Sets the remote host to establish tunneling connections with. <text> = IP address or host name of the remote host. |
| aes decrypt key <hexadecimal> | Sets the connect tunnel AES decrypt key with up to 16 bytes. Each byte is represented by two adjacent hex digits. Bytes may run together or be separated by optional punctuation: 123ABC "12 3A BC" 12,3A,BC 12.3a.bc 12:3a:bc Note that quotes must enclose the value if it contains spaces. |
| aes decrypt key text <text> | Sets the connect tunnel AES decrypt key with up to 16 bytes. Each byte is represented by a single character. Note that quotes must enclose the value if it contains spaces. |
| aes encrypt key <hexadecimal> | Sets the connect tunnel AES encrypt key with up to 16 bytes. Each byte is represented by two adjacent hex digits. Bytes may run together or be separated by optional punctuation: 123ABC "12 3A BC" 12,3A,BC 12.3a.bc 12:3a:bc Note that quotes must enclose the value if it contains spaces. |
| aes encrypt key text <text> | Sets the connect tunnel AES encrypt key with up to 16 bytes. Each byte is represented by a single character. Note that quotes must enclose the value if it contains spaces. |
| auto show statistics | show connection statistics |
| clrscrn | Clears the screen. |
| credentials <text> | Selects the RSA/DSA certificates by name for the SSL client. |
| default protocol | Restores the default protocol as "TCP". |
| default tcp keep alive | Restores the default 45 second connect mode TCP keep alive timeout. |
| exit | Exits to the next higher level. |
| no address | Removes the remote host address used to establish tunneling connections. |
| no aes decrypt key | Removes the connect tunnel AES decrypt key. |
| no aes encrypt key | Removes the connect tunnel AES encrypt key. |
| no credentials | Clears the RSA/DSA certificate selection. |
| no port | Removes the remote port used to establish tunnel connections. |
| no ssh username | Removes the SSH user name. |
| no tcp keep alive | Disables the connect mode TCP keep alive timeout. |
| port <number> | Sets the remote port to use for connect mode tunneling. <number> = number of the port to use. |
| protocol ssh | Uses SSH protocol for connect mode tunneling. |
| protocol ssl | Uses SSL protocol for connect mode tunneling. |
| protocol tcp | Uses TCP protocol for connect mode tunneling. |
| protocol tcp aes | Uses TCP protocol with AES encryption for connect mode tunneling. |
| protocol telnet | Uses Telnet protocol (with IAC) for connect mode tunneling. |

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| protocol udp | Uses UDP protocol for connect mode tunneling. |
| protocol udp aes | Uses UDP protocol with AES encryption for connect mode tunneling. |
| show | Shows the current configuration. |
| show history | Displays the last 20 commands entered during the current CLI session. |
| show statistics | show connection statistics |
| ssh username <text> | Sets the SSH user name for use when establishing tunneling connections with other devices. <text> = SSH user name. |
| tcp keep alive <milliseconds> | Enables TCP keep alive for connect mode tunneling and sets the timer. <milliseconds> = timer value, in milliseconds. |
| validate certificate disable | Skips verification of the server certificate when connecting. |
| validate certificate enable | Requires verification of the server certificate when connecting. |
| write | Stores the current configuration in permanent memory. |
| host 1 (config-host:1) level commands | |
| clrscrn | Clears the screen. |
| default protocol | Restores the default value of the protocol (Telnet). |
| default remote port | Sets the remote port (used to connect to the host) to the default value, which depends on the selected protocol. |
| exit | Exits to the configuration level. |
| host <number> | Change to config host level |
| name <text> | Sets the name of the host. <text> = name of the host. |
| no name | Clears the name of the host. |
| no remote address | Clears the remote address of the host. |
| no ssh username | Clears the SSH username associated with the host. |
| protocol ssh | Sets the protocol to SSH. |
| protocol telnet | Sets the protocol to Telnet. |
| remote address <text> | Sets the IP address of the remote host to connect to when this host is selected on the login connect menu. <text> = IP address. |
| remote port <number> | Sets the remote port used to connect to the host. <number> = port to be used. |
| show | Displays the current configuration. |
| show history | Displays the last 20 commands entered during the current CLI session. |
| ssh username <text> | Sets the username for logging into the host via SSH. <text> = username. |
| write | Stores the current configuration in permanent memory. |
| host 10 (tunnel-connect-host:3:10) level commands | |
| address <text> | Sets the remote host to establish tunneling connections with. <text> = IP address or host name of the remote host. |
| aes decrypt key <hexadecimal> | Sets the connect tunnel AES decrypt key with up to 16 bytes. Each byte is represented by two adjacent hex digits. Bytes may run together or be separated by optional |

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| | punctuation: 123ABC "12 3A BC" 12,3A,BC 12.3a.bc 12:3a:bc Note that quotes must enclose the value if it contains spaces. |
| aes decrypt key text <text> | Sets the connect tunnel AES decrypt key with up to 16 bytes. Each byte is represented by a single character. Note that quotes must enclose the value if it contains spaces. |
| aes encrypt key <hexadecimal> | Sets the connect tunnel AES encrypt key with up to 16 bytes. Each byte is represented by two adjacent hex digits. Bytes may run together or be separated by optional punctuation: 123ABC "12 3A BC" 12,3A,BC 12.3a.bc 12:3a:bc Note that quotes must enclose the value if it contains spaces. |
| aes encrypt key text <text> | Sets the connect tunnel AES encrypt key with up to 16 bytes. Each byte is represented by a single character. Note that quotes must enclose the value if it contains spaces. |
| auto show statistics | show connection statistics |
| clrscrn | Clears the screen. |
| credentials <text> | Selects the RSA/DSA certificates by name for the SSL client. |
| default protocol | Restores the default protocol as "TCP". |
| default tcp keep alive | Restores the default 45 second connect mode TCP keep alive timeout. |
| exit | Exits to the next higher level. |
| no address | Removes the remote host address used to establish tunneling connections. |
| no aes decrypt key | Removes the connect tunnel AES decrypt key. |
| no aes encrypt key | Removes the connect tunnel AES encrypt key. |
| no credentials | Clears the RSA/DSA certificate selection. |
| no port | Removes the remote port used to establish tunnel connections. |
| no ssh username | Removes the SSH user name. |
| no tcp keep alive | Disables the connect mode TCP keep alive timeout. |
| port <number> | Sets the remote port to use for connect mode tunneling. <number> = number of the port to use. |
| protocol ssh | Uses SSH protocol for connect mode tunneling. |
| protocol ssl | Uses SSL protocol for connect mode tunneling. |
| protocol tcp | Uses TCP protocol for connect mode tunneling. |
| protocol tcp aes | Uses TCP protocol with AES encryption for connect mode tunneling. |
| protocol telnet | Uses Telnet protocol (with IAC) for connect mode tunneling. |
| protocol udp | Uses UDP protocol for connect mode tunneling. |
| protocol udp aes | Uses UDP protocol with AES encryption for connect mode tunneling. |
| show | Shows the current configuration. |
| show history | Displays the last 20 commands entered during the current CLI session. |
| show statistics | show connection statistics |

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| ssh username <text> | Sets the SSH user name for use when establishing tunneling connections with other devices. <text> = SSH user name. |
| tcp keep alive <milliseconds> | Enables TCP keep alive for connect mode tunneling and sets the timer. <milliseconds> = timer value, in milliseconds. |
| validate certificate disable | Skips verification of the server certificate when connecting. |
| validate certificate enable | Requires verification of the server certificate when connecting. |
| write | Stores the current configuration in permanent memory. |
| host 10 (tunnel-connect-host:2:10) level commands | |
| address <text> | Sets the remote host to establish tunneling connections with. <text> = IP address or host name of the remote host. |
| aes decrypt key <hexadecimal> | Sets the connect tunnel AES decrypt key with up to 16 bytes. Each byte is represented by two adjacent hex digits. Bytes may run together or be separated by optional punctuation: 123ABC "12 3A BC" 12,3A,BC 12.3a.bc 12:3a:bc Note that quotes must enclose the value if it contains spaces. |
| aes decrypt key text <text> | Sets the connect tunnel AES decrypt key with up to 16 bytes. Each byte is represented by a single character. Note that quotes must enclose the value if it contains spaces. |
| aes encrypt key <hexadecimal> | Sets the connect tunnel AES encrypt key with up to 16 bytes. Each byte is represented by two adjacent hex digits. Bytes may run together or be separated by optional punctuation: 123ABC "12 3A BC" 12,3A,BC 12.3a.bc 12:3a:bc Note that quotes must enclose the value if it contains spaces. |
| aes encrypt key text <text> | Sets the connect tunnel AES encrypt key with up to 16 bytes. Each byte is represented by a single character. Note that quotes must enclose the value if it contains spaces. |
| auto show statistics | show connection statistics |
| clrscrn | Clears the screen. |
| credentials <text> | Selects the RSA/DSA certificates by name for the SSL client. |
| default protocol | Restores the default protocol as "TCP". |
| default tcp keep alive | Restores the default 45 second connect mode TCP keep alive timeout. |
| exit | Exits to the next higher level. |
| no address | Removes the remote host address used to establish tunneling connections. |
| no aes decrypt key | Removes the connect tunnel AES decrypt key. |
| no aes encrypt key | Removes the connect tunnel AES encrypt key. |
| no credentials | Clears the RSA/DSA certificate selection. |
| no port | Removes the remote port used to establish tunnel connections. |
| no ssh username | Removes the SSH user name. |
| no tcp keep alive | Disables the connect mode TCP keep alive timeout. |

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| port <number> | Sets the remote port to use for connect mode tunneling. <number> = number of the port to use. |
| protocol ssh | Uses SSH protocol for connect mode tunneling. |
| protocol ssl | Uses SSL protocol for connect mode tunneling. |
| protocol tcp | Uses TCP protocol for connect mode tunneling. |
| protocol tcp aes | Uses TCP protocol with AES encryption for connect mode tunneling. |
| protocol telnet | Uses Telnet protocol (with IAC) for connect mode tunneling. |
| protocol udp | Uses UDP protocol for connect mode tunneling. |
| protocol udp aes | Uses UDP protocol with AES encryption for connect mode tunneling. |
| show | Shows the current configuration. |
| show history | Displays the last 20 commands entered during the current CLI session. |
| show statistics | show connection statistics |
| ssh username <text> | Sets the SSH user name for use when establishing tunneling connections with other devices. <text> = SSH user name. |
| tcp keep alive <milliseconds> | Enables TCP keep alive for connect mode tunneling and sets the timer. <milliseconds> = timer value, in milliseconds. |
| validate certificate disable | Skips verification of the server certificate when connecting. |
| validate certificate enable | Requires verification of the server certificate when connecting. |
| write | Stores the current configuration in permanent memory. |
| host 10 (tunnel-connect-host:1:10) level commands | |
| address <text> | Sets the remote host to establish tunneling connections with. <text> = IP address or host name of the remote host. |
| aes decrypt key <hexadecimal> | Sets the connect tunnel AES decrypt key with up to 16 bytes. Each byte is represented by two adjacent hex digits. Bytes may run together or be separated by optional punctuation: 123ABC "12 3A BC" 12,3A,BC 12.3a.bc 12:3a:bc Note that quotes must enclose the value if it contains spaces. |
| aes decrypt key text <text> | Sets the connect tunnel AES decrypt key with up to 16 bytes. Each byte is represented by a single character. Note that quotes must enclose the value if it contains spaces. |
| aes encrypt key <hexadecimal> | Sets the connect tunnel AES encrypt key with up to 16 bytes. Each byte is represented by two adjacent hex digits. Bytes may run together or be separated by optional punctuation: 123ABC "12 3A BC" 12,3A,BC 12.3a.bc 12:3a:bc Note that quotes must enclose the value if it contains spaces. |
| aes encrypt key text <text> | Sets the connect tunnel AES encrypt key with up to 16 bytes. Each byte is represented by a single character. Note that quotes must enclose the value if it contains spaces. |
| auto show statistics | show connection statistics |
| clrscrn | Clears the screen. |

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| credentials <text> | Selects the RSA/DSA certificates by name for the SSL client. |
| default protocol | Restores the default protocol as "TCP". |
| default tcp keep alive | Restores the default 45 second connect mode TCP keep alive timeout. |
| exit | Exits to the next higher level. |
| no address | Removes the remote host address used to establish tunneling connections. |
| no aes decrypt key | Removes the connect tunnel AES decrypt key. |
| no aes encrypt key | Removes the connect tunnel AES encrypt key. |
| no credentials | Clears the RSA/DSA certificate selection. |
| no port | Removes the remote port used to establish tunnel connections. |
| no ssh username | Removes the SSH user name. |
| no tcp keep alive | Disables the connect mode TCP keep alive timeout. |
| port <number> | Sets the remote port to use for connect mode tunneling. <number> = number of the port to use. |
| protocol ssh | Uses SSH protocol for connect mode tunneling. |
| protocol ssl | Uses SSL protocol for connect mode tunneling. |
| protocol tcp | Uses TCP protocol for connect mode tunneling. |
| protocol tcp aes | Uses TCP protocol with AES encryption for connect mode tunneling. |
| protocol telnet | Uses Telnet protocol (with IAC) for connect mode tunneling. |
| protocol udp | Uses UDP protocol for connect mode tunneling. |
| protocol udp aes | Uses UDP protocol with AES encryption for connect mode tunneling. |
| show | Shows the current configuration. |
| show history | Displays the last 20 commands entered during the current CLI session. |
| show statistics | show connection statistics |
| ssh username <text> | Sets the SSH user name for use when establishing tunneling connections with other devices. <text> = SSH user name. |
| tcp keep alive <milliseconds> | Enables TCP keep alive for connect mode tunneling and sets the timer. <milliseconds> = timer value, in milliseconds. |
| validate certificate disable | Skips verification of the server certificate when connecting. |
| validate certificate enable | Requires verification of the server certificate when connecting. |
| write | Stores the current configuration in permanent memory. |
| host 10 (config-host:10) level commands | |
| clrscrn | Clears the screen. |
| default protocol | Restores the default value of the protocol (Telnet). |
| default remote port | Sets the remote port (used to connect to the host) to the default value, which depends on the selected protocol. |
| exit | Exits to the configuration level. |

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| host <number> | Change to config host level |
| name <text> | Sets the name of the host. <text> = name of the host. |
| no name | Clears the name of the host. |
| no remote address | Clears the remote address of the host. |
| no ssh username | Clears the SSH username associated with the host. |
| protocol ssh | Sets the protocol to SSH. |
| protocol telnet | Sets the protocol to Telnet. |
| remote address <text> | Sets the IP address of the remote host to connect to when this host is selected on the login connect menu. <text> = IP address. |
| remote port <number> | Sets the remote port used to connect to the host. <number> = port to be used. |
| show | Displays the current configuration. |
| show history | Displays the last 20 commands entered during the current CLI session. |
| ssh username <text> | Sets the username for logging into the host via SSH. <text> = username. |
| write | Stores the current configuration in permanent memory. |
| host 11 (tunnel-connect-host:3:11) level commands | |
| address <text> | Sets the remote host to establish tunneling connections with. <text> = IP address or host name of the remote host. |
| aes decrypt key <hexadecimal> | Sets the connect tunnel AES decrypt key with up to 16 bytes. Each byte is represented by two adjacent hex digits. Bytes may run together or be separated by optional punctuation: 123ABC "12 3A BC" 12,3A,BC 12.3a.bc 12:3a:bc Note that quotes must enclose the value if it contains spaces. |
| aes decrypt key text <text> | Sets the connect tunnel AES decrypt key with up to 16 bytes. Each byte is represented by a single character. Note that quotes must enclose the value if it contains spaces. |
| aes encrypt key <hexadecimal> | Sets the connect tunnel AES encrypt key with up to 16 bytes. Each byte is represented by two adjacent hex digits. Bytes may run together or be separated by optional punctuation: 123ABC "12 3A BC" 12,3A,BC 12.3a.bc 12:3a:bc Note that quotes must enclose the value if it contains spaces. |
| aes encrypt key text <text> | Sets the connect tunnel AES encrypt key with up to 16 bytes. Each byte is represented by a single character. Note that quotes must enclose the value if it contains spaces. |
| auto show statistics | show connection statistics |
| clrscrn | Clears the screen. |
| credentials <text> | Selects the RSA/DSA certificates by name for the SSL client. |
| default protocol | Restores the default protocol as "TCP". |
| default tcp keep alive | Restores the default 45 second connect mode TCP keep alive timeout. |
| exit | Exits to the next higher level. |
| no address | Removes the remote host address used to establish tunneling connections. |

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| no aes decrypt key | Removes the connect tunnel AES decrypt key. |
| no aes encrypt key | Removes the connect tunnel AES encrypt key. |
| no credentials | Clears the RSA/DSA certificate selection. |
| no port | Removes the remote port used to establish tunnel connections. |
| no ssh username | Removes the SSH user name. |
| no tcp keep alive | Disables the connect mode TCP keep alive timeout. |
| port <number> | Sets the remote port to use for connect mode tunneling. <number> = number of the port to use. |
| protocol ssh | Uses SSH protocol for connect mode tunneling. |
| protocol ssl | Uses SSL protocol for connect mode tunneling. |
| protocol tcp | Uses TCP protocol for connect mode tunneling. |
| protocol tcp aes | Uses TCP protocol with AES encryption for connect mode tunneling. |
| protocol telnet | Uses Telnet protocol (with IAC) for connect mode tunneling. |
| protocol udp | Uses UDP protocol for connect mode tunneling. |
| protocol udp aes | Uses UDP protocol with AES encryption for connect mode tunneling. |
| show | Shows the current configuration. |
| show history | Displays the last 20 commands entered during the current CLI session. |
| show statistics | show connection statistics |
| ssh username <text> | Sets the SSH user name for use when establishing tunneling connections with other devices. <text> = SSH user name. |
| tcp keep alive <milliseconds> | Enables TCP keep alive for connect mode tunneling and sets the timer. <milliseconds> = timer value, in milliseconds. |
| validate certificate disable | Skips verification of the server certificate when connecting. |
| validate certificate enable | Requires verification of the server certificate when connecting. |
| write | Stores the current configuration in permanent memory. |
| host 11 (tunnel-connect-host:2:11) level commands | |
| address <text> | Sets the remote host to establish tunneling connections with. <text> = IP address or host name of the remote host. |
| aes decrypt key <hexadecimal> | Sets the connect tunnel AES decrypt key with up to 16 bytes. Each byte is represented by two adjacent hex digits. Bytes may run together or be separated by optional punctuation: 123ABC "12 3A BC" 12,3A,BC 12.3a.bc 12:3a:bc Note that quotes must enclose the value if it contains spaces. |
| aes decrypt key text <text> | Sets the connect tunnel AES decrypt key with up to 16 bytes. Each byte is represented by a single character. Note that quotes must enclose the value if it contains spaces. |
| aes encrypt key <hexadecimal> | Sets the connect tunnel AES encrypt key with up to 16 bytes. Each byte is represented by two adjacent hex digits. Bytes may run together or be separated by optional |

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| | punctuation: 123ABC "12 3A BC" 12,3A,BC 12.3a.bc 12:3a:bc Note that quotes must enclose the value if it contains spaces. |
| aes encrypt key text <text> | Sets the connect tunnel AES encrypt key with up to 16 bytes. Each byte is represented by a single character. Note that quotes must enclose the value if it contains spaces. |
| auto show statistics | show connection statistics |
| clrscrn | Clears the screen. |
| credentials <text> | Selects the RSA/DSA certificates by name for the SSL client. |
| default protocol | Restores the default protocol as "TCP". |
| default tcp keep alive | Restores the default 45 second connect mode TCP keep alive timeout. |
| exit | Exits to the next higher level. |
| no address | Removes the remote host address used to establish tunneling connections. |
| no aes decrypt key | Removes the connect tunnel AES decrypt key. |
| no aes encrypt key | Removes the connect tunnel AES encrypt key. |
| no credentials | Clears the RSA/DSA certificate selection. |
| no port | Removes the remote port used to establish tunnel connections. |
| no ssh username | Removes the SSH user name. |
| no tcp keep alive | Disables the connect mode TCP keep alive timeout. |
| port <number> | Sets the remote port to use for connect mode tunneling. <number> = number of the port to use. |
| protocol ssh | Uses SSH protocol for connect mode tunneling. |
| protocol ssl | Uses SSL protocol for connect mode tunneling. |
| protocol tcp | Uses TCP protocol for connect mode tunneling. |
| protocol tcp aes | Uses TCP protocol with AES encryption for connect mode tunneling. |
| protocol telnet | Uses Telnet protocol (with IAC) for connect mode tunneling. |
| protocol udp | Uses UDP protocol for connect mode tunneling. |
| protocol udp aes | Uses UDP protocol with AES encryption for connect mode tunneling. |
| show | Shows the current configuration. |
| show history | Displays the last 20 commands entered during the current CLI session. |
| show statistics | show connection statistics |
| ssh username <text> | Sets the SSH user name for use when establishing tunneling connections with other devices. <text> = SSH user name. |
| tcp keep alive <milliseconds> | Enables TCP keep alive for connect mode tunneling and sets the timer. <milliseconds> = timer value, in milliseconds. |
| validate certificate disable | Skips verification of the server certificate when connecting. |
| validate certificate enable | Requires verification of the server certificate when con- |

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| | necting. |
| write | Stores the current configuration in permanent memory. |
| host 11 (tunnel-connect-host:1:11) level commands | |
| address <text> | Sets the remote host to establish tunneling connections with. <text> = IP address or host name of the remote host. |
| aes decrypt key <hexadecimal> | Sets the connect tunnel AES decrypt key with up to 16 bytes. Each byte is represented by two adjacent hex digits. Bytes may run together or be separated by optional punctuation: 123ABC "12 3A BC" 12,3A,BC 12.3a.bc 12:3a:bc Note that quotes must enclose the value if it contains spaces. |
| aes decrypt key text <text> | Sets the connect tunnel AES decrypt key with up to 16 bytes. Each byte is represented by a single character. Note that quotes must enclose the value if it contains spaces. |
| aes encrypt key <hexadecimal> | Sets the connect tunnel AES encrypt key with up to 16 bytes. Each byte is represented by two adjacent hex digits. Bytes may run together or be separated by optional punctuation: 123ABC "12 3A BC" 12,3A,BC 12.3a.bc 12:3a:bc Note that quotes must enclose the value if it contains spaces. |
| aes encrypt key text <text> | Sets the connect tunnel AES encrypt key with up to 16 bytes. Each byte is represented by a single character. Note that quotes must enclose the value if it contains spaces. |
| auto show statistics | show connection statistics |
| clrscrn | Clears the screen. |
| credentials <text> | Selects the RSA/DSA certificates by name for the SSL client. |
| default protocol | Restores the default protocol as "TCP". |
| default tcp keep alive | Restores the default 45 second connect mode TCP keep alive timeout. |
| exit | Exits to the next higher level. |
| no address | Removes the remote host address used to establish tunneling connections. |
| no aes decrypt key | Removes the connect tunnel AES decrypt key. |
| no aes encrypt key | Removes the connect tunnel AES encrypt key. |
| no credentials | Clears the RSA/DSA certificate selection. |
| no port | Removes the remote port used to establish tunnel connections. |
| no ssh username | Removes the SSH user name. |
| no tcp keep alive | Disables the connect mode TCP keep alive timeout. |
| port <number> | Sets the remote port to use for connect mode tunneling. <number> = number of the port to use. |
| protocol ssh | Uses SSH protocol for connect mode tunneling. |
| protocol ssl | Uses SSL protocol for connect mode tunneling. |
| protocol tcp | Uses TCP protocol for connect mode tunneling. |
| protocol tcp aes | Uses TCP protocol with AES encryption for connect mode tunneling. |
| protocol telnet | Uses Telnet protocol (with IAC) for connect mode tunnel- |

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| | ing. |
| protocol udp | Uses UDP protocol for connect mode tunneling. |
| protocol udp aes | Uses UDP protocol with AES encryption for connect mode tunneling. |
| show | Shows the current configuration. |
| show history | Displays the last 20 commands entered during the current CLI session. |
| show statistics | show connection statistics |
| ssh username <text> | Sets the SSH user name for use when establishing tunneling connections with other devices. <text> = SSH user name. |
| tcp keep alive <milliseconds> | Enables TCP keep alive for connect mode tunneling and sets the timer. <milliseconds> = timer value, in milliseconds. |
| validate certificate disable | Skips verification of the server certificate when connecting. |
| validate certificate enable | Requires verification of the server certificate when connecting. |
| write | Stores the current configuration in permanent memory. |
| host 11 (config-host:11) level commands | |
| clrscrn | Clears the screen. |
| default protocol | Restores the default value of the protocol (Telnet). |
| default remote port | Sets the remote port (used to connect to the host) to the default value, which depends on the selected protocol. |
| exit | Exits to the configuration level. |
| host <number> | Change to config host level |
| name <text> | Sets the name of the host. <text> = name of the host. |
| no name | Clears the name of the host. |
| no remote address | Clears the remote address of the host. |
| no ssh username | Clears the SSH username associated with the host. |
| protocol ssh | Sets the protocol to SSH. |
| protocol telnet | Sets the protocol to Telnet. |
| remote address <text> | Sets the IP address of the remote host to connect to when this host is selected on the login connect menu. <text> = IP address. |
| remote port <number> | Sets the remote port used to connect to the host. <number> = port to be used. |
| show | Displays the current configuration. |
| show history | Displays the last 20 commands entered during the current CLI session. |
| ssh username <text> | Sets the username for logging into the host via SSH. <text> = username. |
| write | Stores the current configuration in permanent memory. |
| host 12 (tunnel-connect-host:3:12) level commands | |
| address <text> | Sets the remote host to establish tunneling connections with. <text> = IP address or host name of the remote host. |
| aes decrypt key <hexadecimal> | Sets the connect tunnel AES decrypt key with up to 16 bytes. Each byte is represented by two adjacent hex dig- |

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| | its. Bytes may run together or be separated by optional punctuation: 123ABC "12 3A BC" 12,3A,BC 12.3a.bc 12:3a:bc Note that quotes must enclose the value if it contains spaces. |
| aes decrypt key text <text> | Sets the connect tunnel AES decrypt key with up to 16 bytes. Each byte is represented by a single character. Note that quotes must enclose the value if it contains spaces. |
| aes encrypt key <hexadecimal> | Sets the connect tunnel AES encrypt key with up to 16 bytes. Each byte is represented by two adjacent hex digits. Bytes may run together or be separated by optional punctuation: 123ABC "12 3A BC" 12,3A,BC 12.3a.bc 12:3a:bc Note that quotes must enclose the value if it contains spaces. |
| aes encrypt key text <text> | Sets the connect tunnel AES encrypt key with up to 16 bytes. Each byte is represented by a single character. Note that quotes must enclose the value if it contains spaces. |
| auto show statistics | show connection statistics |
| clrscrn | Clears the screen. |
| credentials <text> | Selects the RSA/DSA certificates by name for the SSL client. |
| default protocol | Restores the default protocol as "TCP". |
| default tcp keep alive | Restores the default 45 second connect mode TCP keep alive timeout. |
| exit | Exits to the next higher level. |
| no address | Removes the remote host address used to establish tunneling connections. |
| no aes decrypt key | Removes the connect tunnel AES decrypt key. |
| no aes encrypt key | Removes the connect tunnel AES encrypt key. |
| no credentials | Clears the RSA/DSA certificate selection. |
| no port | Removes the remote port used to establish tunnel connections. |
| no ssh username | Removes the SSH user name. |
| no tcp keep alive | Disables the connect mode TCP keep alive timeout. |
| port <number> | Sets the remote port to use for connect mode tunneling. <number> = number of the port to use. |
| protocol ssh | Uses SSH protocol for connect mode tunneling. |
| protocol ssl | Uses SSL protocol for connect mode tunneling. |
| protocol tcp | Uses TCP protocol for connect mode tunneling. |
| protocol tcp aes | Uses TCP protocol with AES encryption for connect mode tunneling. |
| protocol telnet | Uses Telnet protocol (with IAC) for connect mode tunneling. |
| protocol udp | Uses UDP protocol for connect mode tunneling. |
| protocol udp aes | Uses UDP protocol with AES encryption for connect mode tunneling. |
| show | Shows the current configuration. |
| show history | Displays the last 20 commands entered during the current CLI session. |

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| show statistics | show connection statistics |
| ssh username <text> | Sets the SSH user name for use when establishing tunneling connections with other devices. <text> = SSH user name. |
| tcp keep alive <milliseconds> | Enables TCP keep alive for connect mode tunneling and sets the timer. <milliseconds> = timer value, in milliseconds. |
| validate certificate disable | Skips verification of the server certificate when connecting. |
| validate certificate enable | Requires verification of the server certificate when connecting. |
| write | Stores the current configuration in permanent memory. |
| host 12 (tunnel-connect-host:2:12) level commands | |
| address <text> | Sets the remote host to establish tunneling connections with. <text> = IP address or host name of the remote host. |
| aes decrypt key <hexadecimal> | Sets the connect tunnel AES decrypt key with up to 16 bytes. Each byte is represented by two adjacent hex digits. Bytes may run together or be separated by optional punctuation: 123ABC "12 3A BC" 12,3A,BC 12.3a.bc 12:3a:bc Note that quotes must enclose the value if it contains spaces. |
| aes decrypt key text <text> | Sets the connect tunnel AES decrypt key with up to 16 bytes. Each byte is represented by a single character. Note that quotes must enclose the value if it contains spaces. |
| aes encrypt key <hexadecimal> | Sets the connect tunnel AES encrypt key with up to 16 bytes. Each byte is represented by two adjacent hex digits. Bytes may run together or be separated by optional punctuation: 123ABC "12 3A BC" 12,3A,BC 12.3a.bc 12:3a:bc Note that quotes must enclose the value if it contains spaces. |
| aes encrypt key text <text> | Sets the connect tunnel AES encrypt key with up to 16 bytes. Each byte is represented by a single character. Note that quotes must enclose the value if it contains spaces. |
| auto show statistics | show connection statistics |
| clrscrn | Clears the screen. |
| credentials <text> | Selects the RSA/DSA certificates by name for the SSL client. |
| default protocol | Restores the default protocol as "TCP". |
| default tcp keep alive | Restores the default 45 second connect mode TCP keep alive timeout. |
| exit | Exits to the next higher level. |
| no address | Removes the remote host address used to establish tunneling connections. |
| no aes decrypt key | Removes the connect tunnel AES decrypt key. |
| no aes encrypt key | Removes the connect tunnel AES encrypt key. |
| no credentials | Clears the RSA/DSA certificate selection. |
| no port | Removes the remote port used to establish tunnel connections. |
| no ssh username | Removes the SSH user name. |

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| no tcp keep alive | Disables the connect mode TCP keep alive timeout. |
| port <number> | Sets the remote port to use for connect mode tunneling. <number> = number of the port to use. |
| protocol ssh | Uses SSH protocol for connect mode tunneling. |
| protocol ssl | Uses SSL protocol for connect mode tunneling. |
| protocol tcp | Uses TCP protocol for connect mode tunneling. |
| protocol tcp aes | Uses TCP protocol with AES encryption for connect mode tunneling. |
| protocol telnet | Uses Telnet protocol (with IAC) for connect mode tunneling. |
| protocol udp | Uses UDP protocol for connect mode tunneling. |
| protocol udp aes | Uses UDP protocol with AES encryption for connect mode tunneling. |
| show | Shows the current configuration. |
| show history | Displays the last 20 commands entered during the current CLI session. |
| show statistics | show connection statistics |
| ssh username <text> | Sets the SSH user name for use when establishing tunneling connections with other devices. <text> = SSH user name. |
| tcp keep alive <milliseconds> | Enables TCP keep alive for connect mode tunneling and sets the timer. <milliseconds> = timer value, in milliseconds. |
| validate certificate disable | Skips verification of the server certificate when connecting. |
| validate certificate enable | Requires verification of the server certificate when connecting. |
| write | Stores the current configuration in permanent memory. |
| host 12 (tunnel-connect-host:1:12) level commands | |
| address <text> | Sets the remote host to establish tunneling connections with. <text> = IP address or host name of the remote host. |
| aes decrypt key <hexadecimal> | Sets the connect tunnel AES decrypt key with up to 16 bytes. Each byte is represented by two adjacent hex digits. Bytes may run together or be separated by optional punctuation: 123ABC "12 3A BC" 12,3A,BC 12.3a.bc 12:3a:bc Note that quotes must enclose the value if it contains spaces. |
| aes decrypt key text <text> | Sets the connect tunnel AES decrypt key with up to 16 bytes. Each byte is represented by a single character. Note that quotes must enclose the value if it contains spaces. |
| aes encrypt key <hexadecimal> | Sets the connect tunnel AES encrypt key with up to 16 bytes. Each byte is represented by two adjacent hex digits. Bytes may run together or be separated by optional punctuation: 123ABC "12 3A BC" 12,3A,BC 12.3a.bc 12:3a:bc Note that quotes must enclose the value if it contains spaces. |
| aes encrypt key text <text> | Sets the connect tunnel AES encrypt key with up to 16 bytes. Each byte is represented by a single character. Note that quotes must enclose the value if it contains spaces. |
| auto show statistics | show connection statistics |

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| clrscrn | Clears the screen. |
| credentials <text> | Selects the RSA/DSA certificates by name for the SSL client. |
| default protocol | Restores the default protocol as "TCP". |
| default tcp keep alive | Restores the default 45 second connect mode TCP keep alive timeout. |
| exit | Exits to the next higher level. |
| no address | Removes the remote host address used to establish tunneling connections. |
| no aes decrypt key | Removes the connect tunnel AES decrypt key. |
| no aes encrypt key | Removes the connect tunnel AES encrypt key. |
| no credentials | Clears the RSA/DSA certificate selection. |
| no port | Removes the remote port used to establish tunnel connections. |
| no ssh username | Removes the SSH user name. |
| no tcp keep alive | Disables the connect mode TCP keep alive timeout. |
| port <number> | Sets the remote port to use for connect mode tunneling. <number> = number of the port to use. |
| protocol ssh | Uses SSH protocol for connect mode tunneling. |
| protocol ssl | Uses SSL protocol for connect mode tunneling. |
| protocol tcp | Uses TCP protocol for connect mode tunneling. |
| protocol tcp aes | Uses TCP protocol with AES encryption for connect mode tunneling. |
| protocol telnet | Uses Telnet protocol (with IAC) for connect mode tunneling. |
| protocol udp | Uses UDP protocol for connect mode tunneling. |
| protocol udp aes | Uses UDP protocol with AES encryption for connect mode tunneling. |
| show | Shows the current configuration. |
| show history | Displays the last 20 commands entered during the current CLI session. |
| show statistics | show connection statistics |
| ssh username <text> | Sets the SSH user name for use when establishing tunneling connections with other devices. <text> = SSH user name. |
| tcp keep alive <milliseconds> | Enables TCP keep alive for connect mode tunneling and sets the timer. <milliseconds> = timer value, in milliseconds. |
| validate certificate disable | Skips verification of the server certificate when connecting. |
| validate certificate enable | Requires verification of the server certificate when connecting. |
| write | Stores the current configuration in permanent memory. |
| host 12 (config-host:12) level commands | |
| clrscrn | Clears the screen. |
| default protocol | Restores the default value of the protocol (Telnet). |
| default remote port | Sets the remote port (used to connect to the host) to the default value, which depends on the selected protocol. |

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| exit | Exits to the configuration level. |
| host <number> | Change to config host level |
| name <text> | Sets the name of the host. <text> = name of the host. |
| no name | Clears the name of the host. |
| no remote address | Clears the remote address of the host. |
| no ssh username | Clears the SSH username associated with the host. |
| protocol ssh | Sets the protocol to SSH. |
| protocol telnet | Sets the protocol to Telnet. |
| remote address <text> | Sets the IP address of the remote host to connect to when this host is selected on the login connect menu. <text> = IP address. |
| remote port <number> | Sets the remote port used to connect to the host. <number> = port to be used. |
| show | Displays the current configuration. |
| show history | Displays the last 20 commands entered during the current CLI session. |
| ssh username <text> | Sets the username for logging into the host via SSH. <text> = username. |
| write | Stores the current configuration in permanent memory. |
| host 13 (tunnel-connect-host:3:13) level commands | |
| address <text> | Sets the remote host to establish tunneling connections with. <text> = IP address or host name of the remote host. |
| aes decrypt key <hexadecimal> | Sets the connect tunnel AES decrypt key with up to 16 bytes. Each byte is represented by two adjacent hex digits. Bytes may run together or be separated by optional punctuation: 123ABC "12 3A BC" 12,3A,BC 12.3a.bc 12:3a:bc Note that quotes must enclose the value if it contains spaces. |
| aes decrypt key text <text> | Sets the connect tunnel AES decrypt key with up to 16 bytes. Each byte is represented by a single character. Note that quotes must enclose the value if it contains spaces. |
| aes encrypt key <hexadecimal> | Sets the connect tunnel AES encrypt key with up to 16 bytes. Each byte is represented by two adjacent hex digits. Bytes may run together or be separated by optional punctuation: 123ABC "12 3A BC" 12,3A,BC 12.3a.bc 12:3a:bc Note that quotes must enclose the value if it contains spaces. |
| aes encrypt key text <text> | Sets the connect tunnel AES encrypt key with up to 16 bytes. Each byte is represented by a single character. Note that quotes must enclose the value if it contains spaces. |
| auto show statistics | show connection statistics |
| clrscrn | Clears the screen. |
| credentials <text> | Selects the RSA/DSA certificates by name for the SSL client. |
| default protocol | Restores the default protocol as "TCP". |
| default tcp keep alive | Restores the default 45 second connect mode TCP keep alive timeout. |
| exit | Exits to the next higher level. |

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| no address | Removes the remote host address used to establish tunneling connections. |
| no aes decrypt key | Removes the connect tunnel AES decrypt key. |
| no aes encrypt key | Removes the connect tunnel AES encrypt key. |
| no credentials | Clears the RSA/DSA certificate selection. |
| no port | Removes the remote port used to establish tunnel connections. |
| no ssh username | Removes the SSH user name. |
| no tcp keep alive | Disables the connect mode TCP keep alive timeout. |
| port <number> | Sets the remote port to use for connect mode tunneling. <number> = number of the port to use. |
| protocol ssh | Uses SSH protocol for connect mode tunneling. |
| protocol ssl | Uses SSL protocol for connect mode tunneling. |
| protocol tcp | Uses TCP protocol for connect mode tunneling. |
| protocol tcp aes | Uses TCP protocol with AES encryption for connect mode tunneling. |
| protocol telnet | Uses Telnet protocol (with IAC) for connect mode tunneling. |
| protocol udp | Uses UDP protocol for connect mode tunneling. |
| protocol udp aes | Uses UDP protocol with AES encryption for connect mode tunneling. |
| show | Shows the current configuration. |
| show history | Displays the last 20 commands entered during the current CLI session. |
| show statistics | show connection statistics |
| ssh username <text> | Sets the SSH user name for use when establishing tunneling connections with other devices. <text> = SSH user name. |
| tcp keep alive <milliseconds> | Enables TCP keep alive for connect mode tunneling and sets the timer. <milliseconds> = timer value, in milliseconds. |
| validate certificate disable | Skips verification of the server certificate when connecting. |
| validate certificate enable | Requires verification of the server certificate when connecting. |
| write | Stores the current configuration in permanent memory. |
| host 13 (tunnel-connect-host:2:13) level commands | |
| address <text> | Sets the remote host to establish tunneling connections with. <text> = IP address or host name of the remote host. |
| aes decrypt key <hexadecimal> | Sets the connect tunnel AES decrypt key with up to 16 bytes. Each byte is represented by two adjacent hex digits. Bytes may run together or be separated by optional punctuation: 123ABC "12 3A BC" 12,3A,BC 12.3a.bc 12:3a:bc Note that quotes must enclose the value if it contains spaces. |
| aes decrypt key text <text> | Sets the connect tunnel AES decrypt key with up to 16 bytes. Each byte is represented by a single character. Note that quotes must enclose the value if it contains spaces. |
| aes encrypt key <hexadecimal> | Sets the connect tunnel AES encrypt key with up to 16 |

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| | bytes. Each byte is represented by two adjacent hex digits. Bytes may run together or be separated by optional punctuation: 123ABC "12 3A BC" 12,3A,BC 12.3a.bc 12:3a:bc Note that quotes must enclose the value if it contains spaces. |
| aes encrypt key text <text> | Sets the connect tunnel AES encrypt key with up to 16 bytes. Each byte is represented by a single character. Note that quotes must enclose the value if it contains spaces. |
| auto show statistics | show connection statistics |
| clrscrn | Clears the screen. |
| credentials <text> | Selects the RSA/DSA certificates by name for the SSL client. |
| default protocol | Restores the default protocol as "TCP". |
| default tcp keep alive | Restores the default 45 second connect mode TCP keep alive timeout. |
| exit | Exits to the next higher level. |
| no address | Removes the remote host address used to establish tunneling connections. |
| no aes decrypt key | Removes the connect tunnel AES decrypt key. |
| no aes encrypt key | Removes the connect tunnel AES encrypt key. |
| no credentials | Clears the RSA/DSA certificate selection. |
| no port | Removes the remote port used to establish tunnel connections. |
| no ssh username | Removes the SSH user name. |
| no tcp keep alive | Disables the connect mode TCP keep alive timeout. |
| port <number> | Sets the remote port to use for connect mode tunneling. <number> = number of the port to use. |
| protocol ssh | Uses SSH protocol for connect mode tunneling. |
| protocol ssl | Uses SSL protocol for connect mode tunneling. |
| protocol tcp | Uses TCP protocol for connect mode tunneling. |
| protocol tcp aes | Uses TCP protocol with AES encryption for connect mode tunneling. |
| protocol telnet | Uses Telnet protocol (with IAC) for connect mode tunneling. |
| protocol udp | Uses UDP protocol for connect mode tunneling. |
| protocol udp aes | Uses UDP protocol with AES encryption for connect mode tunneling. |
| show | Shows the current configuration. |
| show history | Displays the last 20 commands entered during the current CLI session. |
| show statistics | show connection statistics |
| ssh username <text> | Sets the SSH user name for use when establishing tunneling connections with other devices. <text> = SSH user name. |
| tcp keep alive <milliseconds> | Enables TCP keep alive for connect mode tunneling and sets the timer. <milliseconds> = timer value, in milliseconds. |
| validate certificate disable | Skips verification of the server certificate when connect- |

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| | ing. |
| validate certificate enable | Requires verification of the server certificate when connecting. |
| write | Stores the current configuration in permanent memory. |
| host 13 (tunnel-connect-host:1:13) level commands | |
| address <text> | Sets the remote host to establish tunneling connections with. <text> = IP address or host name of the remote host. |
| aes decrypt key <hexadecimal> | Sets the connect tunnel AES decrypt key with up to 16 bytes. Each byte is represented by two adjacent hex digits. Bytes may run together or be separated by optional punctuation: 123ABC "12 3A BC" 12,3A,BC 12.3a.bc 12:3a:bc Note that quotes must enclose the value if it contains spaces. |
| aes decrypt key text <text> | Sets the connect tunnel AES decrypt key with up to 16 bytes. Each byte is represented by a single character. Note that quotes must enclose the value if it contains spaces. |
| aes encrypt key <hexadecimal> | Sets the connect tunnel AES encrypt key with up to 16 bytes. Each byte is represented by two adjacent hex digits. Bytes may run together or be separated by optional punctuation: 123ABC "12 3A BC" 12,3A,BC 12.3a.bc 12:3a:bc Note that quotes must enclose the value if it contains spaces. |
| aes encrypt key text <text> | Sets the connect tunnel AES encrypt key with up to 16 bytes. Each byte is represented by a single character. Note that quotes must enclose the value if it contains spaces. |
| auto show statistics | show connection statistics |
| clrscrn | Clears the screen. |
| credentials <text> | Selects the RSA/DSA certificates by name for the SSL client. |
| default protocol | Restores the default protocol as "TCP". |
| default tcp keep alive | Restores the default 45 second connect mode TCP keep alive timeout. |
| exit | Exits to the next higher level. |
| no address | Removes the remote host address used to establish tunneling connections. |
| no aes decrypt key | Removes the connect tunnel AES decrypt key. |
| no aes encrypt key | Removes the connect tunnel AES encrypt key. |
| no credentials | Clears the RSA/DSA certificate selection. |
| no port | Removes the remote port used to establish tunnel connections. |
| no ssh username | Removes the SSH user name. |
| no tcp keep alive | Disables the connect mode TCP keep alive timeout. |
| port <number> | Sets the remote port to use for connect mode tunneling. <number> = number of the port to use. |
| protocol ssh | Uses SSH protocol for connect mode tunneling. |
| protocol ssl | Uses SSL protocol for connect mode tunneling. |
| protocol tcp | Uses TCP protocol for connect mode tunneling. |
| protocol tcp aes | Uses TCP protocol with AES encryption for connect mode |

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| | tunneling. |
| protocol telnet | Uses Telnet protocol (with IAC) for connect mode tunneling. |
| protocol udp | Uses UDP protocol for connect mode tunneling. |
| protocol udp aes | Uses UDP protocol with AES encryption for connect mode tunneling. |
| show | Shows the current configuration. |
| show history | Displays the last 20 commands entered during the current CLI session. |
| show statistics | show connection statistics |
| ssh username <text> | Sets the SSH user name for use when establishing tunneling connections with other devices. <text> = SSH user name. |
| tcp keep alive <milliseconds> | Enables TCP keep alive for connect mode tunneling and sets the timer. <milliseconds> = timer value, in milliseconds. |
| validate certificate disable | Skips verification of the server certificate when connecting. |
| validate certificate enable | Requires verification of the server certificate when connecting. |
| write | Stores the current configuration in permanent memory. |
| host 13 (config-host:13) level commands | |
| clrscrn | Clears the screen. |
| default protocol | Restores the default value of the protocol (Telnet). |
| default remote port | Sets the remote port (used to connect to the host) to the default value, which depends on the selected protocol. |
| exit | Exits to the configuration level. |
| host <number> | Change to config host level |
| name <text> | Sets the name of the host. <text> = name of the host. |
| no name | Clears the name of the host. |
| no remote address | Clears the remote address of the host. |
| no ssh username | Clears the SSH username associated with the host. |
| protocol ssh | Sets the protocol to SSH. |
| protocol telnet | Sets the protocol to Telnet. |
| remote address <text> | Sets the IP address of the remote host to connect to when this host is selected on the login connect menu. <text> = IP address. |
| remote port <number> | Sets the remote port used to connect to the host. <number> = port to be used. |
| show | Displays the current configuration. |
| show history | Displays the last 20 commands entered during the current CLI session. |
| ssh username <text> | Sets the username for logging into the host via SSH. <text> = username. |
| write | Stores the current configuration in permanent memory. |
| host 14 (tunnel-connect-host:3:14) level commands | |
| address <text> | Sets the remote host to establish tunneling connections with. <text> = IP address or host name of the remote host. |

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| aes decrypt key <hexadecimal> | Sets the connect tunnel AES decrypt key with up to 16 bytes. Each byte is represented by two adjacent hex digits. Bytes may run together or be separated by optional punctuation: 123ABC "12 3A BC" 12,3A,BC 12.3a.bc 12:3a:bc Note that quotes must enclose the value if it contains spaces. |
| aes decrypt key text <text> | Sets the connect tunnel AES decrypt key with up to 16 bytes. Each byte is represented by a single character. Note that quotes must enclose the value if it contains spaces. |
| aes encrypt key <hexadecimal> | Sets the connect tunnel AES encrypt key with up to 16 bytes. Each byte is represented by two adjacent hex digits. Bytes may run together or be separated by optional punctuation: 123ABC "12 3A BC" 12,3A,BC 12.3a.bc 12:3a:bc Note that quotes must enclose the value if it contains spaces. |
| aes encrypt key text <text> | Sets the connect tunnel AES encrypt key with up to 16 bytes. Each byte is represented by a single character. Note that quotes must enclose the value if it contains spaces. |
| auto show statistics | show connection statistics |
| clrscrn | Clears the screen. |
| credentials <text> | Selects the RSA/DSA certificates by name for the SSL client. |
| default protocol | Restores the default protocol as "TCP". |
| default tcp keep alive | Restores the default 45 second connect mode TCP keep alive timeout. |
| exit | Exits to the next higher level. |
| no address | Removes the remote host address used to establish tunneling connections. |
| no aes decrypt key | Removes the connect tunnel AES decrypt key. |
| no aes encrypt key | Removes the connect tunnel AES encrypt key. |
| no credentials | Clears the RSA/DSA certificate selection. |
| no port | Removes the remote port used to establish tunnel connections. |
| no ssh username | Removes the SSH user name. |
| no tcp keep alive | Disables the connect mode TCP keep alive timeout. |
| port <number> | Sets the remote port to use for connect mode tunneling. <number> = number of the port to use. |
| protocol ssh | Uses SSH protocol for connect mode tunneling. |
| protocol ssl | Uses SSL protocol for connect mode tunneling. |
| protocol tcp | Uses TCP protocol for connect mode tunneling. |
| protocol tcp aes | Uses TCP protocol with AES encryption for connect mode tunneling. |
| protocol telnet | Uses Telnet protocol (with IAC) for connect mode tunneling. |
| protocol udp | Uses UDP protocol for connect mode tunneling. |
| protocol udp aes | Uses UDP protocol with AES encryption for connect mode tunneling. |
| show | Shows the current configuration. |

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| show history | Displays the last 20 commands entered during the current CLI session. |
| show statistics | show connection statistics |
| ssh username <text> | Sets the SSH user name for use when establishing tunneling connections with other devices. <text> = SSH user name. |
| tcp keep alive <milliseconds> | Enables TCP keep alive for connect mode tunneling and sets the timer. <milliseconds> = timer value, in milliseconds. |
| validate certificate disable | Skips verification of the server certificate when connecting. |
| validate certificate enable | Requires verification of the server certificate when connecting. |
| write | Stores the current configuration in permanent memory. |
| host 14 (tunnel-connect-host:2:14) level commands | |
| address <text> | Sets the remote host to establish tunneling connections with. <text> = IP address or host name of the remote host. |
| aes decrypt key <hexadecimal> | Sets the connect tunnel AES decrypt key with up to 16 bytes. Each byte is represented by two adjacent hex digits. Bytes may run together or be separated by optional punctuation: 123ABC "12 3A BC" 12,3A,BC 12.3a.bc 12:3a:bc Note that quotes must enclose the value if it contains spaces. |
| aes decrypt key text <text> | Sets the connect tunnel AES decrypt key with up to 16 bytes. Each byte is represented by a single character. Note that quotes must enclose the value if it contains spaces. |
| aes encrypt key <hexadecimal> | Sets the connect tunnel AES encrypt key with up to 16 bytes. Each byte is represented by two adjacent hex digits. Bytes may run together or be separated by optional punctuation: 123ABC "12 3A BC" 12,3A,BC 12.3a.bc 12:3a:bc Note that quotes must enclose the value if it contains spaces. |
| aes encrypt key text <text> | Sets the connect tunnel AES encrypt key with up to 16 bytes. Each byte is represented by a single character. Note that quotes must enclose the value if it contains spaces. |
| auto show statistics | show connection statistics |
| clrscrm | Clears the screen. |
| credentials <text> | Selects the RSA/DSA certificates by name for the SSL client. |
| default protocol | Restores the default protocol as "TCP". |
| default tcp keep alive | Restores the default 45 second connect mode TCP keep alive timeout. |
| exit | Exits to the next higher level. |
| no address | Removes the remote host address used to establish tunneling connections. |
| no aes decrypt key | Removes the connect tunnel AES decrypt key. |
| no aes encrypt key | Removes the connect tunnel AES encrypt key. |
| no credentials | Clears the RSA/DSA certificate selection. |
| no port | Removes the remote port used to establish tunnel connections. |

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| no ssh username | Removes the SSH user name. |
| no tcp keep alive | Disables the connect mode TCP keep alive timeout. |
| port <number> | Sets the remote port to use for connect mode tunneling. <number> = number of the port to use. |
| protocol ssh | Uses SSH protocol for connect mode tunneling. |
| protocol ssl | Uses SSL protocol for connect mode tunneling. |
| protocol tcp | Uses TCP protocol for connect mode tunneling. |
| protocol tcp aes | Uses TCP protocol with AES encryption for connect mode tunneling. |
| protocol telnet | Uses Telnet protocol (with IAC) for connect mode tunneling. |
| protocol udp | Uses UDP protocol for connect mode tunneling. |
| protocol udp aes | Uses UDP protocol with AES encryption for connect mode tunneling. |
| show | Shows the current configuration. |
| show history | Displays the last 20 commands entered during the current CLI session. |
| show statistics | show connection statistics |
| ssh username <text> | Sets the SSH user name for use when establishing tunneling connections with other devices. <text> = SSH user name. |
| tcp keep alive <milliseconds> | Enables TCP keep alive for connect mode tunneling and sets the timer. <milliseconds> = timer value, in milliseconds. |
| validate certificate disable | Skips verification of the server certificate when connecting. |
| validate certificate enable | Requires verification of the server certificate when connecting. |
| write | Stores the current configuration in permanent memory. |
| host 14 (tunnel-connect-host:1:14) level commands | |
| address <text> | Sets the remote host to establish tunneling connections with. <text> = IP address or host name of the remote host. |
| aes decrypt key <hexadecimal> | Sets the connect tunnel AES decrypt key with up to 16 bytes. Each byte is represented by two adjacent hex digits. Bytes may run together or be separated by optional punctuation: 123ABC "12 3A BC" 12,3A,BC 12.3a.bc 12:3a:bc Note that quotes must enclose the value if it contains spaces. |
| aes decrypt key text <text> | Sets the connect tunnel AES decrypt key with up to 16 bytes. Each byte is represented by a single character. Note that quotes must enclose the value if it contains spaces. |
| aes encrypt key <hexadecimal> | Sets the connect tunnel AES encrypt key with up to 16 bytes. Each byte is represented by two adjacent hex digits. Bytes may run together or be separated by optional punctuation: 123ABC "12 3A BC" 12,3A,BC 12.3a.bc 12:3a:bc Note that quotes must enclose the value if it contains spaces. |
| aes encrypt key text <text> | Sets the connect tunnel AES encrypt key with up to 16 bytes. Each byte is represented by a single character. Note that quotes must enclose the value if it contains spaces. |

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| auto show statistics | show connection statistics |
| clrscrn | Clears the screen. |
| credentials <text> | Selects the RSA/DSA certificates by name for the SSL client. |
| default protocol | Restores the default protocol as "TCP". |
| default tcp keep alive | Restores the default 45 second connect mode TCP keep alive timeout. |
| exit | Exits to the next higher level. |
| no address | Removes the remote host address used to establish tunneling connections. |
| no aes decrypt key | Removes the connect tunnel AES decrypt key. |
| no aes encrypt key | Removes the connect tunnel AES encrypt key. |
| no credentials | Clears the RSA/DSA certificate selection. |
| no port | Removes the remote port used to establish tunnel connections. |
| no ssh username | Removes the SSH user name. |
| no tcp keep alive | Disables the connect mode TCP keep alive timeout. |
| port <number> | Sets the remote port to use for connect mode tunneling. <number> = number of the port to use. |
| protocol ssh | Uses SSH protocol for connect mode tunneling. |
| protocol ssl | Uses SSL protocol for connect mode tunneling. |
| protocol tcp | Uses TCP protocol for connect mode tunneling. |
| protocol tcp aes | Uses TCP protocol with AES encryption for connect mode tunneling. |
| protocol telnet | Uses Telnet protocol (with IAC) for connect mode tunneling. |
| protocol udp | Uses UDP protocol for connect mode tunneling. |
| protocol udp aes | Uses UDP protocol with AES encryption for connect mode tunneling. |
| show | Shows the current configuration. |
| show history | Displays the last 20 commands entered during the current CLI session. |
| show statistics | show connection statistics |
| ssh username <text> | Sets the SSH user name for use when establishing tunneling connections with other devices. <text> = SSH user name. |
| tcp keep alive <milliseconds> | Enables TCP keep alive for connect mode tunneling and sets the timer. <milliseconds> = timer value, in milliseconds. |
| validate certificate disable | Skips verification of the server certificate when connecting. |
| validate certificate enable | Requires verification of the server certificate when connecting. |
| write | Stores the current configuration in permanent memory. |
| host 14 (config-host:14) level commands | |
| clrscrn | Clears the screen. |
| default protocol | Restores the default value of the protocol (Telnet). |
| default remote port | Sets the remote port (used to connect to the host) to the |

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| | default value, which depends on the selected protocol. |
| exit | Exits to the configuration level. |
| host <number> | Change to config host level |
| name <text> | Sets the name of the host. <text> = name of the host. |
| no name | Clears the name of the host. |
| no remote address | Clears the remote address of the host. |
| no ssh username | Clears the SSH username associated with the host. |
| protocol ssh | Sets the protocol to SSH. |
| protocol telnet | Sets the protocol to Telnet. |
| remote address <text> | Sets the IP address of the remote host to connect to when this host is selected on the login connect menu. <text> = IP address. |
| remote port <number> | Sets the remote port used to connect to the host. <number> = port to be used. |
| show | Displays the current configuration. |
| show history | Displays the last 20 commands entered during the current CLI session. |
| ssh username <text> | Sets the username for logging into the host via SSH. <text> = username. |
| write | Stores the current configuration in permanent memory. |
| host 15 (tunnel-connect-host:3:15) level commands | |
| address <text> | Sets the remote host to establish tunneling connections with. <text> = IP address or host name of the remote host. |
| aes decrypt key <hexadecimal> | Sets the connect tunnel AES decrypt key with up to 16 bytes. Each byte is represented by two adjacent hex digits. Bytes may run together or be separated by optional punctuation: 123ABC "12 3A BC" 12,3A,BC 12.3a.bc 12:3a:bc Note that quotes must enclose the value if it contains spaces. |
| aes decrypt key text <text> | Sets the connect tunnel AES decrypt key with up to 16 bytes. Each byte is represented by a single character. Note that quotes must enclose the value if it contains spaces. |
| aes encrypt key <hexadecimal> | Sets the connect tunnel AES encrypt key with up to 16 bytes. Each byte is represented by two adjacent hex digits. Bytes may run together or be separated by optional punctuation: 123ABC "12 3A BC" 12,3A,BC 12.3a.bc 12:3a:bc Note that quotes must enclose the value if it contains spaces. |
| aes encrypt key text <text> | Sets the connect tunnel AES encrypt key with up to 16 bytes. Each byte is represented by a single character. Note that quotes must enclose the value if it contains spaces. |
| auto show statistics | show connection statistics |
| clrscrn | Clears the screen. |
| credentials <text> | Selects the RSA/DSA certificates by name for the SSL client. |
| default protocol | Restores the default protocol as "TCP". |
| default tcp keep alive | Restores the default 45 second connect mode TCP keep alive timeout. |

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| exit | Exits to the next higher level. |
| no address | Removes the remote host address used to establish tunneling connections. |
| no aes decrypt key | Removes the connect tunnel AES decrypt key. |
| no aes encrypt key | Removes the connect tunnel AES encrypt key. |
| no credentials | Clears the RSA/DSA certificate selection. |
| no port | Removes the remote port used to establish tunnel connections. |
| no ssh username | Removes the SSH user name. |
| no tcp keep alive | Disables the connect mode TCP keep alive timeout. |
| port <number> | Sets the remote port to use for connect mode tunneling. <number> = number of the port to use. |
| protocol ssh | Uses SSH protocol for connect mode tunneling. |
| protocol ssl | Uses SSL protocol for connect mode tunneling. |
| protocol tcp | Uses TCP protocol for connect mode tunneling. |
| protocol tcp aes | Uses TCP protocol with AES encryption for connect mode tunneling. |
| protocol telnet | Uses Telnet protocol (with IAC) for connect mode tunneling. |
| protocol udp | Uses UDP protocol for connect mode tunneling. |
| protocol udp aes | Uses UDP protocol with AES encryption for connect mode tunneling. |
| show | Shows the current configuration. |
| show history | Displays the last 20 commands entered during the current CLI session. |
| show statistics | show connection statistics |
| ssh username <text> | Sets the SSH user name for use when establishing tunneling connections with other devices. <text> = SSH user name. |
| tcp keep alive <milliseconds> | Enables TCP keep alive for connect mode tunneling and sets the timer. <milliseconds> = timer value, in milliseconds. |
| validate certificate disable | Skips verification of the server certificate when connecting. |
| validate certificate enable | Requires verification of the server certificate when connecting. |
| write | Stores the current configuration in permanent memory. |
| host 15 (tunnel-connect-host:2:15) level commands | |
| address <text> | Sets the remote host to establish tunneling connections with. <text> = IP address or host name of the remote host. |
| aes decrypt key <hexadecimal> | Sets the connect tunnel AES decrypt key with up to 16 bytes. Each byte is represented by two adjacent hex digits. Bytes may run together or be separated by optional punctuation: 123ABC "12 3A BC" 12,3A,BC 12.3a.bc 12:3a:bc Note that quotes must enclose the value if it contains spaces. |
| aes decrypt key text <text> | Sets the connect tunnel AES decrypt key with up to 16 bytes. Each byte is represented by a single character. Note that quotes must enclose the value if it contains spaces. |

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| aes encrypt key <hexadecimal> | Sets the connect tunnel AES encrypt key with up to 16 bytes. Each byte is represented by two adjacent hex digits. Bytes may run together or be separated by optional punctuation: 123ABC "12 3A BC" 12,3A,BC 12.3a.bc 12:3a:bc Note that quotes must enclose the value if it contains spaces. |
| aes encrypt key text <text> | Sets the connect tunnel AES encrypt key with up to 16 bytes. Each byte is represented by a single character. Note that quotes must enclose the value if it contains spaces. |
| auto show statistics | show connection statistics |
| clrscrn | Clears the screen. |
| credentials <text> | Selects the RSA/DSA certificates by name for the SSL client. |
| default protocol | Restores the default protocol as "TCP". |
| default tcp keep alive | Restores the default 45 second connect mode TCP keep alive timeout. |
| exit | Exits to the next higher level. |
| no address | Removes the remote host address used to establish tunneling connections. |
| no aes decrypt key | Removes the connect tunnel AES decrypt key. |
| no aes encrypt key | Removes the connect tunnel AES encrypt key. |
| no credentials | Clears the RSA/DSA certificate selection. |
| no port | Removes the remote port used to establish tunnel connections. |
| no ssh username | Removes the SSH user name. |
| no tcp keep alive | Disables the connect mode TCP keep alive timeout. |
| port <number> | Sets the remote port to use for connect mode tunneling. <number> = number of the port to use. |
| protocol ssh | Uses SSH protocol for connect mode tunneling. |
| protocol ssl | Uses SSL protocol for connect mode tunneling. |
| protocol tcp | Uses TCP protocol for connect mode tunneling. |
| protocol tcp aes | Uses TCP protocol with AES encryption for connect mode tunneling. |
| protocol telnet | Uses Telnet protocol (with IAC) for connect mode tunneling. |
| protocol udp | Uses UDP protocol for connect mode tunneling. |
| protocol udp aes | Uses UDP protocol with AES encryption for connect mode tunneling. |
| show | Shows the current configuration. |
| show history | Displays the last 20 commands entered during the current CLI session. |
| show statistics | show connection statistics |
| ssh username <text> | Sets the SSH user name for use when establishing tunneling connections with other devices. <text> = SSH user name. |
| tcp keep alive <milliseconds> | Enables TCP keep alive for connect mode tunneling and sets the timer. <milliseconds> = timer value, in milliseconds. |

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| validate certificate disable | Skips verification of the server certificate when connecting. |
| validate certificate enable | Requires verification of the server certificate when connecting. |
| write | Stores the current configuration in permanent memory. |
| host 15 (tunnel-connect-host:1:15) level commands | |
| address <text> | Sets the remote host to establish tunneling connections with. <text> = IP address or host name of the remote host. |
| aes decrypt key <hexadecimal> | Sets the connect tunnel AES decrypt key with up to 16 bytes. Each byte is represented by two adjacent hex digits. Bytes may run together or be separated by optional punctuation: 123ABC "12 3A BC" 12,3A,BC 12.3a.bc 12:3a:bc Note that quotes must enclose the value if it contains spaces. |
| aes decrypt key text <text> | Sets the connect tunnel AES decrypt key with up to 16 bytes. Each byte is represented by a single character. Note that quotes must enclose the value if it contains spaces. |
| aes encrypt key <hexadecimal> | Sets the connect tunnel AES encrypt key with up to 16 bytes. Each byte is represented by two adjacent hex digits. Bytes may run together or be separated by optional punctuation: 123ABC "12 3A BC" 12,3A,BC 12.3a.bc 12:3a:bc Note that quotes must enclose the value if it contains spaces. |
| aes encrypt key text <text> | Sets the connect tunnel AES encrypt key with up to 16 bytes. Each byte is represented by a single character. Note that quotes must enclose the value if it contains spaces. |
| auto show statistics | show connection statistics |
| clrscrn | Clears the screen. |
| credentials <text> | Selects the RSA/DSA certificates by name for the SSL client. |
| default protocol | Restores the default protocol as "TCP". |
| default tcp keep alive | Restores the default 45 second connect mode TCP keep alive timeout. |
| exit | Exits to the next higher level. |
| no address | Removes the remote host address used to establish tunneling connections. |
| no aes decrypt key | Removes the connect tunnel AES decrypt key. |
| no aes encrypt key | Removes the connect tunnel AES encrypt key. |
| no credentials | Clears the RSA/DSA certificate selection. |
| no port | Removes the remote port used to establish tunnel connections. |
| no ssh username | Removes the SSH user name. |
| no tcp keep alive | Disables the connect mode TCP keep alive timeout. |
| port <number> | Sets the remote port to use for connect mode tunneling. <number> = number of the port to use. |
| protocol ssh | Uses SSH protocol for connect mode tunneling. |
| protocol ssl | Uses SSL protocol for connect mode tunneling. |
| protocol tcp | Uses TCP protocol for connect mode tunneling. |

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| protocol tcp aes | Uses TCP protocol with AES encryption for connect mode tunneling. |
| protocol telnet | Uses Telnet protocol (with IAC) for connect mode tunneling. |
| protocol udp | Uses UDP protocol for connect mode tunneling. |
| protocol udp aes | Uses UDP protocol with AES encryption for connect mode tunneling. |
| show | Shows the current configuration. |
| show history | Displays the last 20 commands entered during the current CLI session. |
| show statistics | show connection statistics |
| ssh username <text> | Sets the SSH user name for use when establishing tunneling connections with other devices. <text> = SSH user name. |
| tcp keep alive <milliseconds> | Enables TCP keep alive for connect mode tunneling and sets the timer. <milliseconds> = timer value, in milliseconds. |
| validate certificate disable | Skips verification of the server certificate when connecting. |
| validate certificate enable | Requires verification of the server certificate when connecting. |
| write | Stores the current configuration in permanent memory. |
| host 15 (config-host:15) level commands | |
| clrscrn | Clears the screen. |
| default protocol | Restores the default value of the protocol (Telnet). |
| default remote port | Sets the remote port (used to connect to the host) to the default value, which depends on the selected protocol. |
| exit | Exits to the configuration level. |
| host <number> | Change to config host level |
| name <text> | Sets the name of the host. <text> = name of the host. |
| no name | Clears the name of the host. |
| no remote address | Clears the remote address of the host. |
| no ssh username | Clears the SSH username associated with the host. |
| protocol ssh | Sets the protocol to SSH. |
| protocol telnet | Sets the protocol to Telnet. |
| remote address <text> | Sets the IP address of the remote host to connect to when this host is selected on the login connect menu. <text> = IP address. |
| remote port <number> | Sets the remote port used to connect to the host. <number> = port to be used. |
| show | Displays the current configuration. |
| show history | Displays the last 20 commands entered during the current CLI session. |
| ssh username <text> | Sets the username for logging into the host via SSH. <text> = username. |
| write | Stores the current configuration in permanent memory. |
| host 16 (tunnel-connect-host:3:16) level commands | |
| address <text> | Sets the remote host to establish tunneling connections |

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| | with. <text> = IP address or host name of the remote host. |
| aes decrypt key <hexadecimal> | Sets the connect tunnel AES decrypt key with up to 16 bytes. Each byte is represented by two adjacent hex digits. Bytes may run together or be separated by optional punctuation: 123ABC "12 3A BC" 12,3A,BC 12.3a.bc 12:3a:bc Note that quotes must enclose the value if it contains spaces. |
| aes decrypt key text <text> | Sets the connect tunnel AES decrypt key with up to 16 bytes. Each byte is represented by a single character. Note that quotes must enclose the value if it contains spaces. |
| aes encrypt key <hexadecimal> | Sets the connect tunnel AES encrypt key with up to 16 bytes. Each byte is represented by two adjacent hex digits. Bytes may run together or be separated by optional punctuation: 123ABC "12 3A BC" 12,3A,BC 12.3a.bc 12:3a:bc Note that quotes must enclose the value if it contains spaces. |
| aes encrypt key text <text> | Sets the connect tunnel AES encrypt key with up to 16 bytes. Each byte is represented by a single character. Note that quotes must enclose the value if it contains spaces. |
| auto show statistics | show connection statistics |
| clrscrn | Clears the screen. |
| credentials <text> | Selects the RSA/DSA certificates by name for the SSL client. |
| default protocol | Restores the default protocol as "TCP". |
| default tcp keep alive | Restores the default 45 second connect mode TCP keep alive timeout. |
| exit | Exits to the next higher level. |
| no address | Removes the remote host address used to establish tunneling connections. |
| no aes decrypt key | Removes the connect tunnel AES decrypt key. |
| no aes encrypt key | Removes the connect tunnel AES encrypt key. |
| no credentials | Clears the RSA/DSA certificate selection. |
| no port | Removes the remote port used to establish tunnel connections. |
| no ssh username | Removes the SSH user name. |
| no tcp keep alive | Disables the connect mode TCP keep alive timeout. |
| port <number> | Sets the remote port to use for connect mode tunneling. <number> = number of the port to use. |
| protocol ssh | Uses SSH protocol for connect mode tunneling. |
| protocol ssl | Uses SSL protocol for connect mode tunneling. |
| protocol tcp | Uses TCP protocol for connect mode tunneling. |
| protocol tcp aes | Uses TCP protocol with AES encryption for connect mode tunneling. |
| protocol telnet | Uses Telnet protocol (with IAC) for connect mode tunneling. |
| protocol udp | Uses UDP protocol for connect mode tunneling. |
| protocol udp aes | Uses UDP protocol with AES encryption for connect mode tunneling. |

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| show | Shows the current configuration. |
| show history | Displays the last 20 commands entered during the current CLI session. |
| show statistics | show connection statistics |
| ssh username <text> | Sets the SSH user name for use when establishing tunneling connections with other devices. <text> = SSH user name. |
| tcp keep alive <milliseconds> | Enables TCP keep alive for connect mode tunneling and sets the timer. <milliseconds> = timer value, in milliseconds. |
| validate certificate disable | Skips verification of the server certificate when connecting. |
| validate certificate enable | Requires verification of the server certificate when connecting. |
| write | Stores the current configuration in permanent memory. |
| host 16 (tunnel-connect-host:2:16) level commands | |
| address <text> | Sets the remote host to establish tunneling connections with. <text> = IP address or host name of the remote host. |
| aes decrypt key <hexadecimal> | Sets the connect tunnel AES decrypt key with up to 16 bytes. Each byte is represented by two adjacent hex digits. Bytes may run together or be separated by optional punctuation: 123ABC "12 3A BC" 12,3A,BC 12.3a.bc 12:3a:bc Note that quotes must enclose the value if it contains spaces. |
| aes decrypt key text <text> | Sets the connect tunnel AES decrypt key with up to 16 bytes. Each byte is represented by a single character. Note that quotes must enclose the value if it contains spaces. |
| aes encrypt key <hexadecimal> | Sets the connect tunnel AES encrypt key with up to 16 bytes. Each byte is represented by two adjacent hex digits. Bytes may run together or be separated by optional punctuation: 123ABC "12 3A BC" 12,3A,BC 12.3a.bc 12:3a:bc Note that quotes must enclose the value if it contains spaces. |
| aes encrypt key text <text> | Sets the connect tunnel AES encrypt key with up to 16 bytes. Each byte is represented by a single character. Note that quotes must enclose the value if it contains spaces. |
| auto show statistics | show connection statistics |
| clrscrn | Clears the screen. |
| credentials <text> | Selects the RSA/DSA certificates by name for the SSL client. |
| default protocol | Restores the default protocol as "TCP". |
| default tcp keep alive | Restores the default 45 second connect mode TCP keep alive timeout. |
| exit | Exits to the next higher level. |
| no address | Removes the remote host address used to establish tunneling connections. |
| no aes decrypt key | Removes the connect tunnel AES decrypt key. |
| no aes encrypt key | Removes the connect tunnel AES encrypt key. |
| no credentials | Clears the RSA/DSA certificate selection. |

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| no port | Removes the remote port used to establish tunnel connections. |
| no ssh username | Removes the SSH user name. |
| no tcp keep alive | Disables the connect mode TCP keep alive timeout. |
| port <number> | Sets the remote port to use for connect mode tunneling. <number> = number of the port to use. |
| protocol ssh | Uses SSH protocol for connect mode tunneling. |
| protocol ssl | Uses SSL protocol for connect mode tunneling. |
| protocol tcp | Uses TCP protocol for connect mode tunneling. |
| protocol tcp aes | Uses TCP protocol with AES encryption for connect mode tunneling. |
| protocol telnet | Uses Telnet protocol (with IAC) for connect mode tunneling. |
| protocol udp | Uses UDP protocol for connect mode tunneling. |
| protocol udp aes | Uses UDP protocol with AES encryption for connect mode tunneling. |
| show | Shows the current configuration. |
| show history | Displays the last 20 commands entered during the current CLI session. |
| show statistics | show connection statistics |
| ssh username <text> | Sets the SSH user name for use when establishing tunneling connections with other devices. <text> = SSH user name. |
| tcp keep alive <milliseconds> | Enables TCP keep alive for connect mode tunneling and sets the timer. <milliseconds> = timer value, in milliseconds. |
| validate certificate disable | Skips verification of the server certificate when connecting. |
| validate certificate enable | Requires verification of the server certificate when connecting. |
| write | Stores the current configuration in permanent memory. |
| host 16 (tunnel-connect-host:1:16) level commands | |
| address <text> | Sets the remote host to establish tunneling connections with. <text> = IP address or host name of the remote host. |
| aes decrypt key <hexadecimal> | Sets the connect tunnel AES decrypt key with up to 16 bytes. Each byte is represented by two adjacent hex digits. Bytes may run together or be separated by optional punctuation: 123ABC "12 3A BC" 12,3A,BC 12.3a.bc 12:3a:bc Note that quotes must enclose the value if it contains spaces. |
| aes decrypt key text <text> | Sets the connect tunnel AES decrypt key with up to 16 bytes. Each byte is represented by a single character. Note that quotes must enclose the value if it contains spaces. |
| aes encrypt key <hexadecimal> | Sets the connect tunnel AES encrypt key with up to 16 bytes. Each byte is represented by two adjacent hex digits. Bytes may run together or be separated by optional punctuation: 123ABC "12 3A BC" 12,3A,BC 12.3a.bc 12:3a:bc Note that quotes must enclose the value if it contains spaces. |
| aes encrypt key text <text> | Sets the connect tunnel AES encrypt key with up to 16 |

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| | bytes. Each byte is represented by a single character. Note that quotes must enclose the value if it contains spaces. |
| auto show statistics | show connection statistics |
| clrscrn | Clears the screen. |
| credentials <text> | Selects the RSA/DSA certificates by name for the SSL client. |
| default protocol | Restores the default protocol as "TCP". |
| default tcp keep alive | Restores the default 45 second connect mode TCP keep alive timeout. |
| exit | Exits to the next higher level. |
| no address | Removes the remote host address used to establish tunneling connections. |
| no aes decrypt key | Removes the connect tunnel AES decrypt key. |
| no aes encrypt key | Removes the connect tunnel AES encrypt key. |
| no credentials | Clears the RSA/DSA certificate selection. |
| no port | Removes the remote port used to establish tunnel connections. |
| no ssh username | Removes the SSH user name. |
| no tcp keep alive | Disables the connect mode TCP keep alive timeout. |
| port <number> | Sets the remote port to use for connect mode tunneling. <number> = number of the port to use. |
| protocol ssh | Uses SSH protocol for connect mode tunneling. |
| protocol ssl | Uses SSL protocol for connect mode tunneling. |
| protocol tcp | Uses TCP protocol for connect mode tunneling. |
| protocol tcp aes | Uses TCP protocol with AES encryption for connect mode tunneling. |
| protocol telnet | Uses Telnet protocol (with IAC) for connect mode tunneling. |
| protocol udp | Uses UDP protocol for connect mode tunneling. |
| protocol udp aes | Uses UDP protocol with AES encryption for connect mode tunneling. |
| show | Shows the current configuration. |
| show history | Displays the last 20 commands entered during the current CLI session. |
| show statistics | show connection statistics |
| ssh username <text> | Sets the SSH user name for use when establishing tunneling connections with other devices. <text> = SSH user name. |
| tcp keep alive <milliseconds> | Enables TCP keep alive for connect mode tunneling and sets the timer. <milliseconds> = timer value, in milliseconds. |
| validate certificate disable | Skips verification of the server certificate when connecting. |
| validate certificate enable | Requires verification of the server certificate when connecting. |
| write | Stores the current configuration in permanent memory. |
| host 16 (config-host:16) level commands | |

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| clrscrn | Clears the screen. |
| default protocol | Restores the default value of the protocol (Telnet). |
| default remote port | Sets the remote port (used to connect to the host) to the default value, which depends on the selected protocol. |
| exit | Exits to the configuration level. |
| host <number> | Change to config host level |
| name <text> | Sets the name of the host. <text> = name of the host. |
| no name | Clears the name of the host. |
| no remote address | Clears the remote address of the host. |
| no ssh username | Clears the SSH username associated with the host. |
| protocol ssh | Sets the protocol to SSH. |
| protocol telnet | Sets the protocol to Telnet. |
| remote address <text> | Sets the IP address of the remote host to connect to when this host is selected on the login connect menu. <text> = IP address. |
| remote port <number> | Sets the remote port used to connect to the host. <number> = port to be used. |
| show | Displays the current configuration. |
| show history | Displays the last 20 commands entered during the current CLI session. |
| ssh username <text> | Sets the username for logging into the host via SSH. <text> = username. |
| write | Stores the current configuration in permanent memory. |
| host 17 (config-host:17) level commands | |
| clrscrn | Clears the screen. |
| default protocol | Restores the default value of the protocol (Telnet). |
| default remote port | Sets the remote port (used to connect to the host) to the default value, which depends on the selected protocol. |
| exit | Exits to the configuration level. |
| host <number> | Change to config host level |
| name <text> | Sets the name of the host. <text> = name of the host. |
| no name | Clears the name of the host. |
| no remote address | Clears the remote address of the host. |
| no ssh username | Clears the SSH username associated with the host. |
| protocol ssh | Sets the protocol to SSH. |
| protocol telnet | Sets the protocol to Telnet. |
| remote address <text> | Sets the IP address of the remote host to connect to when this host is selected on the login connect menu. <text> = IP address. |
| remote port <number> | Sets the remote port used to connect to the host. <number> = port to be used. |
| show | Displays the current configuration. |
| show history | Displays the last 20 commands entered during the current CLI session. |
| ssh username <text> | Sets the username for logging into the host via SSH. <text> = username. |
| write | Stores the current configuration in permanent memory. |

| host 18 (config-host:18) level commands | |
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| clrscrn | Clears the screen. |
| default protocol | Restores the default value of the protocol (Telnet). |
| default remote port | Sets the remote port (used to connect to the host) to the default value, which depends on the selected protocol. |
| exit | Exits to the configuration level. |
| host <number> | Change to config host level |
| name <text> | Sets the name of the host. <text> = name of the host. |
| no name | Clears the name of the host. |
| no remote address | Clears the remote address of the host. |
| no ssh username | Clears the SSH username associated with the host. |
| protocol ssh | Sets the protocol to SSH. |
| protocol telnet | Sets the protocol to Telnet. |
| remote address <text> | Sets the IP address of the remote host to connect to when this host is selected on the login connect menu. <text> = IP address. |
| remote port <number> | Sets the remote port used to connect to the host. <number> = port to be used. |
| show | Displays the current configuration. |
| show history | Displays the last 20 commands entered during the current CLI session. |
| ssh username <text> | Sets the username for logging into the host via SSH. <text> = username. |
| write | Stores the current configuration in permanent memory. |
| host 19 (config-host:19) level commands | |
| clrscrn | Clears the screen. |
| default protocol | Restores the default value of the protocol (Telnet). |
| default remote port | Sets the remote port (used to connect to the host) to the default value, which depends on the selected protocol. |
| exit | Exits to the configuration level. |
| host <number> | Change to config host level |
| name <text> | Sets the name of the host. <text> = name of the host. |
| no name | Clears the name of the host. |
| no remote address | Clears the remote address of the host. |
| no ssh username | Clears the SSH username associated with the host. |
| protocol ssh | Sets the protocol to SSH. |
| protocol telnet | Sets the protocol to Telnet. |
| remote address <text> | Sets the IP address of the remote host to connect to when this host is selected on the login connect menu. <text> = IP address. |
| remote port <number> | Sets the remote port used to connect to the host. <number> = port to be used. |
| show | Displays the current configuration. |
| show history | Displays the last 20 commands entered during the current CLI session. |
| ssh username <text> | Sets the username for logging into the host via SSH. <text> = username. |

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| write | Stores the current configuration in permanent memory. |
| host 2 (tunnel-connect-host:3:2) level commands | |
| address <text> | Sets the remote host to establish tunneling connections with. <text> = IP address or host name of the remote host. |
| aes decrypt key <hexadecimal> | Sets the connect tunnel AES decrypt key with up to 16 bytes. Each byte is represented by two adjacent hex digits. Bytes may run together or be separated by optional punctuation: 123ABC "12 3A BC" 12,3A,BC 12.3a.bc 12:3a:bc Note that quotes must enclose the value if it contains spaces. |
| aes decrypt key text <text> | Sets the connect tunnel AES decrypt key with up to 16 bytes. Each byte is represented by a single character. Note that quotes must enclose the value if it contains spaces. |
| aes encrypt key <hexadecimal> | Sets the connect tunnel AES encrypt key with up to 16 bytes. Each byte is represented by two adjacent hex digits. Bytes may run together or be separated by optional punctuation: 123ABC "12 3A BC" 12,3A,BC 12.3a.bc 12:3a:bc Note that quotes must enclose the value if it contains spaces. |
| aes encrypt key text <text> | Sets the connect tunnel AES encrypt key with up to 16 bytes. Each byte is represented by a single character. Note that quotes must enclose the value if it contains spaces. |
| auto show statistics | show connection statistics |
| clrscrn | Clears the screen. |
| credentials <text> | Selects the RSA/DSA certificates by name for the SSL client. |
| default protocol | Restores the default protocol as "TCP". |
| default tcp keep alive | Restores the default 45 second connect mode TCP keep alive timeout. |
| exit | Exits to the next higher level. |
| no address | Removes the remote host address used to establish tunneling connections. |
| no aes decrypt key | Removes the connect tunnel AES decrypt key. |
| no aes encrypt key | Removes the connect tunnel AES encrypt key. |
| no credentials | Clears the RSA/DSA certificate selection. |
| no port | Removes the remote port used to establish tunnel connections. |
| no ssh username | Removes the SSH user name. |
| no tcp keep alive | Disables the connect mode TCP keep alive timeout. |
| port <number> | Sets the remote port to use for connect mode tunneling. <number> = number of the port to use. |
| protocol ssh | Uses SSH protocol for connect mode tunneling. |
| protocol ssl | Uses SSL protocol for connect mode tunneling. |
| protocol tcp | Uses TCP protocol for connect mode tunneling. |
| protocol tcp aes | Uses TCP protocol with AES encryption for connect mode tunneling. |
| protocol telnet | Uses Telnet protocol (with IAC) for connect mode tunneling. |

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| protocol udp | Uses UDP protocol for connect mode tunneling. |
| protocol udp aes | Uses UDP protocol with AES encryption for connect mode tunneling. |
| show | Shows the current configuration. |
| show history | Displays the last 20 commands entered during the current CLI session. |
| show statistics | show connection statistics |
| ssh username <text> | Sets the SSH user name for use when establishing tunneling connections with other devices. <text> = SSH user name. |
| tcp keep alive <milliseconds> | Enables TCP keep alive for connect mode tunneling and sets the timer. <milliseconds> = timer value, in milliseconds. |
| validate certificate disable | Skips verification of the server certificate when connecting. |
| validate certificate enable | Requires verification of the server certificate when connecting. |
| write | Stores the current configuration in permanent memory. |
| host 2 (tunnel-connect-host:2:2) level commands | |
| address <text> | Sets the remote host to establish tunneling connections with. <text> = IP address or host name of the remote host. |
| aes decrypt key <hexadecimal> | Sets the connect tunnel AES decrypt key with up to 16 bytes. Each byte is represented by two adjacent hex digits. Bytes may run together or be separated by optional punctuation: 123ABC "12 3A BC" 12,3A,BC 12.3a.bc 12:3a:bc Note that quotes must enclose the value if it contains spaces. |
| aes decrypt key text <text> | Sets the connect tunnel AES decrypt key with up to 16 bytes. Each byte is represented by a single character. Note that quotes must enclose the value if it contains spaces. |
| aes encrypt key <hexadecimal> | Sets the connect tunnel AES encrypt key with up to 16 bytes. Each byte is represented by two adjacent hex digits. Bytes may run together or be separated by optional punctuation: 123ABC "12 3A BC" 12,3A,BC 12.3a.bc 12:3a:bc Note that quotes must enclose the value if it contains spaces. |
| aes encrypt key text <text> | Sets the connect tunnel AES encrypt key with up to 16 bytes. Each byte is represented by a single character. Note that quotes must enclose the value if it contains spaces. |
| auto show statistics | show connection statistics |
| clrscrn | Clears the screen. |
| credentials <text> | Selects the RSA/DSA certificates by name for the SSL client. |
| default protocol | Restores the default protocol as "TCP". |
| default tcp keep alive | Restores the default 45 second connect mode TCP keep alive timeout. |
| exit | Exits to the next higher level. |
| no address | Removes the remote host address used to establish tunneling connections. |
| no aes decrypt key | Removes the connect tunnel AES decrypt key. |

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| no aes encrypt key | Removes the connect tunnel AES encrypt key. |
| no credentials | Clears the RSA/DSA certificate selection. |
| no port | Removes the remote port used to establish tunnel connections. |
| no ssh username | Removes the SSH user name. |
| no tcp keep alive | Disables the connect mode TCP keep alive timeout. |
| port <number> | Sets the remote port to use for connect mode tunneling. <number> = number of the port to use. |
| protocol ssh | Uses SSH protocol for connect mode tunneling. |
| protocol ssl | Uses SSL protocol for connect mode tunneling. |
| protocol tcp | Uses TCP protocol for connect mode tunneling. |
| protocol tcp aes | Uses TCP protocol with AES encryption for connect mode tunneling. |
| protocol telnet | Uses Telnet protocol (with IAC) for connect mode tunneling. |
| protocol udp | Uses UDP protocol for connect mode tunneling. |
| protocol udp aes | Uses UDP protocol with AES encryption for connect mode tunneling. |
| show | Shows the current configuration. |
| show history | Displays the last 20 commands entered during the current CLI session. |
| show statistics | show connection statistics |
| ssh username <text> | Sets the SSH user name for use when establishing tunneling connections with other devices. <text> = SSH user name. |
| tcp keep alive <milliseconds> | Enables TCP keep alive for connect mode tunneling and sets the timer. <milliseconds> = timer value, in milliseconds. |
| validate certificate disable | Skips verification of the server certificate when connecting. |
| validate certificate enable | Requires verification of the server certificate when connecting. |
| write | Stores the current configuration in permanent memory. |
| host 2 (tunnel-connect-host:1:2) level commands | |
| address <text> | Sets the remote host to establish tunneling connections with. <text> = IP address or host name of the remote host. |
| aes decrypt key <hexadecimal> | Sets the connect tunnel AES decrypt key with up to 16 bytes. Each byte is represented by two adjacent hex digits. Bytes may run together or be separated by optional punctuation: 123ABC "12 3A BC" 12,3A,BC 12.3a.bc 12:3a:bc Note that quotes must enclose the value if it contains spaces. |
| aes decrypt key text <text> | Sets the connect tunnel AES decrypt key with up to 16 bytes. Each byte is represented by a single character. Note that quotes must enclose the value if it contains spaces. |
| aes encrypt key <hexadecimal> | Sets the connect tunnel AES encrypt key with up to 16 bytes. Each byte is represented by two adjacent hex digits. Bytes may run together or be separated by optional punctuation: 123ABC "12 3A BC" 12,3A,BC 12.3a.bc 12:3a:bc Note that quotes must enclose the value if it con- |

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| | tains spaces. |
| aes encrypt key text <text> | Sets the connect tunnel AES encrypt key with up to 16 bytes. Each byte is represented by a single character. Note that quotes must enclose the value if it contains spaces. |
| auto show statistics | show connection statistics |
| clrscrn | Clears the screen. |
| credentials <text> | Selects the RSA/DSA certificates by name for the SSL client. |
| default protocol | Restores the default protocol as "TCP". |
| default tcp keep alive | Restores the default 45 second connect mode TCP keep alive timeout. |
| exit | Exits to the next higher level. |
| no address | Removes the remote host address used to establish tunneling connections. |
| no aes decrypt key | Removes the connect tunnel AES decrypt key. |
| no aes encrypt key | Removes the connect tunnel AES encrypt key. |
| no credentials | Clears the RSA/DSA certificate selection. |
| no port | Removes the remote port used to establish tunnel connections. |
| no ssh username | Removes the SSH user name. |
| no tcp keep alive | Disables the connect mode TCP keep alive timeout. |
| port <number> | Sets the remote port to use for connect mode tunneling. <number> = number of the port to use. |
| protocol ssh | Uses SSH protocol for connect mode tunneling. |
| protocol ssl | Uses SSL protocol for connect mode tunneling. |
| protocol tcp | Uses TCP protocol for connect mode tunneling. |
| protocol tcp aes | Uses TCP protocol with AES encryption for connect mode tunneling. |
| protocol telnet | Uses Telnet protocol (with IAC) for connect mode tunneling. |
| protocol udp | Uses UDP protocol for connect mode tunneling. |
| protocol udp aes | Uses UDP protocol with AES encryption for connect mode tunneling. |
| show | Shows the current configuration. |
| show history | Displays the last 20 commands entered during the current CLI session. |
| show statistics | show connection statistics |
| ssh username <text> | Sets the SSH user name for use when establishing tunneling connections with other devices. <text> = SSH user name. |
| tcp keep alive <milliseconds> | Enables TCP keep alive for connect mode tunneling and sets the timer. <milliseconds> = timer value, in milliseconds. |
| validate certificate disable | Skips verification of the server certificate when connecting. |
| validate certificate enable | Requires verification of the server certificate when connecting. |

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| write | Stores the current configuration in permanent memory. |
| host 2 (config-host:2) level commands | |
| clrscrn | Clears the screen. |
| default protocol | Restores the default value of the protocol (Telnet). |
| default remote port | Sets the remote port (used to connect to the host) to the default value, which depends on the selected protocol. |
| exit | Exits to the configuration level. |
| host <number> | Change to config host level |
| name <text> | Sets the name of the host. <text> = name of the host. |
| no name | Clears the name of the host. |
| no remote address | Clears the remote address of the host. |
| no ssh username | Clears the SSH username associated with the host. |
| protocol ssh | Sets the protocol to SSH. |
| protocol telnet | Sets the protocol to Telnet. |
| remote address <text> | Sets the IP address of the remote host to connect to when this host is selected on the login connect menu. <text> = IP address. |
| remote port <number> | Sets the remote port used to connect to the host. <number> = port to be used. |
| show | Displays the current configuration. |
| show history | Displays the last 20 commands entered during the current CLI session. |
| ssh username <text> | Sets the username for logging into the host via SSH. <text> = username. |
| write | Stores the current configuration in permanent memory. |
| host 20 (config-host:20) level commands | |
| clrscrn | Clears the screen. |
| default protocol | Restores the default value of the protocol (Telnet). |
| default remote port | Sets the remote port (used to connect to the host) to the default value, which depends on the selected protocol. |
| exit | Exits to the configuration level. |
| host <number> | Change to config host level |
| name <text> | Sets the name of the host. <text> = name of the host. |
| no name | Clears the name of the host. |
| no remote address | Clears the remote address of the host. |
| no ssh username | Clears the SSH username associated with the host. |
| protocol ssh | Sets the protocol to SSH. |
| protocol telnet | Sets the protocol to Telnet. |
| remote address <text> | Sets the IP address of the remote host to connect to when this host is selected on the login connect menu. <text> = IP address. |
| remote port <number> | Sets the remote port used to connect to the host. <number> = port to be used. |
| show | Displays the current configuration. |
| show history | Displays the last 20 commands entered during the current CLI session. |

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| ssh username <text> | Sets the username for logging into the host via SSH. <text> = username. |
| write | Stores the current configuration in permanent memory. |
| host 21 (config-host:21) level commands | |
| clrscrn | Clears the screen. |
| default protocol | Restores the default value of the protocol (Telnet). |
| default remote port | Sets the remote port (used to connect to the host) to the default value, which depends on the selected protocol. |
| exit | Exits to the configuration level. |
| host <number> | Change to config host level |
| name <text> | Sets the name of the host. <text> = name of the host. |
| no name | Clears the name of the host. |
| no remote address | Clears the remote address of the host. |
| no ssh username | Clears the SSH username associated with the host. |
| protocol ssh | Sets the protocol to SSH. |
| protocol telnet | Sets the protocol to Telnet. |
| remote address <text> | Sets the IP address of the remote host to connect to when this host is selected on the login connect menu. <text> = IP address. |
| remote port <number> | Sets the remote port used to connect to the host. <number> = port to be used. |
| show | Displays the current configuration. |
| show history | Displays the last 20 commands entered during the current CLI session. |
| ssh username <text> | Sets the username for logging into the host via SSH. <text> = username. |
| write | Stores the current configuration in permanent memory. |
| host 22 (config-host:22) level commands | |
| clrscrn | Clears the screen. |
| default protocol | Restores the default value of the protocol (Telnet). |
| default remote port | Sets the remote port (used to connect to the host) to the default value, which depends on the selected protocol. |
| exit | Exits to the configuration level. |
| host <number> | Change to config host level |
| name <text> | Sets the name of the host. <text> = name of the host. |
| no name | Clears the name of the host. |
| no remote address | Clears the remote address of the host. |
| no ssh username | Clears the SSH username associated with the host. |
| protocol ssh | Sets the protocol to SSH. |
| protocol telnet | Sets the protocol to Telnet. |
| remote address <text> | Sets the IP address of the remote host to connect to when this host is selected on the login connect menu. <text> = IP address. |
| remote port <number> | Sets the remote port used to connect to the host. <number> = port to be used. |
| show | Displays the current configuration. |

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| show history | Displays the last 20 commands entered during the current CLI session. |
| ssh username <text> | Sets the username for logging into the host via SSH. <text> = username. |
| write | Stores the current configuration in permanent memory. |
| host 23 (config-host:23) level commands | |
| clrscrn | Clears the screen. |
| default protocol | Restores the default value of the protocol (Telnet). |
| default remote port | Sets the remote port (used to connect to the host) to the default value, which depends on the selected protocol. |
| exit | Exits to the configuration level. |
| host <number> | Change to config host level |
| name <text> | Sets the name of the host. <text> = name of the host. |
| no name | Clears the name of the host. |
| no remote address | Clears the remote address of the host. |
| no ssh username | Clears the SSH username associated with the host. |
| protocol ssh | Sets the protocol to SSH. |
| protocol telnet | Sets the protocol to Telnet. |
| remote address <text> | Sets the IP address of the remote host to connect to when this host is selected on the login connect menu. <text> = IP address. |
| remote port <number> | Sets the remote port used to connect to the host. <number> = port to be used. |
| show | Displays the current configuration. |
| show history | Displays the last 20 commands entered during the current CLI session. |
| ssh username <text> | Sets the username for logging into the host via SSH. <text> = username. |
| write | Stores the current configuration in permanent memory. |
| host 24 (config-host:24) level commands | |
| clrscrn | Clears the screen. |
| default protocol | Restores the default value of the protocol (Telnet). |
| default remote port | Sets the remote port (used to connect to the host) to the default value, which depends on the selected protocol. |
| exit | Exits to the configuration level. |
| host <number> | Change to config host level |
| name <text> | Sets the name of the host. <text> = name of the host. |
| no name | Clears the name of the host. |
| no remote address | Clears the remote address of the host. |
| no ssh username | Clears the SSH username associated with the host. |
| protocol ssh | Sets the protocol to SSH. |
| protocol telnet | Sets the protocol to Telnet. |
| remote address <text> | Sets the IP address of the remote host to connect to when this host is selected on the login connect menu. <text> = IP address. |
| remote port <number> | Sets the remote port used to connect to the host. <number> = port to be used. |

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| show | Displays the current configuration. |
| show history | Displays the last 20 commands entered during the current CLI session. |
| ssh username <text> | Sets the username for logging into the host via SSH. <text> = username. |
| write | Stores the current configuration in permanent memory. |
| host 25 (config-host:25) level commands | |
| clrscrn | Clears the screen. |
| default protocol | Restores the default value of the protocol (Telnet). |
| default remote port | Sets the remote port (used to connect to the host) to the default value, which depends on the selected protocol. |
| exit | Exits to the configuration level. |
| host <number> | Change to config host level |
| name <text> | Sets the name of the host. <text> = name of the host. |
| no name | Clears the name of the host. |
| no remote address | Clears the remote address of the host. |
| no ssh username | Clears the SSH username associated with the host. |
| protocol ssh | Sets the protocol to SSH. |
| protocol telnet | Sets the protocol to Telnet. |
| remote address <text> | Sets the IP address of the remote host to connect to when this host is selected on the login connect menu. <text> = IP address. |
| remote port <number> | Sets the remote port used to connect to the host. <number> = port to be used. |
| show | Displays the current configuration. |
| show history | Displays the last 20 commands entered during the current CLI session. |
| ssh username <text> | Sets the username for logging into the host via SSH. <text> = username. |
| write | Stores the current configuration in permanent memory. |
| host 26 (config-host:26) level commands | |
| clrscrn | Clears the screen. |
| default protocol | Restores the default value of the protocol (Telnet). |
| default remote port | Sets the remote port (used to connect to the host) to the default value, which depends on the selected protocol. |
| exit | Exits to the configuration level. |
| host <number> | Change to config host level |
| name <text> | Sets the name of the host. <text> = name of the host. |
| no name | Clears the name of the host. |
| no remote address | Clears the remote address of the host. |
| no ssh username | Clears the SSH username associated with the host. |
| protocol ssh | Sets the protocol to SSH. |
| protocol telnet | Sets the protocol to Telnet. |
| remote address <text> | Sets the IP address of the remote host to connect to when this host is selected on the login connect menu. <text> = IP address. |

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| remote port <number> | Sets the remote port used to connect to the host. <number> = port to be used. |
| show | Displays the current configuration. |
| show history | Displays the last 20 commands entered during the current CLI session. |
| ssh username <text> | Sets the username for logging into the host via SSH. <text> = username. |
| write | Stores the current configuration in permanent memory. |
| host 27 (config-host:27) level commands | |
| clrscrn | Clears the screen. |
| default protocol | Restores the default value of the protocol (Telnet). |
| default remote port | Sets the remote port (used to connect to the host) to the default value, which depends on the selected protocol. |
| exit | Exits to the configuration level. |
| host <number> | Change to config host level |
| name <text> | Sets the name of the host. <text> = name of the host. |
| no name | Clears the name of the host. |
| no remote address | Clears the remote address of the host. |
| no ssh username | Clears the SSH username associated with the host. |
| protocol ssh | Sets the protocol to SSH. |
| protocol telnet | Sets the protocol to Telnet. |
| remote address <text> | Sets the IP address of the remote host to connect to when this host is selected on the login connect menu. <text> = IP address. |
| remote port <number> | Sets the remote port used to connect to the host. <number> = port to be used. |
| show | Displays the current configuration. |
| show history | Displays the last 20 commands entered during the current CLI session. |
| ssh username <text> | Sets the username for logging into the host via SSH. <text> = username. |
| write | Stores the current configuration in permanent memory. |
| host 28 (config-host:28) level commands | |
| clrscrn | Clears the screen. |
| default protocol | Restores the default value of the protocol (Telnet). |
| default remote port | Sets the remote port (used to connect to the host) to the default value, which depends on the selected protocol. |
| exit | Exits to the configuration level. |
| host <number> | Change to config host level |
| name <text> | Sets the name of the host. <text> = name of the host. |
| no name | Clears the name of the host. |
| no remote address | Clears the remote address of the host. |
| no ssh username | Clears the SSH username associated with the host. |
| protocol ssh | Sets the protocol to SSH. |
| protocol telnet | Sets the protocol to Telnet. |
| remote address <text> | Sets the IP address of the remote host to connect to when |

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| | this host is selected on the login connect menu. <text> = IP address. |
| remote port <number> | Sets the remote port used to connect to the host. <number> = port to be used. |
| show | Displays the current configuration. |
| show history | Displays the last 20 commands entered during the current CLI session. |
| ssh username <text> | Sets the username for logging into the host via SSH. <text> = username. |
| write | Stores the current configuration in permanent memory. |
| host 29 (config-host:29) level commands | |
| clrscrn | Clears the screen. |
| default protocol | Restores the default value of the protocol (Telnet). |
| default remote port | Sets the remote port (used to connect to the host) to the default value, which depends on the selected protocol. |
| exit | Exits to the configuration level. |
| host <number> | Change to config host level |
| name <text> | Sets the name of the host. <text> = name of the host. |
| no name | Clears the name of the host. |
| no remote address | Clears the remote address of the host. |
| no ssh username | Clears the SSH username associated with the host. |
| protocol ssh | Sets the protocol to SSH. |
| protocol telnet | Sets the protocol to Telnet. |
| remote address <text> | Sets the IP address of the remote host to connect to when this host is selected on the login connect menu. <text> = IP address. |
| remote port <number> | Sets the remote port used to connect to the host. <number> = port to be used. |
| show | Displays the current configuration. |
| show history | Displays the last 20 commands entered during the current CLI session. |
| ssh username <text> | Sets the username for logging into the host via SSH. <text> = username. |
| write | Stores the current configuration in permanent memory. |
| host 3 (tunnel-connect-host:3:3) level commands | |
| address <text> | Sets the remote host to establish tunneling connections with. <text> = IP address or host name of the remote host. |
| aes decrypt key <hexadecimal> | Sets the connect tunnel AES decrypt key with up to 16 bytes. Each byte is represented by two adjacent hex digits. Bytes may run together or be separated by optional punctuation: 123ABC "12 3A BC" 12,3A,BC 12.3a.bc 12:3a:bc Note that quotes must enclose the value if it contains spaces. |
| aes decrypt key text <text> | Sets the connect tunnel AES decrypt key with up to 16 bytes. Each byte is represented by a single character. Note that quotes must enclose the value if it contains spaces. |
| aes encrypt key <hexadecimal> | Sets the connect tunnel AES encrypt key with up to 16 bytes. Each byte is represented by two adjacent hex dig- |

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| | its. Bytes may run together or be separated by optional punctuation: 123ABC "12 3A BC" 12,3A,BC 12.3a.bc 12:3a:bc Note that quotes must enclose the value if it contains spaces. |
| aes encrypt key text <text> | Sets the connect tunnel AES encrypt key with up to 16 bytes. Each byte is represented by a single character. Note that quotes must enclose the value if it contains spaces. |
| auto show statistics | show connection statistics |
| clrscrn | Clears the screen. |
| credentials <text> | Selects the RSA/DSA certificates by name for the SSL client. |
| default protocol | Restores the default protocol as "TCP". |
| default tcp keep alive | Restores the default 45 second connect mode TCP keep alive timeout. |
| exit | Exits to the next higher level. |
| no address | Removes the remote host address used to establish tunneling connections. |
| no aes decrypt key | Removes the connect tunnel AES decrypt key. |
| no aes encrypt key | Removes the connect tunnel AES encrypt key. |
| no credentials | Clears the RSA/DSA certificate selection. |
| no port | Removes the remote port used to establish tunnel connections. |
| no ssh username | Removes the SSH user name. |
| no tcp keep alive | Disables the connect mode TCP keep alive timeout. |
| port <number> | Sets the remote port to use for connect mode tunneling. <number> = number of the port to use. |
| protocol ssh | Uses SSH protocol for connect mode tunneling. |
| protocol ssl | Uses SSL protocol for connect mode tunneling. |
| protocol tcp | Uses TCP protocol for connect mode tunneling. |
| protocol tcp aes | Uses TCP protocol with AES encryption for connect mode tunneling. |
| protocol telnet | Uses Telnet protocol (with IAC) for connect mode tunneling. |
| protocol udp | Uses UDP protocol for connect mode tunneling. |
| protocol udp aes | Uses UDP protocol with AES encryption for connect mode tunneling. |
| show | Shows the current configuration. |
| show history | Displays the last 20 commands entered during the current CLI session. |
| show statistics | show connection statistics |
| ssh username <text> | Sets the SSH user name for use when establishing tunneling connections with other devices. <text> = SSH user name. |
| tcp keep alive <milliseconds> | Enables TCP keep alive for connect mode tunneling and sets the timer. <milliseconds> = timer value, in milliseconds. |
| validate certificate disable | Skips verification of the server certificate when connecting. |

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| validate certificate enable | Requires verification of the server certificate when connecting. |
| write | Stores the current configuration in permanent memory. |
| host 3 (tunnel-connect-host:2:3) level commands | |
| address <text> | Sets the remote host to establish tunneling connections with. <text> = IP address or host name of the remote host. |
| aes decrypt key <hexadecimal> | Sets the connect tunnel AES decrypt key with up to 16 bytes. Each byte is represented by two adjacent hex digits. Bytes may run together or be separated by optional punctuation: 123ABC "12 3A BC" 12,3A,BC 12.3a.bc 12:3a:bc Note that quotes must enclose the value if it contains spaces. |
| aes decrypt key text <text> | Sets the connect tunnel AES decrypt key with up to 16 bytes. Each byte is represented by a single character. Note that quotes must enclose the value if it contains spaces. |
| aes encrypt key <hexadecimal> | Sets the connect tunnel AES encrypt key with up to 16 bytes. Each byte is represented by two adjacent hex digits. Bytes may run together or be separated by optional punctuation: 123ABC "12 3A BC" 12,3A,BC 12.3a.bc 12:3a:bc Note that quotes must enclose the value if it contains spaces. |
| aes encrypt key text <text> | Sets the connect tunnel AES encrypt key with up to 16 bytes. Each byte is represented by a single character. Note that quotes must enclose the value if it contains spaces. |
| auto show statistics | show connection statistics |
| clrscrn | Clears the screen. |
| credentials <text> | Selects the RSA/DSA certificates by name for the SSL client. |
| default protocol | Restores the default protocol as "TCP". |
| default tcp keep alive | Restores the default 45 second connect mode TCP keep alive timeout. |
| exit | Exits to the next higher level. |
| no address | Removes the remote host address used to establish tunneling connections. |
| no aes decrypt key | Removes the connect tunnel AES decrypt key. |
| no aes encrypt key | Removes the connect tunnel AES encrypt key. |
| no credentials | Clears the RSA/DSA certificate selection. |
| no port | Removes the remote port used to establish tunnel connections. |
| no ssh username | Removes the SSH user name. |
| no tcp keep alive | Disables the connect mode TCP keep alive timeout. |
| port <number> | Sets the remote port to use for connect mode tunneling. <number> = number of the port to use. |
| protocol ssh | Uses SSH protocol for connect mode tunneling. |
| protocol ssl | Uses SSL protocol for connect mode tunneling. |
| protocol tcp | Uses TCP protocol for connect mode tunneling. |
| protocol tcp aes | Uses TCP protocol with AES encryption for connect mode tunneling. |

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| protocol telnet | Uses Telnet protocol (with IAC) for connect mode tunneling. |
| protocol udp | Uses UDP protocol for connect mode tunneling. |
| protocol udp aes | Uses UDP protocol with AES encryption for connect mode tunneling. |
| show | Shows the current configuration. |
| show history | Displays the last 20 commands entered during the current CLI session. |
| show statistics | show connection statistics |
| ssh username <text> | Sets the SSH user name for use when establishing tunneling connections with other devices. <text> = SSH user name. |
| tcp keep alive <milliseconds> | Enables TCP keep alive for connect mode tunneling and sets the timer. <milliseconds> = timer value, in milliseconds. |
| validate certificate disable | Skips verification of the server certificate when connecting. |
| validate certificate enable | Requires verification of the server certificate when connecting. |
| write | Stores the current configuration in permanent memory. |
| host 3 (tunnel-connect-host:1:3) level commands | |
| address <text> | Sets the remote host to establish tunneling connections with. <text> = IP address or host name of the remote host. |
| aes decrypt key <hexadecimal> | Sets the connect tunnel AES decrypt key with up to 16 bytes. Each byte is represented by two adjacent hex digits. Bytes may run together or be separated by optional punctuation: 123ABC "12 3A BC" 12,3A,BC 12.3a.bc 12:3a:bc Note that quotes must enclose the value if it contains spaces. |
| aes decrypt key text <text> | Sets the connect tunnel AES decrypt key with up to 16 bytes. Each byte is represented by a single character. Note that quotes must enclose the value if it contains spaces. |
| aes encrypt key <hexadecimal> | Sets the connect tunnel AES encrypt key with up to 16 bytes. Each byte is represented by two adjacent hex digits. Bytes may run together or be separated by optional punctuation: 123ABC "12 3A BC" 12,3A,BC 12.3a.bc 12:3a:bc Note that quotes must enclose the value if it contains spaces. |
| aes encrypt key text <text> | Sets the connect tunnel AES encrypt key with up to 16 bytes. Each byte is represented by a single character. Note that quotes must enclose the value if it contains spaces. |
| auto show statistics | show connection statistics |
| clrscrn | Clears the screen. |
| credentials <text> | Selects the RSA/DSA certificates by name for the SSL client. |
| default protocol | Restores the default protocol as "TCP". |
| default tcp keep alive | Restores the default 45 second connect mode TCP keep alive timeout. |
| exit | Exits to the next higher level. |
| no address | Removes the remote host address used to establish tun- |

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| | neling connections. |
| no aes decrypt key | Removes the connect tunnel AES decrypt key. |
| no aes encrypt key | Removes the connect tunnel AES encrypt key. |
| no credentials | Clears the RSA/DSA certificate selection. |
| no port | Removes the remote port used to establish tunnel connections. |
| no ssh username | Removes the SSH user name. |
| no tcp keep alive | Disables the connect mode TCP keep alive timeout. |
| port <number> | Sets the remote port to use for connect mode tunneling. <number> = number of the port to use. |
| protocol ssh | Uses SSH protocol for connect mode tunneling. |
| protocol ssl | Uses SSL protocol for connect mode tunneling. |
| protocol tcp | Uses TCP protocol for connect mode tunneling. |
| protocol tcp aes | Uses TCP protocol with AES encryption for connect mode tunneling. |
| protocol telnet | Uses Telnet protocol (with IAC) for connect mode tunneling. |
| protocol udp | Uses UDP protocol for connect mode tunneling. |
| protocol udp aes | Uses UDP protocol with AES encryption for connect mode tunneling. |
| show | Shows the current configuration. |
| show history | Displays the last 20 commands entered during the current CLI session. |
| show statistics | show connection statistics |
| ssh username <text> | Sets the SSH user name for use when establishing tunneling connections with other devices. <text> = SSH user name. |
| tcp keep alive <milliseconds> | Enables TCP keep alive for connect mode tunneling and sets the timer. <milliseconds> = timer value, in milliseconds. |
| validate certificate disable | Skips verification of the server certificate when connecting. |
| validate certificate enable | Requires verification of the server certificate when connecting. |
| write | Stores the current configuration in permanent memory. |
| host 3 (config-host:3) level commands | |
| clrscrn | Clears the screen. |
| default protocol | Restores the default value of the protocol (Telnet). |
| default remote port | Sets the remote port (used to connect to the host) to the default value, which depends on the selected protocol. |
| exit | Exits to the configuration level. |
| host <number> | Change to config host level |
| name <text> | Sets the name of the host. <text> = name of the host. |
| no name | Clears the name of the host. |
| no remote address | Clears the remote address of the host. |
| no ssh username | Clears the SSH username associated with the host. |
| protocol ssh | Sets the protocol to SSH. |

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| protocol telnet | Sets the protocol to Telnet. |
| remote address <text> | Sets the IP address of the remote host to connect to when this host is selected on the login connect menu. <text> = IP address. |
| remote port <number> | Sets the remote port used to connect to the host. <number> = port to be used. |
| show | Displays the current configuration. |
| show history | Displays the last 20 commands entered during the current CLI session. |
| ssh username <text> | Sets the username for logging into the host via SSH. <text> = username. |
| write | Stores the current configuration in permanent memory. |
| host 30 (config-host:30) level commands | |
| clrscrn | Clears the screen. |
| default protocol | Restores the default value of the protocol (Telnet). |
| default remote port | Sets the remote port (used to connect to the host) to the default value, which depends on the selected protocol. |
| exit | Exits to the configuration level. |
| host <number> | Change to config host level |
| name <text> | Sets the name of the host. <text> = name of the host. |
| no name | Clears the name of the host. |
| no remote address | Clears the remote address of the host. |
| no ssh username | Clears the SSH username associated with the host. |
| protocol ssh | Sets the protocol to SSH. |
| protocol telnet | Sets the protocol to Telnet. |
| remote address <text> | Sets the IP address of the remote host to connect to when this host is selected on the login connect menu. <text> = IP address. |
| remote port <number> | Sets the remote port used to connect to the host. <number> = port to be used. |
| show | Displays the current configuration. |
| show history | Displays the last 20 commands entered during the current CLI session. |
| ssh username <text> | Sets the username for logging into the host via SSH. <text> = username. |
| write | Stores the current configuration in permanent memory. |
| host 31 (config-host:31) level commands | |
| clrscrn | Clears the screen. |
| default protocol | Restores the default value of the protocol (Telnet). |
| default remote port | Sets the remote port (used to connect to the host) to the default value, which depends on the selected protocol. |
| exit | Exits to the configuration level. |
| host <number> | Change to config host level |
| name <text> | Sets the name of the host. <text> = name of the host. |
| no name | Clears the name of the host. |
| no remote address | Clears the remote address of the host. |
| no ssh username | Clears the SSH username associated with the host. |

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| protocol ssh | Sets the protocol to SSH. |
| protocol telnet | Sets the protocol to Telnet. |
| remote address <text> | Sets the IP address of the remote host to connect to when this host is selected on the login connect menu. <text> = IP address. |
| remote port <number> | Sets the remote port used to connect to the host. <number> = port to be used. |
| show | Displays the current configuration. |
| show history | Displays the last 20 commands entered during the current CLI session. |
| ssh username <text> | Sets the username for logging into the host via SSH. <text> = username. |
| write | Stores the current configuration in permanent memory. |
| host 32 (config-host:32) level commands | |
| clrscrn | Clears the screen. |
| default protocol | Restores the default value of the protocol (Telnet). |
| default remote port | Sets the remote port (used to connect to the host) to the default value, which depends on the selected protocol. |
| exit | Exits to the configuration level. |
| host <number> | Change to config host level |
| name <text> | Sets the name of the host. <text> = name of the host. |
| no name | Clears the name of the host. |
| no remote address | Clears the remote address of the host. |
| no ssh username | Clears the SSH username associated with the host. |
| protocol ssh | Sets the protocol to SSH. |
| protocol telnet | Sets the protocol to Telnet. |
| remote address <text> | Sets the IP address of the remote host to connect to when this host is selected on the login connect menu. <text> = IP address. |
| remote port <number> | Sets the remote port used to connect to the host. <number> = port to be used. |
| show | Displays the current configuration. |
| show history | Displays the last 20 commands entered during the current CLI session. |
| ssh username <text> | Sets the username for logging into the host via SSH. <text> = username. |
| write | Stores the current configuration in permanent memory. |
| host 4 (tunnel-connect-host:3:4) level commands | |
| address <text> | Sets the remote host to establish tunneling connections with. <text> = IP address or host name of the remote host. |
| aes decrypt key <hexadecimal> | Sets the connect tunnel AES decrypt key with up to 16 bytes. Each byte is represented by two adjacent hex digits. Bytes may run together or be separated by optional punctuation: 123ABC "12 3A BC" 12,3A,BC 12.3a.bc 12:3a:bc Note that quotes must enclose the value if it contains spaces. |
| aes decrypt key text <text> | Sets the connect tunnel AES decrypt key with up to 16 bytes. Each byte is represented by a single character. Note that quotes must enclose the value if it contains |

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| | spaces. |
| aes encrypt key <hexadecimal> | Sets the connect tunnel AES encrypt key with up to 16 bytes. Each byte is represented by two adjacent hex digits. Bytes may run together or be separated by optional punctuation: 123ABC "12 3A BC" 12,3A,BC 12.3a.bc 12:3a:bc Note that quotes must enclose the value if it contains spaces. |
| aes encrypt key text <text> | Sets the connect tunnel AES encrypt key with up to 16 bytes. Each byte is represented by a single character. Note that quotes must enclose the value if it contains spaces. |
| auto show statistics | show connection statistics |
| clrscrn | Clears the screen. |
| credentials <text> | Selects the RSA/DSA certificates by name for the SSL client. |
| default protocol | Restores the default protocol as "TCP". |
| default tcp keep alive | Restores the default 45 second connect mode TCP keep alive timeout. |
| exit | Exits to the next higher level. |
| no address | Removes the remote host address used to establish tunneling connections. |
| no aes decrypt key | Removes the connect tunnel AES decrypt key. |
| no aes encrypt key | Removes the connect tunnel AES encrypt key. |
| no credentials | Clears the RSA/DSA certificate selection. |
| no port | Removes the remote port used to establish tunnel connections. |
| no ssh username | Removes the SSH user name. |
| no tcp keep alive | Disables the connect mode TCP keep alive timeout. |
| port <number> | Sets the remote port to use for connect mode tunneling. <number> = number of the port to use. |
| protocol ssh | Uses SSH protocol for connect mode tunneling. |
| protocol ssl | Uses SSL protocol for connect mode tunneling. |
| protocol tcp | Uses TCP protocol for connect mode tunneling. |
| protocol tcp aes | Uses TCP protocol with AES encryption for connect mode tunneling. |
| protocol telnet | Uses Telnet protocol (with IAC) for connect mode tunneling. |
| protocol udp | Uses UDP protocol for connect mode tunneling. |
| protocol udp aes | Uses UDP protocol with AES encryption for connect mode tunneling. |
| show | Shows the current configuration. |
| show history | Displays the last 20 commands entered during the current CLI session. |
| show statistics | show connection statistics |
| ssh username <text> | Sets the SSH user name for use when establishing tunneling connections with other devices. <text> = SSH user name. |
| tcp keep alive <milliseconds> | Enables TCP keep alive for connect mode tunneling and sets the timer. <milliseconds> = timer value, in millisec- |

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| | onds. |
| validate certificate disable | Skips verification of the server certificate when connecting. |
| validate certificate enable | Requires verification of the server certificate when connecting. |
| write | Stores the current configuration in permanent memory. |
| host 4 (tunnel-connect-host:2:4) level commands | |
| address <text> | Sets the remote host to establish tunneling connections with. <text> = IP address or host name of the remote host. |
| aes decrypt key <hexadecimal> | Sets the connect tunnel AES decrypt key with up to 16 bytes. Each byte is represented by two adjacent hex digits. Bytes may run together or be separated by optional punctuation: 123ABC "12 3A BC" 12,3A,BC 12.3a.bc 12:3a:bc Note that quotes must enclose the value if it contains spaces. |
| aes decrypt key text <text> | Sets the connect tunnel AES decrypt key with up to 16 bytes. Each byte is represented by a single character. Note that quotes must enclose the value if it contains spaces. |
| aes encrypt key <hexadecimal> | Sets the connect tunnel AES encrypt key with up to 16 bytes. Each byte is represented by two adjacent hex digits. Bytes may run together or be separated by optional punctuation: 123ABC "12 3A BC" 12,3A,BC 12.3a.bc 12:3a:bc Note that quotes must enclose the value if it contains spaces. |
| aes encrypt key text <text> | Sets the connect tunnel AES encrypt key with up to 16 bytes. Each byte is represented by a single character. Note that quotes must enclose the value if it contains spaces. |
| auto show statistics | show connection statistics |
| clrscrn | Clears the screen. |
| credentials <text> | Selects the RSA/DSA certificates by name for the SSL client. |
| default protocol | Restores the default protocol as "TCP". |
| default tcp keep alive | Restores the default 45 second connect mode TCP keep alive timeout. |
| exit | Exits to the next higher level. |
| no address | Removes the remote host address used to establish tunneling connections. |
| no aes decrypt key | Removes the connect tunnel AES decrypt key. |
| no aes encrypt key | Removes the connect tunnel AES encrypt key. |
| no credentials | Clears the RSA/DSA certificate selection. |
| no port | Removes the remote port used to establish tunnel connections. |
| no ssh username | Removes the SSH user name. |
| no tcp keep alive | Disables the connect mode TCP keep alive timeout. |
| port <number> | Sets the remote port to use for connect mode tunneling. <number> = number of the port to use. |
| protocol ssh | Uses SSH protocol for connect mode tunneling. |
| protocol ssl | Uses SSL protocol for connect mode tunneling. |

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| protocol tcp | Uses TCP protocol for connect mode tunneling. |
| protocol tcp aes | Uses TCP protocol with AES encryption for connect mode tunneling. |
| protocol telnet | Uses Telnet protocol (with IAC) for connect mode tunneling. |
| protocol udp | Uses UDP protocol for connect mode tunneling. |
| protocol udp aes | Uses UDP protocol with AES encryption for connect mode tunneling. |
| show | Shows the current configuration. |
| show history | Displays the last 20 commands entered during the current CLI session. |
| show statistics | show connection statistics |
| ssh username <text> | Sets the SSH user name for use when establishing tunneling connections with other devices. <text> = SSH user name. |
| tcp keep alive <milliseconds> | Enables TCP keep alive for connect mode tunneling and sets the timer. <milliseconds> = timer value, in milliseconds. |
| validate certificate disable | Skips verification of the server certificate when connecting. |
| validate certificate enable | Requires verification of the server certificate when connecting. |
| write | Stores the current configuration in permanent memory. |
| host 4 (tunnel-connect-host:1:4) level commands | |
| address <text> | Sets the remote host to establish tunneling connections with. <text> = IP address or host name of the remote host. |
| aes decrypt key <hexadecimal> | Sets the connect tunnel AES decrypt key with up to 16 bytes. Each byte is represented by two adjacent hex digits. Bytes may run together or be separated by optional punctuation: 123ABC "12 3A BC" 12,3A,BC 12.3a.bc 12:3a:bc Note that quotes must enclose the value if it contains spaces. |
| aes decrypt key text <text> | Sets the connect tunnel AES decrypt key with up to 16 bytes. Each byte is represented by a single character. Note that quotes must enclose the value if it contains spaces. |
| aes encrypt key <hexadecimal> | Sets the connect tunnel AES encrypt key with up to 16 bytes. Each byte is represented by two adjacent hex digits. Bytes may run together or be separated by optional punctuation: 123ABC "12 3A BC" 12,3A,BC 12.3a.bc 12:3a:bc Note that quotes must enclose the value if it contains spaces. |
| aes encrypt key text <text> | Sets the connect tunnel AES encrypt key with up to 16 bytes. Each byte is represented by a single character. Note that quotes must enclose the value if it contains spaces. |
| auto show statistics | show connection statistics |
| clrscrn | Clears the screen. |
| credentials <text> | Selects the RSA/DSA certificates by name for the SSL client. |
| default protocol | Restores the default protocol as "TCP". |
| default tcp keep alive | Restores the default 45 second connect mode TCP keep |

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| | alive timeout. |
| exit | Exits to the next higher level. |
| no address | Removes the remote host address used to establish tunneling connections. |
| no aes decrypt key | Removes the connect tunnel AES decrypt key. |
| no aes encrypt key | Removes the connect tunnel AES encrypt key. |
| no credentials | Clears the RSA/DSA certificate selection. |
| no port | Removes the remote port used to establish tunnel connections. |
| no ssh username | Removes the SSH user name. |
| no tcp keep alive | Disables the connect mode TCP keep alive timeout. |
| port <number> | Sets the remote port to use for connect mode tunneling. <number> = number of the port to use. |
| protocol ssh | Uses SSH protocol for connect mode tunneling. |
| protocol ssl | Uses SSL protocol for connect mode tunneling. |
| protocol tcp | Uses TCP protocol for connect mode tunneling. |
| protocol tcp aes | Uses TCP protocol with AES encryption for connect mode tunneling. |
| protocol telnet | Uses Telnet protocol (with IAC) for connect mode tunneling. |
| protocol udp | Uses UDP protocol for connect mode tunneling. |
| protocol udp aes | Uses UDP protocol with AES encryption for connect mode tunneling. |
| show | Shows the current configuration. |
| show history | Displays the last 20 commands entered during the current CLI session. |
| show statistics | show connection statistics |
| ssh username <text> | Sets the SSH user name for use when establishing tunneling connections with other devices. <text> = SSH user name. |
| tcp keep alive <milliseconds> | Enables TCP keep alive for connect mode tunneling and sets the timer. <milliseconds> = timer value, in milliseconds. |
| validate certificate disable | Skips verification of the server certificate when connecting. |
| validate certificate enable | Requires verification of the server certificate when connecting. |
| write | Stores the current configuration in permanent memory. |
| host 4 (config-host:4) level commands | |
| clrscrn | Clears the screen. |
| default protocol | Restores the default value of the protocol (Telnet). |
| default remote port | Sets the remote port (used to connect to the host) to the default value, which depends on the selected protocol. |
| exit | Exits to the configuration level. |
| host <number> | Change to config host level |
| name <text> | Sets the name of the host. <text> = name of the host. |
| no name | Clears the name of the host. |

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| no remote address | Clears the remote address of the host. |
| no ssh username | Clears the SSH username associated with the host. |
| protocol ssh | Sets the protocol to SSH. |
| protocol telnet | Sets the protocol to Telnet. |
| remote address <text> | Sets the IP address of the remote host to connect to when this host is selected on the login connect menu. <text> = IP address. |
| remote port <number> | Sets the remote port used to connect to the host. <number> = port to be used. |
| show | Displays the current configuration. |
| show history | Displays the last 20 commands entered during the current CLI session. |
| ssh username <text> | Sets the username for logging into the host via SSH. <text> = username. |
| write | Stores the current configuration in permanent memory. |
| host 5 (tunnel-connect-host:3:5) level commands | |
| address <text> | Sets the remote host to establish tunneling connections with. <text> = IP address or host name of the remote host. |
| aes decrypt key <hexadecimal> | Sets the connect tunnel AES decrypt key with up to 16 bytes. Each byte is represented by two adjacent hex digits. Bytes may run together or be separated by optional punctuation: 123ABC "12 3A BC" 12,3A,BC 12.3a.bc 12:3a:bc Note that quotes must enclose the value if it contains spaces. |
| aes decrypt key text <text> | Sets the connect tunnel AES decrypt key with up to 16 bytes. Each byte is represented by a single character. Note that quotes must enclose the value if it contains spaces. |
| aes encrypt key <hexadecimal> | Sets the connect tunnel AES encrypt key with up to 16 bytes. Each byte is represented by two adjacent hex digits. Bytes may run together or be separated by optional punctuation: 123ABC "12 3A BC" 12,3A,BC 12.3a.bc 12:3a:bc Note that quotes must enclose the value if it contains spaces. |
| aes encrypt key text <text> | Sets the connect tunnel AES encrypt key with up to 16 bytes. Each byte is represented by a single character. Note that quotes must enclose the value if it contains spaces. |
| auto show statistics | show connection statistics |
| clrscrn | Clears the screen. |
| credentials <text> | Selects the RSA/DSA certificates by name for the SSL client. |
| default protocol | Restores the default protocol as "TCP". |
| default tcp keep alive | Restores the default 45 second connect mode TCP keep alive timeout. |
| exit | Exits to the next higher level. |
| no address | Removes the remote host address used to establish tunneling connections. |
| no aes decrypt key | Removes the connect tunnel AES decrypt key. |
| no aes encrypt key | Removes the connect tunnel AES encrypt key. |
| no credentials | Clears the RSA/DSA certificate selection. |

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| no port | Removes the remote port used to establish tunnel connections. |
| no ssh username | Removes the SSH user name. |
| no tcp keep alive | Disables the connect mode TCP keep alive timeout. |
| port <number> | Sets the remote port to use for connect mode tunneling. <number> = number of the port to use. |
| protocol ssh | Uses SSH protocol for connect mode tunneling. |
| protocol ssl | Uses SSL protocol for connect mode tunneling. |
| protocol tcp | Uses TCP protocol for connect mode tunneling. |
| protocol tcp aes | Uses TCP protocol with AES encryption for connect mode tunneling. |
| protocol telnet | Uses Telnet protocol (with IAC) for connect mode tunneling. |
| protocol udp | Uses UDP protocol for connect mode tunneling. |
| protocol udp aes | Uses UDP protocol with AES encryption for connect mode tunneling. |
| show | Shows the current configuration. |
| show history | Displays the last 20 commands entered during the current CLI session. |
| show statistics | show connection statistics |
| ssh username <text> | Sets the SSH user name for use when establishing tunneling connections with other devices. <text> = SSH user name. |
| tcp keep alive <milliseconds> | Enables TCP keep alive for connect mode tunneling and sets the timer. <milliseconds> = timer value, in milliseconds. |
| validate certificate disable | Skips verification of the server certificate when connecting. |
| validate certificate enable | Requires verification of the server certificate when connecting. |
| write | Stores the current configuration in permanent memory. |
| host 5 (tunnel-connect-host:2:5) level commands | |
| address <text> | Sets the remote host to establish tunneling connections with. <text> = IP address or host name of the remote host. |
| aes decrypt key <hexadecimal> | Sets the connect tunnel AES decrypt key with up to 16 bytes. Each byte is represented by two adjacent hex digits. Bytes may run together or be separated by optional punctuation: 123ABC "12 3A BC" 12,3A,BC 12.3a.bc 12:3a:bc Note that quotes must enclose the value if it contains spaces. |
| aes decrypt key text <text> | Sets the connect tunnel AES decrypt key with up to 16 bytes. Each byte is represented by a single character. Note that quotes must enclose the value if it contains spaces. |
| aes encrypt key <hexadecimal> | Sets the connect tunnel AES encrypt key with up to 16 bytes. Each byte is represented by two adjacent hex digits. Bytes may run together or be separated by optional punctuation: 123ABC "12 3A BC" 12,3A,BC 12.3a.bc 12:3a:bc Note that quotes must enclose the value if it contains spaces. |
| aes encrypt key text <text> | Sets the connect tunnel AES encrypt key with up to 16 |

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| | bytes. Each byte is represented by a single character. Note that quotes must enclose the value if it contains spaces. |
| auto show statistics | show connection statistics |
| clrscrn | Clears the screen. |
| credentials <text> | Selects the RSA/DSA certificates by name for the SSL client. |
| default protocol | Restores the default protocol as "TCP". |
| default tcp keep alive | Restores the default 45 second connect mode TCP keep alive timeout. |
| exit | Exits to the next higher level. |
| no address | Removes the remote host address used to establish tunneling connections. |
| no aes decrypt key | Removes the connect tunnel AES decrypt key. |
| no aes encrypt key | Removes the connect tunnel AES encrypt key. |
| no credentials | Clears the RSA/DSA certificate selection. |
| no port | Removes the remote port used to establish tunnel connections. |
| no ssh username | Removes the SSH user name. |
| no tcp keep alive | Disables the connect mode TCP keep alive timeout. |
| port <number> | Sets the remote port to use for connect mode tunneling. <number> = number of the port to use. |
| protocol ssh | Uses SSH protocol for connect mode tunneling. |
| protocol ssl | Uses SSL protocol for connect mode tunneling. |
| protocol tcp | Uses TCP protocol for connect mode tunneling. |
| protocol tcp aes | Uses TCP protocol with AES encryption for connect mode tunneling. |
| protocol telnet | Uses Telnet protocol (with IAC) for connect mode tunneling. |
| protocol udp | Uses UDP protocol for connect mode tunneling. |
| protocol udp aes | Uses UDP protocol with AES encryption for connect mode tunneling. |
| show | Shows the current configuration. |
| show history | Displays the last 20 commands entered during the current CLI session. |
| show statistics | show connection statistics |
| ssh username <text> | Sets the SSH user name for use when establishing tunneling connections with other devices. <text> = SSH user name. |
| tcp keep alive <milliseconds> | Enables TCP keep alive for connect mode tunneling and sets the timer. <milliseconds> = timer value, in milliseconds. |
| validate certificate disable | Skips verification of the server certificate when connecting. |
| validate certificate enable | Requires verification of the server certificate when connecting. |
| write | Stores the current configuration in permanent memory. |
| host 5 (tunnel-connect-host:1:5) level commands | |

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| address <text> | Sets the remote host to establish tunneling connections with. <text> = IP address or host name of the remote host. |
| aes decrypt key <hexadecimal> | Sets the connect tunnel AES decrypt key with up to 16 bytes. Each byte is represented by two adjacent hex digits. Bytes may run together or be separated by optional punctuation: 123ABC "12 3A BC" 12,3A,BC 12.3a.bc 12:3a:bc Note that quotes must enclose the value if it contains spaces. |
| aes decrypt key text <text> | Sets the connect tunnel AES decrypt key with up to 16 bytes. Each byte is represented by a single character. Note that quotes must enclose the value if it contains spaces. |
| aes encrypt key <hexadecimal> | Sets the connect tunnel AES encrypt key with up to 16 bytes. Each byte is represented by two adjacent hex digits. Bytes may run together or be separated by optional punctuation: 123ABC "12 3A BC" 12,3A,BC 12.3a.bc 12:3a:bc Note that quotes must enclose the value if it contains spaces. |
| aes encrypt key text <text> | Sets the connect tunnel AES encrypt key with up to 16 bytes. Each byte is represented by a single character. Note that quotes must enclose the value if it contains spaces. |
| auto show statistics | show connection statistics |
| clrscrn | Clears the screen. |
| credentials <text> | Selects the RSA/DSA certificates by name for the SSL client. |
| default protocol | Restores the default protocol as "TCP". |
| default tcp keep alive | Restores the default 45 second connect mode TCP keep alive timeout. |
| exit | Exits to the next higher level. |
| no address | Removes the remote host address used to establish tunneling connections. |
| no aes decrypt key | Removes the connect tunnel AES decrypt key. |
| no aes encrypt key | Removes the connect tunnel AES encrypt key. |
| no credentials | Clears the RSA/DSA certificate selection. |
| no port | Removes the remote port used to establish tunnel connections. |
| no ssh username | Removes the SSH user name. |
| no tcp keep alive | Disables the connect mode TCP keep alive timeout. |
| port <number> | Sets the remote port to use for connect mode tunneling. <number> = number of the port to use. |
| protocol ssh | Uses SSH protocol for connect mode tunneling. |
| protocol ssl | Uses SSL protocol for connect mode tunneling. |
| protocol tcp | Uses TCP protocol for connect mode tunneling. |
| protocol tcp aes | Uses TCP protocol with AES encryption for connect mode tunneling. |
| protocol telnet | Uses Telnet protocol (with IAC) for connect mode tunneling. |
| protocol udp | Uses UDP protocol for connect mode tunneling. |
| protocol udp aes | Uses UDP protocol with AES encryption for connect mode tunneling. |

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| show | Shows the current configuration. |
| show history | Displays the last 20 commands entered during the current CLI session. |
| show statistics | show connection statistics |
| ssh username <text> | Sets the SSH user name for use when establishing tunneling connections with other devices. <text> = SSH user name. |
| tcp keep alive <milliseconds> | Enables TCP keep alive for connect mode tunneling and sets the timer. <milliseconds> = timer value, in milliseconds. |
| validate certificate disable | Skips verification of the server certificate when connecting. |
| validate certificate enable | Requires verification of the server certificate when connecting. |
| write | Stores the current configuration in permanent memory. |
| host 5 (config-host:5) level commands | |
| clrscrn | Clears the screen. |
| default protocol | Restores the default value of the protocol (Telnet). |
| default remote port | Sets the remote port (used to connect to the host) to the default value, which depends on the selected protocol. |
| exit | Exits to the configuration level. |
| host <number> | Change to config host level |
| name <text> | Sets the name of the host. <text> = name of the host. |
| no name | Clears the name of the host. |
| no remote address | Clears the remote address of the host. |
| no ssh username | Clears the SSH username associated with the host. |
| protocol ssh | Sets the protocol to SSH. |
| protocol telnet | Sets the protocol to Telnet. |
| remote address <text> | Sets the IP address of the remote host to connect to when this host is selected on the login connect menu. <text> = IP address. |
| remote port <number> | Sets the remote port used to connect to the host. <number> = port to be used. |
| show | Displays the current configuration. |
| show history | Displays the last 20 commands entered during the current CLI session. |
| ssh username <text> | Sets the username for logging into the host via SSH. <text> = username. |
| write | Stores the current configuration in permanent memory. |
| host 6 (tunnel-connect-host:3:6) level commands | |
| address <text> | Sets the remote host to establish tunneling connections with. <text> = IP address or host name of the remote host. |
| aes decrypt key <hexadecimal> | Sets the connect tunnel AES decrypt key with up to 16 bytes. Each byte is represented by two adjacent hex digits. Bytes may run together or be separated by optional punctuation: 123ABC "12 3A BC" 12,3A,BC 12.3a.bc 12:3a:bc Note that quotes must enclose the value if it contains spaces. |
| aes decrypt key text <text> | Sets the connect tunnel AES decrypt key with up to 16 |

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| | bytes. Each byte is represented by a single character. Note that quotes must enclose the value if it contains spaces. |
| aes encrypt key <hexadecimal> | Sets the connect tunnel AES encrypt key with up to 16 bytes. Each byte is represented by two adjacent hex digits. Bytes may run together or be separated by optional punctuation: 123ABC "12 3A BC" 12,3A,BC 12.3a.bc 12:3a:bc Note that quotes must enclose the value if it contains spaces. |
| aes encrypt key text <text> | Sets the connect tunnel AES encrypt key with up to 16 bytes. Each byte is represented by a single character. Note that quotes must enclose the value if it contains spaces. |
| auto show statistics | show connection statistics |
| clrscrn | Clears the screen. |
| credentials <text> | Selects the RSA/DSA certificates by name for the SSL client. |
| default protocol | Restores the default protocol as "TCP". |
| default tcp keep alive | Restores the default 45 second connect mode TCP keep alive timeout. |
| exit | Exits to the next higher level. |
| no address | Removes the remote host address used to establish tunneling connections. |
| no aes decrypt key | Removes the connect tunnel AES decrypt key. |
| no aes encrypt key | Removes the connect tunnel AES encrypt key. |
| no credentials | Clears the RSA/DSA certificate selection. |
| no port | Removes the remote port used to establish tunnel connections. |
| no ssh username | Removes the SSH user name. |
| no tcp keep alive | Disables the connect mode TCP keep alive timeout. |
| port <number> | Sets the remote port to use for connect mode tunneling. <number> = number of the port to use. |
| protocol ssh | Uses SSH protocol for connect mode tunneling. |
| protocol ssl | Uses SSL protocol for connect mode tunneling. |
| protocol tcp | Uses TCP protocol for connect mode tunneling. |
| protocol tcp aes | Uses TCP protocol with AES encryption for connect mode tunneling. |
| protocol telnet | Uses Telnet protocol (with IAC) for connect mode tunneling. |
| protocol udp | Uses UDP protocol for connect mode tunneling. |
| protocol udp aes | Uses UDP protocol with AES encryption for connect mode tunneling. |
| show | Shows the current configuration. |
| show history | Displays the last 20 commands entered during the current CLI session. |
| show statistics | show connection statistics |
| ssh username <text> | Sets the SSH user name for use when establishing tunneling connections with other devices. <text> = SSH user name. |

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| tcp keep alive <milliseconds> | Enables TCP keep alive for connect mode tunneling and sets the timer. <milliseconds> = timer value, in milliseconds. |
| validate certificate disable | Skips verification of the server certificate when connecting. |
| validate certificate enable | Requires verification of the server certificate when connecting. |
| write | Stores the current configuration in permanent memory. |
| host 6 (tunnel-connect-host:2:6) level commands | |
| address <text> | Sets the remote host to establish tunneling connections with. <text> = IP address or host name of the remote host. |
| aes decrypt key <hexadecimal> | Sets the connect tunnel AES decrypt key with up to 16 bytes. Each byte is represented by two adjacent hex digits. Bytes may run together or be separated by optional punctuation: 123ABC "12 3A BC" 12,3A,BC 12.3a.bc 12:3a:bc Note that quotes must enclose the value if it contains spaces. |
| aes decrypt key text <text> | Sets the connect tunnel AES decrypt key with up to 16 bytes. Each byte is represented by a single character. Note that quotes must enclose the value if it contains spaces. |
| aes encrypt key <hexadecimal> | Sets the connect tunnel AES encrypt key with up to 16 bytes. Each byte is represented by two adjacent hex digits. Bytes may run together or be separated by optional punctuation: 123ABC "12 3A BC" 12,3A,BC 12.3a.bc 12:3a:bc Note that quotes must enclose the value if it contains spaces. |
| aes encrypt key text <text> | Sets the connect tunnel AES encrypt key with up to 16 bytes. Each byte is represented by a single character. Note that quotes must enclose the value if it contains spaces. |
| auto show statistics | show connection statistics |
| clrscrn | Clears the screen. |
| credentials <text> | Selects the RSA/DSA certificates by name for the SSL client. |
| default protocol | Restores the default protocol as "TCP". |
| default tcp keep alive | Restores the default 45 second connect mode TCP keep alive timeout. |
| exit | Exits to the next higher level. |
| no address | Removes the remote host address used to establish tunneling connections. |
| no aes decrypt key | Removes the connect tunnel AES decrypt key. |
| no aes encrypt key | Removes the connect tunnel AES encrypt key. |
| no credentials | Clears the RSA/DSA certificate selection. |
| no port | Removes the remote port used to establish tunnel connections. |
| no ssh username | Removes the SSH user name. |
| no tcp keep alive | Disables the connect mode TCP keep alive timeout. |
| port <number> | Sets the remote port to use for connect mode tunneling. <number> = number of the port to use. |
| protocol ssh | Uses SSH protocol for connect mode tunneling. |

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| protocol ssl | Uses SSL protocol for connect mode tunneling. |
| protocol tcp | Uses TCP protocol for connect mode tunneling. |
| protocol tcp aes | Uses TCP protocol with AES encryption for connect mode tunneling. |
| protocol telnet | Uses Telnet protocol (with IAC) for connect mode tunneling. |
| protocol udp | Uses UDP protocol for connect mode tunneling. |
| protocol udp aes | Uses UDP protocol with AES encryption for connect mode tunneling. |
| show | Shows the current configuration. |
| show history | Displays the last 20 commands entered during the current CLI session. |
| show statistics | show connection statistics |
| ssh username <text> | Sets the SSH user name for use when establishing tunneling connections with other devices. <text> = SSH user name. |
| tcp keep alive <milliseconds> | Enables TCP keep alive for connect mode tunneling and sets the timer. <milliseconds> = timer value, in milliseconds. |
| validate certificate disable | Skips verification of the server certificate when connecting. |
| validate certificate enable | Requires verification of the server certificate when connecting. |
| write | Stores the current configuration in permanent memory. |
| host 6 (tunnel-connect-host:1:6) level commands | |
| address <text> | Sets the remote host to establish tunneling connections with. <text> = IP address or host name of the remote host. |
| aes decrypt key <hexadecimal> | Sets the connect tunnel AES decrypt key with up to 16 bytes. Each byte is represented by two adjacent hex digits. Bytes may run together or be separated by optional punctuation: 123ABC "12 3A BC" 12,3A,BC 12.3a.bc 12:3a:bc Note that quotes must enclose the value if it contains spaces. |
| aes decrypt key text <text> | Sets the connect tunnel AES decrypt key with up to 16 bytes. Each byte is represented by a single character. Note that quotes must enclose the value if it contains spaces. |
| aes encrypt key <hexadecimal> | Sets the connect tunnel AES encrypt key with up to 16 bytes. Each byte is represented by two adjacent hex digits. Bytes may run together or be separated by optional punctuation: 123ABC "12 3A BC" 12,3A,BC 12.3a.bc 12:3a:bc Note that quotes must enclose the value if it contains spaces. |
| aes encrypt key text <text> | Sets the connect tunnel AES encrypt key with up to 16 bytes. Each byte is represented by a single character. Note that quotes must enclose the value if it contains spaces. |
| auto show statistics | show connection statistics |
| clrscrn | Clears the screen. |
| credentials <text> | Selects the RSA/DSA certificates by name for the SSL client. |
| default protocol | Restores the default protocol as "TCP". |

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| default tcp keep alive | Restores the default 45 second connect mode TCP keep alive timeout. |
| exit | Exits to the next higher level. |
| no address | Removes the remote host address used to establish tunneling connections. |
| no aes decrypt key | Removes the connect tunnel AES decrypt key. |
| no aes encrypt key | Removes the connect tunnel AES encrypt key. |
| no credentials | Clears the RSA/DSA certificate selection. |
| no port | Removes the remote port used to establish tunnel connections. |
| no ssh username | Removes the SSH user name. |
| no tcp keep alive | Disables the connect mode TCP keep alive timeout. |
| port <number> | Sets the remote port to use for connect mode tunneling. <number> = number of the port to use. |
| protocol ssh | Uses SSH protocol for connect mode tunneling. |
| protocol ssl | Uses SSL protocol for connect mode tunneling. |
| protocol tcp | Uses TCP protocol for connect mode tunneling. |
| protocol tcp aes | Uses TCP protocol with AES encryption for connect mode tunneling. |
| protocol telnet | Uses Telnet protocol (with IAC) for connect mode tunneling. |
| protocol udp | Uses UDP protocol for connect mode tunneling. |
| protocol udp aes | Uses UDP protocol with AES encryption for connect mode tunneling. |
| show | Shows the current configuration. |
| show history | Displays the last 20 commands entered during the current CLI session. |
| show statistics | show connection statistics |
| ssh username <text> | Sets the SSH user name for use when establishing tunneling connections with other devices. <text> = SSH user name. |
| tcp keep alive <milliseconds> | Enables TCP keep alive for connect mode tunneling and sets the timer. <milliseconds> = timer value, in milliseconds. |
| validate certificate disable | Skips verification of the server certificate when connecting. |
| validate certificate enable | Requires verification of the server certificate when connecting. |
| write | Stores the current configuration in permanent memory. |
| host 6 (config-host:6) level commands | |
| clrscrn | Clears the screen. |
| default protocol | Restores the default value of the protocol (Telnet). |
| default remote port | Sets the remote port (used to connect to the host) to the default value, which depends on the selected protocol. |
| exit | Exits to the configuration level. |
| host <number> | Change to config host level |
| name <text> | Sets the name of the host. <text> = name of the host. |
| no name | Clears the name of the host. |

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| no remote address | Clears the remote address of the host. |
| no ssh username | Clears the SSH username associated with the host. |
| protocol ssh | Sets the protocol to SSH. |
| protocol telnet | Sets the protocol to Telnet. |
| remote address <text> | Sets the IP address of the remote host to connect to when this host is selected on the login connect menu. <text> = IP address. |
| remote port <number> | Sets the remote port used to connect to the host. <number> = port to be used. |
| show | Displays the current configuration. |
| show history | Displays the last 20 commands entered during the current CLI session. |
| ssh username <text> | Sets the username for logging into the host via SSH. <text> = username. |
| write | Stores the current configuration in permanent memory. |
| host 7 (tunnel-connect-host:3:7) level commands | |
| address <text> | Sets the remote host to establish tunneling connections with. <text> = IP address or host name of the remote host. |
| aes decrypt key <hexadecimal> | Sets the connect tunnel AES decrypt key with up to 16 bytes. Each byte is represented by two adjacent hex digits. Bytes may run together or be separated by optional punctuation: 123ABC "12 3A BC" 12,3A,BC 12.3a.bc 12:3a:bc Note that quotes must enclose the value if it contains spaces. |
| aes decrypt key text <text> | Sets the connect tunnel AES decrypt key with up to 16 bytes. Each byte is represented by a single character. Note that quotes must enclose the value if it contains spaces. |
| aes encrypt key <hexadecimal> | Sets the connect tunnel AES encrypt key with up to 16 bytes. Each byte is represented by two adjacent hex digits. Bytes may run together or be separated by optional punctuation: 123ABC "12 3A BC" 12,3A,BC 12.3a.bc 12:3a:bc Note that quotes must enclose the value if it contains spaces. |
| aes encrypt key text <text> | Sets the connect tunnel AES encrypt key with up to 16 bytes. Each byte is represented by a single character. Note that quotes must enclose the value if it contains spaces. |
| auto show statistics | show connection statistics |
| clrscrn | Clears the screen. |
| credentials <text> | Selects the RSA/DSA certificates by name for the SSL client. |
| default protocol | Restores the default protocol as "TCP". |
| default tcp keep alive | Restores the default 45 second connect mode TCP keep alive timeout. |
| exit | Exits to the next higher level. |
| no address | Removes the remote host address used to establish tunneling connections. |
| no aes decrypt key | Removes the connect tunnel AES decrypt key. |
| no aes encrypt key | Removes the connect tunnel AES encrypt key. |
| no credentials | Clears the RSA/DSA certificate selection. |

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| no port | Removes the remote port used to establish tunnel connections. |
| no ssh username | Removes the SSH user name. |
| no tcp keep alive | Disables the connect mode TCP keep alive timeout. |
| port <number> | Sets the remote port to use for connect mode tunneling. <number> = number of the port to use. |
| protocol ssh | Uses SSH protocol for connect mode tunneling. |
| protocol ssl | Uses SSL protocol for connect mode tunneling. |
| protocol tcp | Uses TCP protocol for connect mode tunneling. |
| protocol tcp aes | Uses TCP protocol with AES encryption for connect mode tunneling. |
| protocol telnet | Uses Telnet protocol (with IAC) for connect mode tunneling. |
| protocol udp | Uses UDP protocol for connect mode tunneling. |
| protocol udp aes | Uses UDP protocol with AES encryption for connect mode tunneling. |
| show | Shows the current configuration. |
| show history | Displays the last 20 commands entered during the current CLI session. |
| show statistics | show connection statistics |
| ssh username <text> | Sets the SSH user name for use when establishing tunneling connections with other devices. <text> = SSH user name. |
| tcp keep alive <milliseconds> | Enables TCP keep alive for connect mode tunneling and sets the timer. <milliseconds> = timer value, in milliseconds. |
| validate certificate disable | Skips verification of the server certificate when connecting. |
| validate certificate enable | Requires verification of the server certificate when connecting. |
| write | Stores the current configuration in permanent memory. |
| host 7 (tunnel-connect-host:2:7) level commands | |
| address <text> | Sets the remote host to establish tunneling connections with. <text> = IP address or host name of the remote host. |
| aes decrypt key <hexadecimal> | Sets the connect tunnel AES decrypt key with up to 16 bytes. Each byte is represented by two adjacent hex digits. Bytes may run together or be separated by optional punctuation: 123ABC "12 3A BC" 12,3A,BC 12.3a.bc 12:3a:bc Note that quotes must enclose the value if it contains spaces. |
| aes decrypt key text <text> | Sets the connect tunnel AES decrypt key with up to 16 bytes. Each byte is represented by a single character. Note that quotes must enclose the value if it contains spaces. |
| aes encrypt key <hexadecimal> | Sets the connect tunnel AES encrypt key with up to 16 bytes. Each byte is represented by two adjacent hex digits. Bytes may run together or be separated by optional punctuation: 123ABC "12 3A BC" 12,3A,BC 12.3a.bc 12:3a:bc Note that quotes must enclose the value if it contains spaces. |
| aes encrypt key text <text> | Sets the connect tunnel AES encrypt key with up to 16 |

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| | bytes. Each byte is represented by a single character. Note that quotes must enclose the value if it contains spaces. |
| auto show statistics | show connection statistics |
| clrscrn | Clears the screen. |
| credentials <text> | Selects the RSA/DSA certificates by name for the SSL client. |
| default protocol | Restores the default protocol as "TCP". |
| default tcp keep alive | Restores the default 45 second connect mode TCP keep alive timeout. |
| exit | Exits to the next higher level. |
| no address | Removes the remote host address used to establish tunneling connections. |
| no aes decrypt key | Removes the connect tunnel AES decrypt key. |
| no aes encrypt key | Removes the connect tunnel AES encrypt key. |
| no credentials | Clears the RSA/DSA certificate selection. |
| no port | Removes the remote port used to establish tunnel connections. |
| no ssh username | Removes the SSH user name. |
| no tcp keep alive | Disables the connect mode TCP keep alive timeout. |
| port <number> | Sets the remote port to use for connect mode tunneling. <number> = number of the port to use. |
| protocol ssh | Uses SSH protocol for connect mode tunneling. |
| protocol ssl | Uses SSL protocol for connect mode tunneling. |
| protocol tcp | Uses TCP protocol for connect mode tunneling. |
| protocol tcp aes | Uses TCP protocol with AES encryption for connect mode tunneling. |
| protocol telnet | Uses Telnet protocol (with IAC) for connect mode tunneling. |
| protocol udp | Uses UDP protocol for connect mode tunneling. |
| protocol udp aes | Uses UDP protocol with AES encryption for connect mode tunneling. |
| show | Shows the current configuration. |
| show history | Displays the last 20 commands entered during the current CLI session. |
| show statistics | show connection statistics |
| ssh username <text> | Sets the SSH user name for use when establishing tunneling connections with other devices. <text> = SSH user name. |
| tcp keep alive <milliseconds> | Enables TCP keep alive for connect mode tunneling and sets the timer. <milliseconds> = timer value, in milliseconds. |
| validate certificate disable | Skips verification of the server certificate when connecting. |
| validate certificate enable | Requires verification of the server certificate when connecting. |
| write | Stores the current configuration in permanent memory. |
| host 7 (tunnel-connect-host:1:7) level commands | |

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| address <text> | Sets the remote host to establish tunneling connections with. <text> = IP address or host name of the remote host. |
| aes decrypt key <hexadecimal> | Sets the connect tunnel AES decrypt key with up to 16 bytes. Each byte is represented by two adjacent hex digits. Bytes may run together or be separated by optional punctuation: 123ABC "12 3A BC" 12,3A,BC 12.3a.bc 12:3a:bc Note that quotes must enclose the value if it contains spaces. |
| aes decrypt key text <text> | Sets the connect tunnel AES decrypt key with up to 16 bytes. Each byte is represented by a single character. Note that quotes must enclose the value if it contains spaces. |
| aes encrypt key <hexadecimal> | Sets the connect tunnel AES encrypt key with up to 16 bytes. Each byte is represented by two adjacent hex digits. Bytes may run together or be separated by optional punctuation: 123ABC "12 3A BC" 12,3A,BC 12.3a.bc 12:3a:bc Note that quotes must enclose the value if it contains spaces. |
| aes encrypt key text <text> | Sets the connect tunnel AES encrypt key with up to 16 bytes. Each byte is represented by a single character. Note that quotes must enclose the value if it contains spaces. |
| auto show statistics | show connection statistics |
| clrscrn | Clears the screen. |
| credentials <text> | Selects the RSA/DSA certificates by name for the SSL client. |
| default protocol | Restores the default protocol as "TCP". |
| default tcp keep alive | Restores the default 45 second connect mode TCP keep alive timeout. |
| exit | Exits to the next higher level. |
| no address | Removes the remote host address used to establish tunneling connections. |
| no aes decrypt key | Removes the connect tunnel AES decrypt key. |
| no aes encrypt key | Removes the connect tunnel AES encrypt key. |
| no credentials | Clears the RSA/DSA certificate selection. |
| no port | Removes the remote port used to establish tunnel connections. |
| no ssh username | Removes the SSH user name. |
| no tcp keep alive | Disables the connect mode TCP keep alive timeout. |
| port <number> | Sets the remote port to use for connect mode tunneling. <number> = number of the port to use. |
| protocol ssh | Uses SSH protocol for connect mode tunneling. |
| protocol ssl | Uses SSL protocol for connect mode tunneling. |
| protocol tcp | Uses TCP protocol for connect mode tunneling. |
| protocol tcp aes | Uses TCP protocol with AES encryption for connect mode tunneling. |
| protocol telnet | Uses Telnet protocol (with IAC) for connect mode tunneling. |
| protocol udp | Uses UDP protocol for connect mode tunneling. |
| protocol udp aes | Uses UDP protocol with AES encryption for connect mode tunneling. |

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| show | Shows the current configuration. |
| show history | Displays the last 20 commands entered during the current CLI session. |
| show statistics | show connection statistics |
| ssh username <text> | Sets the SSH user name for use when establishing tunneling connections with other devices. <text> = SSH user name. |
| tcp keep alive <milliseconds> | Enables TCP keep alive for connect mode tunneling and sets the timer. <milliseconds> = timer value, in milliseconds. |
| validate certificate disable | Skips verification of the server certificate when connecting. |
| validate certificate enable | Requires verification of the server certificate when connecting. |
| write | Stores the current configuration in permanent memory. |
| host 7 (config-host:7) level commands | |
| clrscrn | Clears the screen. |
| default protocol | Restores the default value of the protocol (Telnet). |
| default remote port | Sets the remote port (used to connect to the host) to the default value, which depends on the selected protocol. |
| exit | Exits to the configuration level. |
| host <number> | Change to config host level |
| name <text> | Sets the name of the host. <text> = name of the host. |
| no name | Clears the name of the host. |
| no remote address | Clears the remote address of the host. |
| no ssh username | Clears the SSH username associated with the host. |
| protocol ssh | Sets the protocol to SSH. |
| protocol telnet | Sets the protocol to Telnet. |
| remote address <text> | Sets the IP address of the remote host to connect to when this host is selected on the login connect menu. <text> = IP address. |
| remote port <number> | Sets the remote port used to connect to the host. <number> = port to be used. |
| show | Displays the current configuration. |
| show history | Displays the last 20 commands entered during the current CLI session. |
| ssh username <text> | Sets the username for logging into the host via SSH. <text> = username. |
| write | Stores the current configuration in permanent memory. |
| host 8 (tunnel-connect-host:3:8) level commands | |
| address <text> | Sets the remote host to establish tunneling connections with. <text> = IP address or host name of the remote host. |
| aes decrypt key <hexadecimal> | Sets the connect tunnel AES decrypt key with up to 16 bytes. Each byte is represented by two adjacent hex digits. Bytes may run together or be separated by optional punctuation: 123ABC "12 3A BC" 12,3A,BC 12.3a.bc 12:3a:bc Note that quotes must enclose the value if it contains spaces. |
| aes decrypt key text <text> | Sets the connect tunnel AES decrypt key with up to 16 |

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| | bytes. Each byte is represented by a single character. Note that quotes must enclose the value if it contains spaces. |
| aes encrypt key <hexadecimal> | Sets the connect tunnel AES encrypt key with up to 16 bytes. Each byte is represented by two adjacent hex digits. Bytes may run together or be separated by optional punctuation: 123ABC "12 3A BC" 12,3A,BC 12.3a.bc 12:3a:bc Note that quotes must enclose the value if it contains spaces. |
| aes encrypt key text <text> | Sets the connect tunnel AES encrypt key with up to 16 bytes. Each byte is represented by a single character. Note that quotes must enclose the value if it contains spaces. |
| auto show statistics | show connection statistics |
| clrscrn | Clears the screen. |
| credentials <text> | Selects the RSA/DSA certificates by name for the SSL client. |
| default protocol | Restores the default protocol as "TCP". |
| default tcp keep alive | Restores the default 45 second connect mode TCP keep alive timeout. |
| exit | Exits to the next higher level. |
| no address | Removes the remote host address used to establish tunneling connections. |
| no aes decrypt key | Removes the connect tunnel AES decrypt key. |
| no aes encrypt key | Removes the connect tunnel AES encrypt key. |
| no credentials | Clears the RSA/DSA certificate selection. |
| no port | Removes the remote port used to establish tunnel connections. |
| no ssh username | Removes the SSH user name. |
| no tcp keep alive | Disables the connect mode TCP keep alive timeout. |
| port <number> | Sets the remote port to use for connect mode tunneling. <number> = number of the port to use. |
| protocol ssh | Uses SSH protocol for connect mode tunneling. |
| protocol ssl | Uses SSL protocol for connect mode tunneling. |
| protocol tcp | Uses TCP protocol for connect mode tunneling. |
| protocol tcp aes | Uses TCP protocol with AES encryption for connect mode tunneling. |
| protocol telnet | Uses Telnet protocol (with IAC) for connect mode tunneling. |
| protocol udp | Uses UDP protocol for connect mode tunneling. |
| protocol udp aes | Uses UDP protocol with AES encryption for connect mode tunneling. |
| show | Shows the current configuration. |
| show history | Displays the last 20 commands entered during the current CLI session. |
| show statistics | show connection statistics |
| ssh username <text> | Sets the SSH user name for use when establishing tunneling connections with other devices. <text> = SSH user name. |

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| tcp keep alive <milliseconds> | Enables TCP keep alive for connect mode tunneling and sets the timer. <milliseconds> = timer value, in milliseconds. |
| validate certificate disable | Skips verification of the server certificate when connecting. |
| validate certificate enable | Requires verification of the server certificate when connecting. |
| write | Stores the current configuration in permanent memory. |
| host 8 (tunnel-connect-host:2:8) level commands | |
| address <text> | Sets the remote host to establish tunneling connections with. <text> = IP address or host name of the remote host. |
| aes decrypt key <hexadecimal> | Sets the connect tunnel AES decrypt key with up to 16 bytes. Each byte is represented by two adjacent hex digits. Bytes may run together or be separated by optional punctuation: 123ABC "12 3A BC" 12,3A,BC 12.3a.bc 12:3a:bc Note that quotes must enclose the value if it contains spaces. |
| aes decrypt key text <text> | Sets the connect tunnel AES decrypt key with up to 16 bytes. Each byte is represented by a single character. Note that quotes must enclose the value if it contains spaces. |
| aes encrypt key <hexadecimal> | Sets the connect tunnel AES encrypt key with up to 16 bytes. Each byte is represented by two adjacent hex digits. Bytes may run together or be separated by optional punctuation: 123ABC "12 3A BC" 12,3A,BC 12.3a.bc 12:3a:bc Note that quotes must enclose the value if it contains spaces. |
| aes encrypt key text <text> | Sets the connect tunnel AES encrypt key with up to 16 bytes. Each byte is represented by a single character. Note that quotes must enclose the value if it contains spaces. |
| auto show statistics | show connection statistics |
| clrscrn | Clears the screen. |
| credentials <text> | Selects the RSA/DSA certificates by name for the SSL client. |
| default protocol | Restores the default protocol as "TCP". |
| default tcp keep alive | Restores the default 45 second connect mode TCP keep alive timeout. |
| exit | Exits to the next higher level. |
| no address | Removes the remote host address used to establish tunneling connections. |
| no aes decrypt key | Removes the connect tunnel AES decrypt key. |
| no aes encrypt key | Removes the connect tunnel AES encrypt key. |
| no credentials | Clears the RSA/DSA certificate selection. |
| no port | Removes the remote port used to establish tunnel connections. |
| no ssh username | Removes the SSH user name. |
| no tcp keep alive | Disables the connect mode TCP keep alive timeout. |
| port <number> | Sets the remote port to use for connect mode tunneling. <number> = number of the port to use. |
| protocol ssh | Uses SSH protocol for connect mode tunneling. |

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| protocol ssl | Uses SSL protocol for connect mode tunneling. |
| protocol tcp | Uses TCP protocol for connect mode tunneling. |
| protocol tcp aes | Uses TCP protocol with AES encryption for connect mode tunneling. |
| protocol telnet | Uses Telnet protocol (with IAC) for connect mode tunneling. |
| protocol udp | Uses UDP protocol for connect mode tunneling. |
| protocol udp aes | Uses UDP protocol with AES encryption for connect mode tunneling. |
| show | Shows the current configuration. |
| show history | Displays the last 20 commands entered during the current CLI session. |
| show statistics | show connection statistics |
| ssh username <text> | Sets the SSH user name for use when establishing tunneling connections with other devices. <text> = SSH user name. |
| tcp keep alive <milliseconds> | Enables TCP keep alive for connect mode tunneling and sets the timer. <milliseconds> = timer value, in milliseconds. |
| validate certificate disable | Skips verification of the server certificate when connecting. |
| validate certificate enable | Requires verification of the server certificate when connecting. |
| write | Stores the current configuration in permanent memory. |
| host 8 (tunnel-connect-host:1:8) level commands | |
| address <text> | Sets the remote host to establish tunneling connections with. <text> = IP address or host name of the remote host. |
| aes decrypt key <hexadecimal> | Sets the connect tunnel AES decrypt key with up to 16 bytes. Each byte is represented by two adjacent hex digits. Bytes may run together or be separated by optional punctuation: 123ABC "12 3A BC" 12,3A,BC 12.3a.bc 12:3a:bc Note that quotes must enclose the value if it contains spaces. |
| aes decrypt key text <text> | Sets the connect tunnel AES decrypt key with up to 16 bytes. Each byte is represented by a single character. Note that quotes must enclose the value if it contains spaces. |
| aes encrypt key <hexadecimal> | Sets the connect tunnel AES encrypt key with up to 16 bytes. Each byte is represented by two adjacent hex digits. Bytes may run together or be separated by optional punctuation: 123ABC "12 3A BC" 12,3A,BC 12.3a.bc 12:3a:bc Note that quotes must enclose the value if it contains spaces. |
| aes encrypt key text <text> | Sets the connect tunnel AES encrypt key with up to 16 bytes. Each byte is represented by a single character. Note that quotes must enclose the value if it contains spaces. |
| auto show statistics | show connection statistics |
| clrscrn | Clears the screen. |
| credentials <text> | Selects the RSA/DSA certificates by name for the SSL client. |
| default protocol | Restores the default protocol as "TCP". |

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| default tcp keep alive | Restores the default 45 second connect mode TCP keep alive timeout. |
| exit | Exits to the next higher level. |
| no address | Removes the remote host address used to establish tunneling connections. |
| no aes decrypt key | Removes the connect tunnel AES decrypt key. |
| no aes encrypt key | Removes the connect tunnel AES encrypt key. |
| no credentials | Clears the RSA/DSA certificate selection. |
| no port | Removes the remote port used to establish tunnel connections. |
| no ssh username | Removes the SSH user name. |
| no tcp keep alive | Disables the connect mode TCP keep alive timeout. |
| port <number> | Sets the remote port to use for connect mode tunneling. <number> = number of the port to use. |
| protocol ssh | Uses SSH protocol for connect mode tunneling. |
| protocol ssl | Uses SSL protocol for connect mode tunneling. |
| protocol tcp | Uses TCP protocol for connect mode tunneling. |
| protocol tcp aes | Uses TCP protocol with AES encryption for connect mode tunneling. |
| protocol telnet | Uses Telnet protocol (with IAC) for connect mode tunneling. |
| protocol udp | Uses UDP protocol for connect mode tunneling. |
| protocol udp aes | Uses UDP protocol with AES encryption for connect mode tunneling. |
| show | Shows the current configuration. |
| show history | Displays the last 20 commands entered during the current CLI session. |
| show statistics | show connection statistics |
| ssh username <text> | Sets the SSH user name for use when establishing tunneling connections with other devices. <text> = SSH user name. |
| tcp keep alive <milliseconds> | Enables TCP keep alive for connect mode tunneling and sets the timer. <milliseconds> = timer value, in milliseconds. |
| validate certificate disable | Skips verification of the server certificate when connecting. |
| validate certificate enable | Requires verification of the server certificate when connecting. |
| write | Stores the current configuration in permanent memory. |
| host 8 (config-host:8) level commands | |
| clrscrn | Clears the screen. |
| default protocol | Restores the default value of the protocol (Telnet). |
| default remote port | Sets the remote port (used to connect to the host) to the default value, which depends on the selected protocol. |
| exit | Exits to the configuration level. |
| host <number> | Change to config host level |
| name <text> | Sets the name of the host. <text> = name of the host. |
| no name | Clears the name of the host. |

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| no remote address | Clears the remote address of the host. |
| no ssh username | Clears the SSH username associated with the host. |
| protocol ssh | Sets the protocol to SSH. |
| protocol telnet | Sets the protocol to Telnet. |
| remote address <text> | Sets the IP address of the remote host to connect to when this host is selected on the login connect menu. <text> = IP address. |
| remote port <number> | Sets the remote port used to connect to the host. <number> = port to be used. |
| show | Displays the current configuration. |
| show history | Displays the last 20 commands entered during the current CLI session. |
| ssh username <text> | Sets the username for logging into the host via SSH. <text> = username. |
| write | Stores the current configuration in permanent memory. |
| host 9 (tunnel-connect-host:3:9) level commands | |
| address <text> | Sets the remote host to establish tunneling connections with. <text> = IP address or host name of the remote host. |
| aes decrypt key <hexadecimal> | Sets the connect tunnel AES decrypt key with up to 16 bytes. Each byte is represented by two adjacent hex digits. Bytes may run together or be separated by optional punctuation: 123ABC "12 3A BC" 12,3A,BC 12.3a.bc 12:3a:bc Note that quotes must enclose the value if it contains spaces. |
| aes decrypt key text <text> | Sets the connect tunnel AES decrypt key with up to 16 bytes. Each byte is represented by a single character. Note that quotes must enclose the value if it contains spaces. |
| aes encrypt key <hexadecimal> | Sets the connect tunnel AES encrypt key with up to 16 bytes. Each byte is represented by two adjacent hex digits. Bytes may run together or be separated by optional punctuation: 123ABC "12 3A BC" 12,3A,BC 12.3a.bc 12:3a:bc Note that quotes must enclose the value if it contains spaces. |
| aes encrypt key text <text> | Sets the connect tunnel AES encrypt key with up to 16 bytes. Each byte is represented by a single character. Note that quotes must enclose the value if it contains spaces. |
| auto show statistics | show connection statistics |
| clrscrn | Clears the screen. |
| credentials <text> | Selects the RSA/DSA certificates by name for the SSL client. |
| default protocol | Restores the default protocol as "TCP". |
| default tcp keep alive | Restores the default 45 second connect mode TCP keep alive timeout. |
| exit | Exits to the next higher level. |
| no address | Removes the remote host address used to establish tunneling connections. |
| no aes decrypt key | Removes the connect tunnel AES decrypt key. |
| no aes encrypt key | Removes the connect tunnel AES encrypt key. |
| no credentials | Clears the RSA/DSA certificate selection. |

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| no port | Removes the remote port used to establish tunnel connections. |
| no ssh username | Removes the SSH user name. |
| no tcp keep alive | Disables the connect mode TCP keep alive timeout. |
| port <number> | Sets the remote port to use for connect mode tunneling. <number> = number of the port to use. |
| protocol ssh | Uses SSH protocol for connect mode tunneling. |
| protocol ssl | Uses SSL protocol for connect mode tunneling. |
| protocol tcp | Uses TCP protocol for connect mode tunneling. |
| protocol tcp aes | Uses TCP protocol with AES encryption for connect mode tunneling. |
| protocol telnet | Uses Telnet protocol (with IAC) for connect mode tunneling. |
| protocol udp | Uses UDP protocol for connect mode tunneling. |
| protocol udp aes | Uses UDP protocol with AES encryption for connect mode tunneling. |
| show | Shows the current configuration. |
| show history | Displays the last 20 commands entered during the current CLI session. |
| show statistics | show connection statistics |
| ssh username <text> | Sets the SSH user name for use when establishing tunneling connections with other devices. <text> = SSH user name. |
| tcp keep alive <milliseconds> | Enables TCP keep alive for connect mode tunneling and sets the timer. <milliseconds> = timer value, in milliseconds. |
| validate certificate disable | Skips verification of the server certificate when connecting. |
| validate certificate enable | Requires verification of the server certificate when connecting. |
| write | Stores the current configuration in permanent memory. |
| host 9 (tunnel-connect-host:2:9) level commands | |
| address <text> | Sets the remote host to establish tunneling connections with. <text> = IP address or host name of the remote host. |
| aes decrypt key <hexadecimal> | Sets the connect tunnel AES decrypt key with up to 16 bytes. Each byte is represented by two adjacent hex digits. Bytes may run together or be separated by optional punctuation: 123ABC "12 3A BC" 12,3A,BC 12.3a.bc 12:3a:bc Note that quotes must enclose the value if it contains spaces. |
| aes decrypt key text <text> | Sets the connect tunnel AES decrypt key with up to 16 bytes. Each byte is represented by a single character. Note that quotes must enclose the value if it contains spaces. |
| aes encrypt key <hexadecimal> | Sets the connect tunnel AES encrypt key with up to 16 bytes. Each byte is represented by two adjacent hex digits. Bytes may run together or be separated by optional punctuation: 123ABC "12 3A BC" 12,3A,BC 12.3a.bc 12:3a:bc Note that quotes must enclose the value if it contains spaces. |
| aes encrypt key text <text> | Sets the connect tunnel AES encrypt key with up to 16 |

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| | bytes. Each byte is represented by a single character. Note that quotes must enclose the value if it contains spaces. |
| auto show statistics | show connection statistics |
| clrscrn | Clears the screen. |
| credentials <text> | Selects the RSA/DSA certificates by name for the SSL client. |
| default protocol | Restores the default protocol as "TCP". |
| default tcp keep alive | Restores the default 45 second connect mode TCP keep alive timeout. |
| exit | Exits to the next higher level. |
| no address | Removes the remote host address used to establish tunneling connections. |
| no aes decrypt key | Removes the connect tunnel AES decrypt key. |
| no aes encrypt key | Removes the connect tunnel AES encrypt key. |
| no credentials | Clears the RSA/DSA certificate selection. |
| no port | Removes the remote port used to establish tunnel connections. |
| no ssh username | Removes the SSH user name. |
| no tcp keep alive | Disables the connect mode TCP keep alive timeout. |
| port <number> | Sets the remote port to use for connect mode tunneling. <number> = number of the port to use. |
| protocol ssh | Uses SSH protocol for connect mode tunneling. |
| protocol ssl | Uses SSL protocol for connect mode tunneling. |
| protocol tcp | Uses TCP protocol for connect mode tunneling. |
| protocol tcp aes | Uses TCP protocol with AES encryption for connect mode tunneling. |
| protocol telnet | Uses Telnet protocol (with IAC) for connect mode tunneling. |
| protocol udp | Uses UDP protocol for connect mode tunneling. |
| protocol udp aes | Uses UDP protocol with AES encryption for connect mode tunneling. |
| show | Shows the current configuration. |
| show history | Displays the last 20 commands entered during the current CLI session. |
| show statistics | show connection statistics |
| ssh username <text> | Sets the SSH user name for use when establishing tunneling connections with other devices. <text> = SSH user name. |
| tcp keep alive <milliseconds> | Enables TCP keep alive for connect mode tunneling and sets the timer. <milliseconds> = timer value, in milliseconds. |
| validate certificate disable | Skips verification of the server certificate when connecting. |
| validate certificate enable | Requires verification of the server certificate when connecting. |
| write | Stores the current configuration in permanent memory. |
| host 9 (tunnel-connect-host:1:9) level commands | |

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| address <text> | Sets the remote host to establish tunneling connections with. <text> = IP address or host name of the remote host. |
| aes decrypt key <hexadecimal> | Sets the connect tunnel AES decrypt key with up to 16 bytes. Each byte is represented by two adjacent hex digits. Bytes may run together or be separated by optional punctuation: 123ABC "12 3A BC" 12,3A,BC 12.3a.bc 12:3a:bc Note that quotes must enclose the value if it contains spaces. |
| aes decrypt key text <text> | Sets the connect tunnel AES decrypt key with up to 16 bytes. Each byte is represented by a single character. Note that quotes must enclose the value if it contains spaces. |
| aes encrypt key <hexadecimal> | Sets the connect tunnel AES encrypt key with up to 16 bytes. Each byte is represented by two adjacent hex digits. Bytes may run together or be separated by optional punctuation: 123ABC "12 3A BC" 12,3A,BC 12.3a.bc 12:3a:bc Note that quotes must enclose the value if it contains spaces. |
| aes encrypt key text <text> | Sets the connect tunnel AES encrypt key with up to 16 bytes. Each byte is represented by a single character. Note that quotes must enclose the value if it contains spaces. |
| auto show statistics | show connection statistics |
| clrscrn | Clears the screen. |
| credentials <text> | Selects the RSA/DSA certificates by name for the SSL client. |
| default protocol | Restores the default protocol as "TCP". |
| default tcp keep alive | Restores the default 45 second connect mode TCP keep alive timeout. |
| exit | Exits to the next higher level. |
| no address | Removes the remote host address used to establish tunneling connections. |
| no aes decrypt key | Removes the connect tunnel AES decrypt key. |
| no aes encrypt key | Removes the connect tunnel AES encrypt key. |
| no credentials | Clears the RSA/DSA certificate selection. |
| no port | Removes the remote port used to establish tunnel connections. |
| no ssh username | Removes the SSH user name. |
| no tcp keep alive | Disables the connect mode TCP keep alive timeout. |
| port <number> | Sets the remote port to use for connect mode tunneling. <number> = number of the port to use. |
| protocol ssh | Uses SSH protocol for connect mode tunneling. |
| protocol ssl | Uses SSL protocol for connect mode tunneling. |
| protocol tcp | Uses TCP protocol for connect mode tunneling. |
| protocol tcp aes | Uses TCP protocol with AES encryption for connect mode tunneling. |
| protocol telnet | Uses Telnet protocol (with IAC) for connect mode tunneling. |
| protocol udp | Uses UDP protocol for connect mode tunneling. |
| protocol udp aes | Uses UDP protocol with AES encryption for connect mode tunneling. |

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| show | Shows the current configuration. |
| show history | Displays the last 20 commands entered during the current CLI session. |
| show statistics | show connection statistics |
| ssh username <text> | Sets the SSH user name for use when establishing tunneling connections with other devices. <text> = SSH user name. |
| tcp keep alive <milliseconds> | Enables TCP keep alive for connect mode tunneling and sets the timer. <milliseconds> = timer value, in milliseconds. |
| validate certificate disable | Skips verification of the server certificate when connecting. |
| validate certificate enable | Requires verification of the server certificate when connecting. |
| write | Stores the current configuration in permanent memory. |
| host 9 (config-host:9) level commands | |
| clrscrn | Clears the screen. |
| default protocol | Restores the default value of the protocol (Telnet). |
| default remote port | Sets the remote port (used to connect to the host) to the default value, which depends on the selected protocol. |
| exit | Exits to the configuration level. |
| host <number> | Change to config host level |
| name <text> | Sets the name of the host. <text> = name of the host. |
| no name | Clears the name of the host. |
| no remote address | Clears the remote address of the host. |
| no ssh username | Clears the SSH username associated with the host. |
| protocol ssh | Sets the protocol to SSH. |
| protocol telnet | Sets the protocol to Telnet. |
| remote address <text> | Sets the IP address of the remote host to connect to when this host is selected on the login connect menu. <text> = IP address. |
| remote port <number> | Sets the remote port used to connect to the host. <number> = port to be used. |
| show | Displays the current configuration. |
| show history | Displays the last 20 commands entered during the current CLI session. |
| ssh username <text> | Sets the username for logging into the host via SSH. <text> = username. |
| write | Stores the current configuration in permanent memory. |
| http (config-http) level commands | |
| auth <uri> | Creates a new HTTP server authentication directive. <uri> = URI of the server. |
| auth type <uri> digest | Sets an HTTP server authentication directive to the Digest Access Authentication scheme. <uri> = URI of the server. |
| auth type <uri> none | Sets the authentication type for an HTTP server authentication directive to none. <uri> = URI of the server. |
| auth type <uri> ssl | Sets the authentication type for an HTTP server authentication directive to SSL. <uri> = URI of the server. |

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| auth type <uri> ssl-basic | Sets the authentication type for an HTTP server authentication directive to SSL-Basic. <uri> = URI of the server. |
| auth type <uri> ssl-digest | Sets the authentication type for an HTTP server authentication directive to SSL-Digest. <uri> = URI of the server. |
| authentication timeout <minutes> | For any Digest AuthType, sets the timeout for authentication. <minutes> = authentication timeout value. |
| clear counters | Sets the HTTP counters to zero. |
| clear log | Clears the HTTP server log. |
| clrscrn | Clears the screen. |
| default authentication timeout | Resets the authentication timeout to its default value. |
| default log format | Restores the HTTP Server log format string to its default value. |
| default max bytes | Resets the maximum bytes to its default value. |
| default max log entries | Restores the default maximum number of HTTP Server log entries. |
| default max timeout | Resets the timeout to its default value. |
| default port | Resets the HTTP Server port to its default value. |
| default secure port | Resets the HTTP Server SSL port to its default value. |
| default secure protocols | Restores the default secure protocol selections. |
| delete auth <uri> | Deletes an existing HTTP Server authentication directive. <uri> = URI of the server. |
| exit | Returns to the config level. |
| log format <text> | Sets the log format string for the HTTP server, using the following directives: %a remote ip address (could be a proxy) %b bytes sent excluding headers %B bytes sent excluding headers (0 = '-') %h remote host (same as %a) %{h}i header contents from request (h = header string) %m request method %p ephemeral local port value used for request %q query string (prepend with '?' or empty '-') %t timestamp HH:MM:SS (same as Apache '%(%H:%M:%S)t') %u remote user (could be bogus for 401 status) %U URL path info %r first line of request (same as '%m %U%q <version>') %s return status |
| logging state disable | Disables HTTP server logging. |
| logging state enable | Enables HTTP server logging. |
| max bytes <number> | Sets the maximum number of bytes the HTTP server accepts when receiving a request. |
| max log entries <number> | Sets the maximum number of HTTP server log entries. <number> = maximum number of HTTP server log entries. |
| max timeout <seconds> | Sets the maximum time the HTTP server waits when receiving a request. <seconds> = maximum timeout value. |
| no clear counters | Restores the HTTP counters to the aggregate values. |
| no port | Disables the HTTP Server port. |
| no secure credentials | Clears the RSA/DSA certificate selection. |
| no secure port | Disables the HTTP Server SSL port. |
| port <number> | Sets the port number the HTTP server will use. <number> = port number. |
| secure credentials <text> | Selects the RSA/DSA certificates by name for the HTTP server. |

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| secure port <number> | Sets the port number the HTTP server will use over SSL. <number> = port number. |
| secure protocols ssl3 disable | Disables the protocol. |
| secure protocols ssl3 enable | Enables the protocol. |
| secure protocols tls1.0 disable | Disables the protocol. |
| secure protocols tls1.0 enable | Enables the protocol. |
| secure protocols tls1.1 disable | Disables the protocol. |
| secure protocols tls1.1 enable | Enables the protocol. |
| show | Displays the current configuration. |
| show auth | Displays the HTTP server authentication settings. |
| show history | Displays the last 20 commands entered during the current CLI session. |
| show log | Displays the HTTP server log. |
| show statistics | Displays the HTTP statistics. |
| state disable | Disables the HTTP server. |
| state enable | Enables the HTTP server. |
| write | Stores the current configuration in permanent memory. |
| icmp (config-icmp) level commands | |
| clrscrn | Clears the screen. |
| exit | Exits to the configuration level. |
| show | Displays the current configuration. |
| show history | Displays the last 20 commands entered during the current CLI session. |
| state disable | Prevents ICMP packets from being sent or received. |
| state enable | Allows ICMP packets to be sent and received. |
| write | Stores the current configuration in permanent memory. |
| if 1 (config-if:eth0) level commands | |
| bootp disable | Disables BOOTP. |
| bootp enable | Enables BOOTP. |
| clrscrn | Clears the screen. |
| default gateway <IP address> | Sets the configurable gateway IP address to the default value. |
| default mtu | Restores the default Maximum Transmission Unit (MTU) size. |
| dhcp client id <text> | Sets the DHCP client ID. |
| dhcp disable | Disables DHCP. |
| dhcp enable | Enables DHCP. |
| domain <text> | Sets the domain name. <text> = name of the domain. |
| exit | Exits to the config level. |
| hostname <text> | Sets the host name. <text> = name of the host. |
| ip address <ip address/cidr> | Sets the IP address and network mask. Formats accepted: 192.168.1.1 (default mask) 192.168.1.1/24 (CIDR) "192.168.1.1 255.255.255.0" (explicit mask) |
| link | Enter link configuration level |
| mtu <bytes> | Sets the Maximum Transmission Unit (MTU) size. |

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| no default gateway | Clears the default gateway. |
| no dhcp client id | Clears the DHCP client ID. |
| no domain | Clears the domain name. |
| no hostname | Clears the host name. |
| no ip address | Clears the IP address. |
| no primary dns | Clears the name of the primary DNS server. |
| no secondary dns | Clears the name of the secondary DNS server. |
| primary dns <IP address> | Sets the IP address of the primary DNS server. |
| secondary dns <IP address> | Sets the IP address of the secondary DNS server. |
| show | Displays the current configuration. |
| show history | Displays the last 20 commands entered during the current CLI session. |
| show status | Show interface status |
| write | Stores the current configuration in permanent memory. |
| ip (config-ip) level commands | |
| clrscrn | Clears the screen. |
| default ip time to live | Restores the default IP time to live. |
| default multicast time to live | Restores the default IP multicast time to live, which is one hop. |
| exit | Exits to the configuration level. |
| ip time to live <hops> | Sets the IP time to live, known by SNMP as "ipDefaultTTL". <hops> = number of hops that a typical IP packet is allowed to live. |
| multicast time to live <hops> | Sets the IP multicast time to live. <hops> = number of hops that a multicast IP packet is allowed to live. |
| show | Displays the current configuration. |
| show history | Displays the last 20 commands entered during the current CLI session. |
| write | Stores the current configuration in permanent memory. |
| line 1 (line:1) level commands | |
| auto show statistics | Continuously displays line statistics. |
| baud rate <bits per second> | Sets the line speed. <bits per second> = the speed. Standard speeds include 1200, 2400, 4800, 9600, 19200, and so on. |
| clear line counters | Sets the serial counters to zero. |
| clrscrn | Clears the screen. |
| command mode always | Sets the current line to always be in command mode. |
| command mode echo serial string disable | Disables user-defined serial boot string to be echoed in the CLI. |
| command mode echo serial string enable | Enables user-defined serial boot string to be echoed in the CLI. |
| command mode serial string | Enables user to enter a custom string at boot time to enter command mode. |
| command mode serial string <string> | Sets a string that can be entered at boot time to enter command mode. <string> = text with possible binary characters. Within [] use binary decimal up to 255 or hex up to 0xFF. Within {} specify decimal milliseconds time delay. |

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| command mode signon message <string> | Sets a sign-on message that is sent from the serial port when the device boots and when the line is in command mode. <string> = text with possible binary characters. Within [] use binary decimal up to 255 or hex up to 0xFF. |
| command mode wait time <milliseconds> | Sets boot-up wait time for command mode serial string. <milliseconds> = wait time. |
| configure current settings | Configures line with the current value of settings. |
| data bits 7 | Uses seven bits for data on the line. |
| data bits 8 | Uses eight bits for data on the line. |
| default baud rate | Restores the default speed of 9600 bits per second. |
| default data bits | Restores the default of eight data bits. |
| default flow control | Restores the default of no flow control. |
| default interface | Restores the default interface type to this line. |
| default parity | Restores the default of no parity. |
| default protocol | Restores the default protocol on the line. |
| default stop bits | Restores the default of one stop bit. |
| default threshold | Restores the factory default threshold. |
| default xoff char | Restores the default xoff character on this line. |
| default xon char | Restores the default xon character on this line. |
| exit | Exits to the enable level |
| flow control hardware | Uses hardware (RTS/CTS) flow control on the line. |
| flow control none | Does not provide flow control on the line. |
| flow control software | Uses software (xon/xoff characters) flow control on the line. |
| gap timer <milliseconds> | Sets the gap timer in milliseconds. If some data has been received, it will be forwarded after this time since the last character. |
| interface rs232 | Sets the line interface to RS232. |
| interface rs485 full-duplex | Sets the line interface to RS485 in full-duplex mode. |
| interface rs485 half-duplex | Sets the line interface to RS485 in half-duplex mode. |
| interface usb-cdc-acm | Sets the line interface to USB-CDC-ACM mode. |
| kill session | Kills command mode session on the Line |
| line <line> | Enters the line level. <line> = number of the line (serial port) to be configured. |
| name <text> | Sets the name for this line. |
| no clear line counters | Restores the serial counters to the aggregate values. |
| no command mode | Disables command mode for the current line. |
| no command mode signon message | Clears the signon message displayed at boot time and when entering command mode. |
| no gap timer | Removes the gap timer, so forwarding depends on the line speed. |
| no name | Removes the name of this line. |
| parity even | Uses a parity bit on the line for even parity. |
| parity none | Does not use a parity bit on the line. |
| parity odd | Uses a parity bit on the line for odd parity. |
| protocol none | Uses no protocol on the line. |

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| protocol tunnel | Applies tunnel protocol on the line. |
| reassert | Asserts line status with current configured values. |
| show | Displays the current status. |
| show command mode | Shows the command mode settings for the current line. |
| show history | Displays the last 20 commands entered during the current CLI session. |
| show line | Displays the current configuration. |
| show statistics | Shows the line statistics. |
| state disable | Disables the line so data cannot be sent/received. |
| state enable | Enables the line so data can be sent/received. |
| stop bits 1 | Uses one stop bit after data on the line. |
| stop bits 2 | Uses two stop bits after data on the line. |
| terminal <line> | Enters the configure-terminal level. <line> = number of the terminal line (serial port) to be configured. |
| terminal network | Enters the configure-terminal level for the network. |
| termination disable | Refrains from terminating the line. |
| termination enable | Enables 120 ohm line termination in RS485 half-duplex mode. |
| threshold <bytes> | Sets the threshold in bytes. After this many bytes are received, they are forwarded without delay. |
| tunnel <line> | Enters the tunnel level. <line> = number of the tunnel line (serial port) to be configured. |
| write | Stores the current configuration in permanent memory. |
| xoff char <control> | Sets the xoff character for use with software flow control on this line. The character may be input as text, control, decimal, or hex. A control character has the form <control>C. A decimal value character has the form \99. A hex value character has the form 0xFF. |
| xon char <control> | Sets the xon character for use with software flow control on this line. The character may be input as text, control, decimal, or hex. A control character has the form <control>C. A decimal value character has the form \99. A hex value character has the form 0xFF. |
| line 2 (line:2) level commands | |
| auto show statistics | Continuously displays line statistics. |
| baud rate <bits per second> | Sets the line speed. <bits per second> = the speed. Standard speeds include 1200, 2400, 4800, 9600, 19200, and so on. |
| clear line counters | Sets the serial counters to zero. |
| clrscrn | Clears the screen. |
| command mode always | Sets the current line to always be in command mode. |
| command mode echo serial string disable | Disables user-defined serial boot string to be echoed in the CLI. |
| command mode echo serial string enable | Enables user-defined serial boot string to be echoed in the CLI. |
| command mode serial string | Enables user to enter a custom string at boot time to enter command mode. |
| command mode serial string <string> | Sets a string that can be entered at boot time to enter command mode. <string> = text with possible binary |

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| | characters. Within [] use binary decimal up to 255 or hex up to 0xFF. Within {} specify decimal milliseconds time delay. |
| command mode signon message <string> | Sets a sign-on message that is sent from the serial port when the device boots and when the line is in command mode. <string> = text with possible binary characters. Within [] use binary decimal up to 255 or hex up to 0xFF. |
| command mode wait time <milliseconds> | Sets boot-up wait time for command mode serial string. <milliseconds> = wait time. |
| configure current settings | Configures line with the current value of settings. |
| data bits 7 | Uses seven bits for data on the line. |
| data bits 8 | Uses eight bits for data on the line. |
| default baud rate | Restores the default speed of 9600 bits per second. |
| default data bits | Restores the default of eight data bits. |
| default flow control | Restores the default of no flow control. |
| default interface | Restores the default interface type to this line. |
| default parity | Restores the default of no parity. |
| default protocol | Restores the default protocol on the line. |
| default stop bits | Restores the default of one stop bit. |
| default threshold | Restores the factory default threshold. |
| default xoff char | Restores the default xoff character on this line. |
| default xon char | Restores the default xon character on this line. |
| exit | Exits to the enable level |
| flow control hardware | Uses hardware (RTS/CTS) flow control on the line. |
| flow control none | Does not provide flow control on the line. |
| flow control software | Uses software (xon/xoff characters) flow control on the line. |
| gap timer <milliseconds> | Sets the gap timer in milliseconds. If some data has been received, it will be forwarded after this time since the last character. |
| interface rs232 | Sets the line interface to RS232. |
| interface rs485 full-duplex | Sets the line interface to RS485 in full-duplex mode. |
| interface rs485 half-duplex | Sets the line interface to RS485 in half-duplex mode. |
| interface usb-cdc-acm | Sets the line interface to USB-CDC-ACM mode. |
| kill session | Kills command mode session on the Line |
| line <line> | Enters the line level. <line> = number of the line (serial port) to be configured. |
| name <text> | Sets the name for this line. |
| no clear line counters | Restores the serial counters to the aggregate values. |
| no command mode | Disables command mode for the current line. |
| no command mode signon message | Clears the signon message displayed at boot time and when entering command mode. |
| no gap timer | Removes the gap timer, so forwarding depends on the line speed. |
| no name | Removes the name of this line. |
| parity even | Uses a parity bit on the line for even parity. |
| parity none | Does not use a parity bit on the line. |

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|---|--|
| parity odd | Uses a parity bit on the line for odd parity. |
| protocol none | Uses no protocol on the line. |
| protocol tunnel | Applies tunnel protocol on the line. |
| reassert | Asserts line status with current configured values. |
| show | Displays the current status. |
| show command mode | Shows the command mode settings for the current line. |
| show history | Displays the last 20 commands entered during the current CLI session. |
| show line | Displays the current configuration. |
| show statistics | Shows the line statistics. |
| state disable | Disables the line so data cannot be sent/received. |
| state enable | Enables the line so data can be sent/received. |
| stop bits 1 | Uses one stop bit after data on the line. |
| stop bits 2 | Uses two stop bits after data on the line. |
| terminal <line> | Enters the configure-terminal level. <line> = number of the terminal line (serial port) to be configured. |
| terminal network | Enters the configure-terminal level for the network. |
| termination disable | Refrains from terminating the line. |
| termination enable | Enables 120 ohm line termination in RS485 half-duplex mode. |
| threshold <bytes> | Sets the threshold in bytes. After this many bytes are received, they are forwarded without delay. |
| tunnel <line> | Enters the tunnel level. <line> = number of the tunnel line (serial port) to be configured. |
| write | Stores the current configuration in permanent memory. |
| xoff char <control> | Sets the xoff character for use with software flow control on this line. The character may be input as text, control, decimal, or hex. A control character has the form <control>C. A decimal value character has the form \99. A hex value character has the form 0xFF. |
| xon char <control> | Sets the xon character for use with software flow control on this line. The character may be input as text, control, decimal, or hex. A control character has the form <control>C. A decimal value character has the form \99. A hex value character has the form 0xFF. |
| line 3 (line:3) level commands | |
| auto show statistics | Continuously displays line statistics. |
| baud rate <bits per second> | Sets the line speed. <bits per second> = the speed. Standard speeds include 1200, 2400, 4800, 9600, 19200, and so on. |
| clear line counters | Sets the serial counters to zero. |
| clrscrn | Clears the screen. |
| command mode always | Sets the current line to always be in command mode. |
| command mode echo serial string disable | Disables user-defined serial boot string to be echoed in the CLI. |
| command mode echo serial string enable | Enables user-defined serial boot string to be echoed in the CLI. |
| command mode serial string | Enables user to enter a custom string at boot time to enter |

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| | command mode. |
| command mode serial string <string> | Sets a string that can be entered at boot time to enter command mode. <string> = text with possible binary characters. Within [] use binary decimal up to 255 or hex up to 0xFF. Within {} specify decimal milliseconds time delay. |
| command mode signon message <string> | Sets a sign-on message that is sent from the serial port when the device boots and when the line is in command mode. <string> = text with possible binary characters. Within [] use binary decimal up to 255 or hex up to 0xFF. |
| command mode wait time <milliseconds> | Sets boot-up wait time for command mode serial string. <milliseconds> = wait time. |
| configure current settings | Configures line with the current value of settings. |
| data bits 7 | Uses seven bits for data on the line. |
| data bits 8 | Uses eight bits for data on the line. |
| default baud rate | Restores the default speed of 9600 bits per second. |
| default data bits | Restores the default of eight data bits. |
| default flow control | Restores the default of no flow control. |
| default interface | Restores the default interface type to this line. |
| default parity | Restores the default of no parity. |
| default protocol | Restores the default protocol on the line. |
| default stop bits | Restores the default of one stop bit. |
| default threshold | Restores the factory default threshold. |
| default xoff char | Restores the default xoff character on this line. |
| default xon char | Restores the default xon character on this line. |
| exit | Exits to the enable level |
| flow control hardware | Uses hardware (RTS/CTS) flow control on the line. |
| flow control none | Does not provide flow control on the line. |
| flow control software | Uses software (xon/xoff characters) flow control on the line. |
| gap timer <milliseconds> | Sets the gap timer in milliseconds. If some data has been received, it will be forwarded after this time since the last character. |
| interface rs232 | Sets the line interface to RS232. |
| interface rs485 full-duplex | Sets the line interface to RS485 in full-duplex mode. |
| interface rs485 half-duplex | Sets the line interface to RS485 in half-duplex mode. |
| interface usb-cdc-acm | Sets the line interface to USB-CDC-ACM mode. |
| kill session | Kills command mode session on the Line |
| line <line> | Enters the line level. <line> = number of the line (serial port) to be configured. |
| name <text> | Sets the name for this line. |
| no clear line counters | Restores the serial counters to the aggregate values. |
| no command mode | Disables command mode for the current line. |
| no command mode signon message | Clears the signon message displayed at boot time and when entering command mode. |
| no gap timer | Removes the gap timer, so forwarding depends on the line speed. |

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|---|--|
| no name | Removes the name of this line. |
| parity even | Uses a parity bit on the line for even parity. |
| parity none | Does not use a parity bit on the line. |
| parity odd | Uses a parity bit on the line for odd parity. |
| protocol none | Uses no protocol on the line. |
| protocol tunnel | Applies tunnel protocol on the line. |
| reassert | Asserts line status with current configured values. |
| show | Displays the current status. |
| show command mode | Shows the command mode settings for the current line. |
| show history | Displays the last 20 commands entered during the current CLI session. |
| show line | Displays the current configuration. |
| show statistics | Shows the line statistics. |
| state disable | Disables the line so data cannot be sent/received. |
| state enable | Enables the line so data can be sent/received. |
| stop bits 1 | Uses one stop bit after data on the line. |
| stop bits 2 | Uses two stop bits after data on the line. |
| terminal <line> | Enters the configure-terminal level. <line> = number of the terminal line (serial port) to be configured. |
| terminal network | Enters the configure-terminal level for the network. |
| termination disable | Refrains from terminating the line. |
| termination enable | Enables 120 ohm line termination in RS485 half-duplex mode. |
| threshold <bytes> | Sets the threshold in bytes. After this many bytes are received, they are forwarded without delay. |
| tunnel <line> | Enters the tunnel level. <line> = number of the tunnel line (serial port) to be configured. |
| write | Stores the current configuration in permanent memory. |
| xoff char <control> | Sets the xoff character for use with software flow control on this line. The character may be input as text, control, decimal, or hex. A control character has the form <control>C. A decimal value character has the form \99. A hex value character has the form 0xFF. |
| xon char <control> | Sets the xon character for use with software flow control on this line. The character may be input as text, control, decimal, or hex. A control character has the form <control>C. A decimal value character has the form \99. A hex value character has the form 0xFF. |
| link (config-ethernet:eth0) level commands | |
| clrscrn | Clears the screen. |
| default duplex | Restores the default duplex setting, which is auto. |
| default speed | Restores the default speed setting, which is auto-negotiate. |
| duplex auto | Sets duplex mode to auto. |
| duplex full | Sets duplex mode to full. |
| duplex half | Sets duplex mode to half. |
| exit | Exit back to interface configuration level |

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| show | Displays the current configuration. |
| show history | Displays the last 20 commands entered during the current CLI session. |
| speed 10 | Sets the speed of the Ethernet link to 10 Mbps. |
| speed 100 | Sets the speed of the Ethernet link to 100 Mbps. |
| speed auto | Sets the speed of the Ethernet link to auto-negotiate. |
| write | Stores the current configuration in permanent memory. |
| log (config-diagnostics-log) level commands | |
| clrscrn | Clears the screen. |
| default max length | Restores the factory default maximum Log file size. |
| default output | Restores the default log output, which is disable. |
| exit | Exits to the next higher level. |
| max length <Kbytes> | Sets the maximum size in Kbytes for the Log file. |
| output disable | Disables log output. |
| output filesystem | Enables log to filesystem. |
| output line <number> | Enables log to serial line. |
| show | Shows the current configuration. |
| show history | Displays the last 20 commands entered during the current CLI session. |
| write | Stores the current configuration in permanent memory. |
| modem (tunnel-modem:3) level commands | |
| clrscrn | Clears the screen. |
| connect string <text> | Sets the CONNECT string used in modem emulation. <string> = connect string. |
| default incoming connection | Default disables incoming network connections. |
| default response type | Default uses text type responses. |
| display remote ip disable | The incoming RING has nothing following it. |
| display remote ip enable | The incoming RING is followed by the IP address of the caller. |
| echo commands disable | Does not echo modem commands. |
| echo commands enable | Echoes modem commands. |
| echo pluses disable | Does not echo the +++ characters when entering modem command mode. |
| echo pluses enable | Echoes the +++ characters when entering modem command mode. |
| error unknown commands disable | Returns OK on unknown AT commands. |
| error unknown commands enable | Returns an error upon unknown AT commands. |
| exit | Returns to the tunnel level. |
| incoming connection automatic | Automatically answer incoming network connections. |
| incoming connection disabled | Disable incoming network connections. |
| incoming connection manual | Wait for an ATA command before answering an incoming network connection. |
| no connect string | Removes optional CONNECT string information for modem emulation. |
| reassert | Asserts tunnel modem status with current configured values. |

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| response type numeric | Uses numeric type responses. |
| response type text | Uses text type responses. |
| show | Displays the current configuration. |
| show history | Displays the last 20 commands entered during the current CLI session. |
| show status | Displays tunnel modem status. |
| verbose response disable | Does not send Modem Response Codes. |
| verbose response enable | Sends Modem Response Codes out on the Serial Line. |
| write | Stores the current configuration in permanent memory. |
| modem (tunnel-modem:2) level commands | |
| clrscrn | Clears the screen. |
| connect string <text> | Sets the CONNECT string used in modem emulation. <string> = connect string. |
| default incoming connection | Default disables incoming network connections. |
| default response type | Default uses text type responses. |
| display remote ip disable | The incoming RING has nothing following it. |
| display remote ip enable | The incoming RING is followed by the IP address of the caller. |
| echo commands disable | Does not echo modem commands. |
| echo commands enable | Echoes modem commands. |
| echo pluses disable | Does not echo the +++ characters when entering modem command mode. |
| echo pluses enable | Echoes the +++ characters when entering modem command mode. |
| error unknown commands disable | Returns OK on unknown AT commands. |
| error unknown commands enable | Returns an error upon unknown AT commands. |
| exit | Returns to the tunnel level. |
| incoming connection automatic | Automatically answer incoming network connections. |
| incoming connection disabled | Disable incoming network connections. |
| incoming connection manual | Wait for an ATA command before answering an incoming network connection. |
| no connect string | Removes optional CONNECT string information for modem emulation. |
| reassert | Asserts tunnel modem status with current configured values. |
| response type numeric | Uses numeric type responses. |
| response type text | Uses text type responses. |
| show | Displays the current configuration. |
| show history | Displays the last 20 commands entered during the current CLI session. |
| show status | Displays tunnel modem status. |
| verbose response disable | Does not send Modem Response Codes. |
| verbose response enable | Sends Modem Response Codes out on the Serial Line. |
| write | Stores the current configuration in permanent memory. |
| modem (tunnel-modem:1) level commands | |
| clrscrn | Clears the screen. |

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| connect string <text> | Sets the CONNECT string used in modem emulation. <string> = connect string. |
| default incoming connection | Default disables incoming network connections. |
| default response type | Default uses text type responses. |
| display remote ip disable | The incoming RING has nothing following it. |
| display remote ip enable | The incoming RING is followed by the IP address of the caller. |
| echo commands disable | Does not echo modem commands. |
| echo commands enable | Echoes modem commands. |
| echo pluses disable | Does not echo the +++ characters when entering modem command mode. |
| echo pluses enable | Echoes the +++ characters when entering modem command mode. |
| error unknown commands disable | Returns OK on unknown AT commands. |
| error unknown commands enable | Returns an error upon unknown AT commands. |
| exit | Returns to the tunnel level. |
| incoming connection automatic | Automatically answer incoming network connections. |
| incoming connection disabled | Disable incoming network connections. |
| incoming connection manual | Wait for an ATA command before answering an incoming network connection. |
| no connect string | Removes optional CONNECT string information for modem emulation. |
| reassert | Asserts tunnel modem status with current configured values. |
| response type numeric | Uses numeric type responses. |
| response type text | Uses text type responses. |
| show | Displays the current configuration. |
| show history | Displays the last 20 commands entered during the current CLI session. |
| show status | Displays tunnel modem status. |
| verbose response disable | Does not send Modem Response Codes. |
| verbose response enable | Sends Modem Response Codes out on the Serial Line. |
| write | Stores the current configuration in permanent memory. |
| ntp (config-clock-ntp) level commands | |
| clrscrn | Clears the screen. |
| default server | Restores the default NTP server address. |
| exit | Exits to the next higher level. |
| server <text> | Sets the NTP server address. |
| show | Shows the current configuration. |
| show history | Displays the last 20 commands entered during the current CLI session. |
| write | Stores the current configuration in permanent memory. |
| packing (tunnel-packing:3) level commands | |
| clrscrn | Clears the screen. |
| default packing mode | Sets to default packing mode, which is "Disable" |
| default send character | Removes the send character for packing mode. |

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| default threshold | Restores the default threshold. |
| default timeout | Restores the default packing mode timeout. |
| exit | Returns to the tunnel level. |
| no trailing character | Removes the trailing character for packing mode. |
| packing mode disable | Disables packing. Data is sent to the network when received. |
| packing mode send character | Sets packing mode to accumulate data and transmit it upon receiving the configured send character on the line (serial port). |
| packing mode timeout | Sets packing mode to accumulate data and transmit it after a specified amount of time (timeout). |
| send character <control> | Sets the send character for packing mode. The character may be input as text, control, decimal, or hex. A control character has the form <control>C. A decimal value character has the form \99. A hex value character has the form 0xFF. |
| show | Displays the current configuration. |
| show history | Displays the last 20 commands entered during the current CLI session. |
| threshold <bytes> | Sets the threshold (byte count). If the queued data reaches this threshold then the data will be sent. <bytes> = number of bytes in the threshold. |
| timeout <milliseconds> | Sets the timeout value for packing mode in milliseconds. <milliseconds> = timeout value, in milliseconds. |
| trailing character <control> | Sets the trailing character for packing mode. The character may be input as text, control, decimal, or hex. A control character has the form <control>C. A decimal value character has the form \99. A hex value character has the form 0xFF. |
| write | Stores the current configuration in permanent memory. |
| packing (tunnel-packing:2) level commands | |
| clrscrn | Clears the screen. |
| default packing mode | Sets to default packing mode, which is "Disable" |
| default send character | Removes the send character for packing mode. |
| default threshold | Restores the default threshold. |
| default timeout | Restores the default packing mode timeout. |
| exit | Returns to the tunnel level. |
| no trailing character | Removes the trailing character for packing mode. |
| packing mode disable | Disables packing. Data is sent to the network when received. |
| packing mode send character | Sets packing mode to accumulate data and transmit it upon receiving the configured send character on the line (serial port). |
| packing mode timeout | Sets packing mode to accumulate data and transmit it after a specified amount of time (timeout). |
| send character <control> | Sets the send character for packing mode. The character may be input as text, control, decimal, or hex. A control character has the form <control>C. A decimal value character has the form \99. A hex value character has the form 0xFF. |

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|---|---|
| show | Displays the current configuration. |
| show history | Displays the last 20 commands entered during the current CLI session. |
| threshold <bytes> | Sets the threshold (byte count). If the queued data reaches this threshold then the data will be sent. <bytes> = number of bytes in the threshold. |
| timeout <milliseconds> | Sets the timeout value for packing mode in milliseconds. <milliseconds> = timeout value, in milliseconds. |
| trailing character <control> | Sets the trailing character for packing mode. The character may be input as text, control, decimal, or hex. A control character has the form <control>C. A decimal value character has the form \99. A hex value character has the form 0xFF. |
| write | Stores the current configuration in permanent memory. |
| packing (tunnel-packing:1) level commands | |
| clrscrn | Clears the screen. |
| default packing mode | Sets to default packing mode, which is "Disable" |
| default send character | Removes the send character for packing mode. |
| default threshold | Restores the default threshold. |
| default timeout | Restores the default packing mode timeout. |
| exit | Returns to the tunnel level. |
| no trailing character | Removes the trailing character for packing mode. |
| packing mode disable | Disables packing. Data is sent to the network when received. |
| packing mode send character | Sets packing mode to accumulate data and transmit it upon receiving the configured send character on the line (serial port). |
| packing mode timeout | Sets packing mode to accumulate data and transmit it after a specified amount of time (timeout). |
| send character <control> | Sets the send character for packing mode. The character may be input as text, control, decimal, or hex. A control character has the form <control>C. A decimal value character has the form \99. A hex value character has the form 0xFF. |
| show | Displays the current configuration. |
| show history | Displays the last 20 commands entered during the current CLI session. |
| threshold <bytes> | Sets the threshold (byte count). If the queued data reaches this threshold then the data will be sent. <bytes> = number of bytes in the threshold. |
| timeout <milliseconds> | Sets the timeout value for packing mode in milliseconds. <milliseconds> = timeout value, in milliseconds. |
| trailing character <control> | Sets the trailing character for packing mode. The character may be input as text, control, decimal, or hex. A control character has the form <control>C. A decimal value character has the form \99. A hex value character has the form 0xFF. |
| write | Stores the current configuration in permanent memory. |
| password (tunnel-accept-password:3) level commands | |
| clrscrn | Clears the screen. |

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| exit | Exits to the next higher level. |
| no password | Removes the password so connections will be accepted unchallenged. |
| password <text> | Sets the password required on the network side of the tunnel to begin a connection. |
| prompt disable | Inhibits any prompting for password on the network side of the tunnel. |
| prompt enable | Sets up so a user on the network side of the tunnel will be prompted for a password. |
| show | Shows the current configuration. |
| show history | Displays the last 20 commands entered during the current CLI session. |
| write | Stores the current configuration in permanent memory. |
| password (tunnel-accept-password:2) level commands | |
| clrscrn | Clears the screen. |
| exit | Exits to the next higher level. |
| no password | Removes the password so connections will be accepted unchallenged. |
| password <text> | Sets the password required on the network side of the tunnel to begin a connection. |
| prompt disable | Inhibits any prompting for password on the network side of the tunnel. |
| prompt enable | Sets up so a user on the network side of the tunnel will be prompted for a password. |
| show | Shows the current configuration. |
| show history | Displays the last 20 commands entered during the current CLI session. |
| write | Stores the current configuration in permanent memory. |
| password (tunnel-accept-password:1) level commands | |
| clrscrn | Clears the screen. |
| exit | Exits to the next higher level. |
| no password | Removes the password so connections will be accepted unchallenged. |
| password <text> | Sets the password required on the network side of the tunnel to begin a connection. |
| prompt disable | Inhibits any prompting for password on the network side of the tunnel. |
| prompt enable | Sets up so a user on the network side of the tunnel will be prompted for a password. |
| show | Shows the current configuration. |
| show history | Displays the last 20 commands entered during the current CLI session. |
| write | Stores the current configuration in permanent memory. |
| root level commands | |
| clrscrn | Clears the screen. |
| enable | Enters the enable level. |
| exit | Exit from the system |
| iperf <params> | Run iperf with command line parameters passed in quot- |

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| | ed string. |
| ping <host> | Ping destination continuously with 5 second timeout |
| ping <host> <count> | Ping destination n times with 5 second timeout |
| ping <host> <count> <timeout> | Ping destination n times with x timeout (in seconds) |
| show | Show system information |
| show history | Displays the last 20 commands entered during the current CLI session. |
| show lines | Show line information |
| trace route <host> | Trace route to destination |
| trace route <host> <protocol> | Trace route to destination using TCP, ICMP, or UDP |
| rss (config-rss) level commands | |
| clear rss | Clear the RSS Feed data |
| clrscrm | Clears the screen. |
| default max entries | Restores the default number of RSS feed entries. |
| exit | Exits to the configuration level. |
| feed disable | Disables RSS feed. |
| feed enable | Enables RSS feed. |
| max entries <number> | Sets the maximum number of RSS feed entries. |
| persist disable | Disables RSS feed data persistence. |
| persist enable | Enables RSS feed data persistence. |
| show | Displays the current configuration. |
| show history | Displays the last 20 commands entered during the current CLI session. |
| show status | Display the RSS Feed status |
| write | Stores the current configuration in permanent memory. |
| serial (tunnel-serial:3) level commands | |
| clrscrm | Clears the screen. |
| default dtr | Restores default DTR control, asserted while connected. |
| dtr asserted while connected | Asserts DTR whenever a connect or accept mode tunnel connection is active. |
| dtr continuously asserted | Asserts DTR regardless of any connections. |
| dtr truport | Asserts DTR to match remote DSR when connected via Telnet. |
| dtr unasserted | Does not assert DTR. |
| exit | Returns to the tunnel level. |
| show | Displays the current configuration. |
| show history | Displays the last 20 commands entered during the current CLI session. |
| write | Stores the current configuration in permanent memory. |
| serial (tunnel-serial:2) level commands | |
| clrscrm | Clears the screen. |
| default dtr | Restores default DTR control, asserted while connected. |
| dtr asserted while connected | Asserts DTR whenever a connect or accept mode tunnel connection is active. |
| dtr continuously asserted | Asserts DTR regardless of any connections. |

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| dtr truport | Asserts DTR to match remote DSR when connected via Telnet. |
| dtr unasserted | Does not assert DTR. |
| exit | Returns to the tunnel level. |
| show | Displays the current configuration. |
| show history | Displays the last 20 commands entered during the current CLI session. |
| write | Stores the current configuration in permanent memory. |
| serial (tunnel-serial:1) level commands | |
| clrscrn | Clears the screen. |
| default dtr | Restores default DTR control, asserted while connected. |
| dtr asserted while connected | Asserts DTR whenever a connect or accept mode tunnel connection is active. |
| dtr continuously asserted | Asserts DTR regardless of any connections. |
| dtr truport | Asserts DTR to match remote DSR when connected via Telnet. |
| dtr unasserted | Does not assert DTR. |
| exit | Returns to the tunnel level. |
| show | Displays the current configuration. |
| show history | Displays the last 20 commands entered during the current CLI session. |
| write | Stores the current configuration in permanent memory. |
| server (ssh-server) level commands | |
| authorized user <username> <password> | Sets authorized username, password, and optionally RSA and/or DSA public keys |
| clrscrn | Clears the screen. |
| delete all authorized users | Removes all authorized users |
| delete authorized user <username> | Remove an authorized user |
| exit | Exits to the ssh level. |
| host generate dsa 1024 | Generate DSA public and private keys |
| host generate dsa 512 | Generate DSA public and private keys |
| host generate dsa 768 | Generate DSA public and private keys |
| host generate rsa 1024 | Generate RSA public and private keys |
| host generate rsa 512 | Generate RSA public and private keys |
| host generate rsa 768 | Generate RSA public and private keys |
| host keys | Sets RSA or DSA public and/or private keys |
| no host dsa | Removes DSA public and private keys |
| no host rsa | Removes RSA public and private keys |
| show | Show SSH Server settings |
| show authorized user <username> | Show information for an authorized user |
| show history | Displays the last 20 commands entered during the current CLI session. |
| show host dsa | Show full DSA public key |
| show host rsa | Show full RSA public key |
| write | Stores the current configuration in permanent memory. |

| smtp (config-smtp) level commands | |
|---|--|
| clrscrn | Clears the screen. |
| default server port | Restores the SMTP server port to its default. |
| exit | Exits to the configuration level. |
| from address <text> | Sets the From address for email alerts. <text> = email address to place in the From field of the email alert. |
| no from address | Removes the From address for email alerts. |
| no overriding domain | Removes the overriding domain name option. |
| no password | Removes the password. |
| no server address | Removes the SMTP server address. |
| no username | Removes the username. |
| overriding domain <text> | Sets a domain name that will be used when connecting to an SMTP server to send an email alert instead of the device's domain name in EHLO. <text> = domain name to override the current domain name in EHLO. |
| password <text> | Sets the password for logging in to the mail server. |
| server address <text> | Sets an SMTP server address to direct all outbound email messages through a mail server. |
| server port <number> | Sets the SMTP server port. |
| show | Displays the current configuration. |
| show history | Displays the last 20 commands entered during the current CLI session. |
| username <text> | Sets the username for logging in to the mail server. |
| write | Stores the current configuration in permanent memory. |
| snmp (config-snmp) level commands | |
| clrscrn | Clears the screen. |
| exit | Returns to the config level. |
| no system location | Clears the SNMP system location. |
| show | Displays the current configuration. |
| show history | Displays the last 20 commands entered during the current CLI session. |
| show status | Displays the SNMP agent status. |
| snmpd | Enters the next lower level. |
| system location <text> | Sets the SNMP system location. <text> = location of device. |
| traps | Enters the next lower level. |
| write | Stores the current configuration in permanent memory. |
| snmpd (config-snmp-snmpd) level commands | |
| authentication password <text> | Sets password used for authentication for agent. |
| authentication protocol md5 | Uses MD5 for authentication for agent. |
| authentication protocol sha | Uses SHA for authentication for agent. |
| clrscrn | Clears the screen. |
| default authentication protocol | Restores to default SNMPv3 authentication method: MD5 for agent. |
| default privacy protocol | Restores to default SNMPv3 privacy encryption method: DES for agent. |

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| default read community | Restores the SNMP read-only community to default: public |
| default security | Restores to default SNMPv3 security method: Authentication, No Privacy for agent. |
| default system description | Restores the SNMP system description to its default. |
| default system name | Restores the SNMP system name to default: the product name. |
| default version | Restores to default SNMP version v2c for agent. |
| default write community | Clears the SNMP read/write community to default: private |
| exit | Exits to the next higher level. |
| no authentication password | Clears authentication password for agent. |
| no privacy password | Clears privacy password for agent. |
| no system contact | Clears the SNMP system contact. |
| no username | Clears SNMPv3 username for agent. |
| privacy password <text> | Sets password used for privacy encryption for agent. |
| privacy protocol aes | Uses AES for privacy encryption for agent. |
| privacy protocol des | Uses DES for privacy encryption for agent. |
| read community <text> | Sets the SNMP read-only community string. <text> = name of the read-only community string to be set. |
| security authentication and privacy | Authentication and Privacy for agent. |
| security authentication but no privacy | Authentication, No Privacy for agent. |
| security no authentication and no priv | No Authentication, No Privacy for agent. |
| show | Shows the current configuration. |
| show engine id | Displays the SNMP agent engine ID. |
| show history | Displays the last 20 commands entered during the current CLI session. |
| state disable | Disables the SNMP agent. |
| state enable | Enables the SNMP agent. |
| system contact <text> | Sets the SNMP system contact information. <text> = system contact information. |
| system description <text> | Sets the SNMP system description. <text> = description of device. |
| system name <text> | Sets the SNMP system name. <text> = SNMP system name. |
| username <text> | Sets SNMPv3 username for agent. |
| version snmpv1 | Uses SNMPv1 for agent. |
| version snmpv2c | Uses SNMPv2c for agent. |
| version snmpv3 | Uses SNMPv3 for agent. |
| write | Stores the current configuration in permanent memory. |
| write community <text> | Sets the SNMP read-write community string. <text> = name of the read-write community string to be set. |
| ssh (ssh) level commands | |
| client | Enters the SSH Client configuration level. |
| clrscrn | Clears the screen. |
| exit | Exits to the enable level. |
| server | Enters the SSH Server configuration level. |

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| show history | Displays the last 20 commands entered during the current CLI session. |
| write | Stores the current configuration in permanent memory. |
| ssh (config-cli-ssh) level commands | |
| clrscrn | Clears the screen. |
| default max sessions | Restores the default maximum allowed concurrent incoming SSH sessions. |
| default port | Restores the default local port to the SSH server. |
| exit | Exits to the CLI level. |
| max sessions <number> | Sets the maximum allowed concurrent incoming SSH sessions. <number> = number of sessions. |
| port <number> | Sets the local port that the SSH server uses. <number> = local port number. |
| show | Displays the current configuration. |
| show history | Displays the last 20 commands entered during the current CLI session. |
| show statistics | Displays the SSH server statistics. |
| state disable | Disables the SSH Server. |
| state enable | Enables the SSH Server. |
| write | Stores the current configuration in permanent memory. |
| ssl (ssl) level commands | |
| clrscrn | Clears the screen. |
| credentials | Enters the SSL credentials configuration level. |
| exit | Exits to the enable level. |
| show history | Displays the last 20 commands entered during the current CLI session. |
| trusted authorities | Enters the SSL configuration level. |
| write | Stores the current configuration in permanent memory. |
| syslog (config-syslog) level commands | |
| clrscrn | Clears the screen. |
| default remote port | Restores the default syslog remote port. |
| default severity log level | No logging. |
| exit | Returns to the config level. |
| host <text> | Sets the address of the syslog recipient. <text> = IP address or name of the host. |
| no host | Removes the address of the syslog recipient. |
| remote port <number> | Sets the syslog remote port. <number> = number of the remote port used when making a syslog connection. |
| severity log level alert | Log only Alert and more severe events. |
| severity log level critical | Log only Critical and more severe events. |
| severity log level debug | Log all events. |
| severity log level emergency | Log only Emergency events. |
| severity log level error | Log only Error and more severe events. |
| severity log level information | Log only Information and more severe events. |
| severity log level none | No logging. |

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| severity log level notice | Log only Notice and more severe events. |
| severity log level warning | Log only Warning and more severe events. |
| show | Displays the current configuration. |
| show history | Displays the last 20 commands entered during the current CLI session. |
| show statistics | Displays the syslog statistics. |
| state disable | Disables syslog logging. |
| state enable | Enables syslog logging. |
| write | Stores the current configuration in permanent memory. |
| telnet (config-cli-telnet) level commands | |
| authentication disable | No password required for Telnet users. |
| authentication enable | Challenges the Telnet user with a password. |
| clrscrn | Clears the screen. |
| default max sessions | Restores the default maximum allowed concurrent incoming Telnet sessions. |
| default port | Restores the default local port to the Telnet server. |
| exit | Exits to the CLI level. |
| max sessions <number> | Sets the maximum allowed concurrent incoming Telnet sessions. <number> = number of sessions. |
| port <number> | Sets the local port that the Telnet server uses. <number> = local port number. |
| show | Displays the current configuration. |
| show history | Displays the last 20 commands entered during the current CLI session. |
| show statistics | Displays the Telnet statistics. |
| state disable | Disables the Telnet Server. |
| state enable | Enables the Telnet Server. |
| write | Stores the current configuration in permanent memory. |
| terminal 1 (config-terminal:1) level commands | |
| break duration <milliseconds> | Sets how long a break should last when it is being sent to the line. <milliseconds> = number of milliseconds. |
| clrscrn | Clears the screen. |
| default break duration | Restores the break duration to the default value (500 ms). |
| default terminal type | Sets the default terminal type, "UNKNOWN". |
| echo disable | Disables echoing of characters received on the line back to the line. |
| echo enable | Enables echoing of characters received on the line back to the line. |
| exit | Exits to the configuration level. |
| exit connect menu disable | On the login connect menu, removes the menu item allowing the user to exit to the CLI. |
| exit connect menu enable | On the login connect menu, inserts the menu item allowing the user to exit to the CLI. |
| line <line> | Enters the line level. <line> = number of the line (serial port) to be configured. |
| login connect menu disable | Disables the login connect menu, so a user will get the CLI immediately after logging in. |

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| login connect menu enable | Enables the login connect menu, so a user will get the menu rather than the CLI immediately after logging in. |
| no send break | Removes the configured send break character. |
| preview connect menu | Shows the layout of the connect menu with current settings. |
| send break <control> | Sets the optional send break character. <text> = the character. The character may be input as text, control, decimal, or hex. A control character has the form <control>C. A decimal value character has the form \99. A hex value character has the form 0xFF. |
| show | Displays the current configuration. |
| show history | Displays the last 20 commands entered during the current CLI session. |
| terminal <line> | Enters the configure-terminal level. <line> = number of the terminal line (serial port) to be configured. |
| terminal network | Enters the configure-terminal level for the network. |
| terminal type <text> | Sets the terminal type. |
| tunnel <line> | Enters the tunnel level. <line> = number of the tunnel line (serial port) to be configured. |
| write | Stores the current configuration in permanent memory. |
| terminal 2 (config-terminal:2) level commands | |
| break duration <milliseconds> | Sets how long a break should last when it is being sent to the line. <milliseconds> = number of milliseconds. |
| clrscrn | Clears the screen. |
| default break duration | Restores the break duration to the default value (500 ms). |
| default terminal type | Sets the default terminal type, "UNKNOWN". |
| echo disable | Disables echoing of characters received on the line back to the line. |
| echo enable | Enables echoing of characters received on the line back to the line. |
| exit | Exits to the configuration level. |
| exit connect menu disable | On the login connect menu, removes the menu item allowing the user to exit to the CLI. |
| exit connect menu enable | On the login connect menu, inserts the menu item allowing the user to exit to the CLI. |
| line <line> | Enters the line level. <line> = number of the line (serial port) to be configured. |
| login connect menu disable | Disables the login connect menu, so a user will get the CLI immediately after logging in. |
| login connect menu enable | Enables the login connect menu, so a user will get the menu rather than the CLI immediately after logging in. |
| no send break | Removes the configured send break character. |
| preview connect menu | Shows the layout of the connect menu with current settings. |
| send break <control> | Sets the optional send break character. <text> = the character. The character may be input as text, control, decimal, or hex. A control character has the form <control>C. A decimal value character has the form \99. A hex value character has the form 0xFF. |
| show | Displays the current configuration. |

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| show history | Displays the last 20 commands entered during the current CLI session. |
| terminal <line> | Enters the configure-terminal level. <line> = number of the terminal line (serial port) to be configured. |
| terminal network | Enters the configure-terminal level for the network. |
| terminal type <text> | Sets the terminal type. |
| tunnel <line> | Enters the tunnel level. <line> = number of the tunnel line (serial port) to be configured. |
| write | Stores the current configuration in permanent memory. |
| terminal 3 (config-terminal:3) level commands | |
| break duration <milliseconds> | Sets how long a break should last when it is being sent to the line. <milliseconds> = number of milliseconds. |
| clrscrn | Clears the screen. |
| default break duration | Restores the break duration to the default value (500 ms). |
| default terminal type | Sets the default terminal type, "UNKNOWN". |
| echo disable | Disables echoing of characters received on the line back to the line. |
| echo enable | Enables echoing of characters received on the line back to the line. |
| exit | Exits to the configuration level. |
| exit connect menu disable | On the login connect menu, removes the menu item allowing the user to exit to the CLI. |
| exit connect menu enable | On the login connect menu, inserts the menu item allowing the user to exit to the CLI. |
| line <line> | Enters the line level. <line> = number of the line (serial port) to be configured. |
| login connect menu disable | Disables the login connect menu, so a user will get the CLI immediately after logging in. |
| login connect menu enable | Enables the login connect menu, so a user will get the menu rather than the CLI immediately after logging in. |
| no send break | Removes the configured send break character. |
| preview connect menu | Shows the layout of the connect menu with current settings. |
| send break <control> | Sets the optional send break character. <text> = the character. The character may be input as text, control, decimal, or hex. A control character has the form <control>C. A decimal value character has the form \99. A hex value character has the form 0xFF. |
| show | Displays the current configuration. |
| show history | Displays the last 20 commands entered during the current CLI session. |
| terminal <line> | Enters the configure-terminal level. <line> = number of the terminal line (serial port) to be configured. |
| terminal network | Enters the configure-terminal level for the network. |
| terminal type <text> | Sets the terminal type. |
| tunnel <line> | Enters the tunnel level. <line> = number of the tunnel line (serial port) to be configured. |
| write | Stores the current configuration in permanent memory. |
| terminal network (config-terminal:network) level commands | |

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| break duration <milliseconds> | Sets how long a break should last when it is being sent to the line. <milliseconds> = number of milliseconds. |
| clrscrn | Clears the screen. |
| default break duration | Restores the break duration to the default value (500 ms). |
| default terminal type | Sets the default terminal type, "UNKNOWN". |
| echo disable | Disables echoing of characters received on the line back to the line. |
| echo enable | Enables echoing of characters received on the line back to the line. |
| exit | Exits to the configuration level. |
| exit connect menu disable | On the login connect menu, removes the menu item allowing the user to exit to the CLI. |
| exit connect menu enable | On the login connect menu, inserts the menu item allowing the user to exit to the CLI. |
| line <line> | Enters the line level. <line> = number of the line (serial port) to be configured. |
| login connect menu disable | Disables the login connect menu, so a user will get the CLI immediately after logging in. |
| login connect menu enable | Enables the login connect menu, so a user will get the menu rather than the CLI immediately after logging in. |
| no send break | Removes the configured send break character. |
| preview connect menu | Shows the layout of the connect menu with current settings. |
| send break <control> | Sets the optional send break character. <text> = the character. The character may be input as text, control, decimal, or hex. A control character has the form <control>C. A decimal value character has the form \99. A hex value character has the form 0xFF. |
| show | Displays the current configuration. |
| show history | Displays the last 20 commands entered during the current CLI session. |
| terminal <line> | Enters the configure-terminal level. <line> = number of the terminal line (serial port) to be configured. |
| terminal network | Enters the configure-terminal level for the network. |
| terminal type <text> | Sets the terminal type. |
| tunnel <line> | Enters the tunnel level. <line> = number of the tunnel line (serial port) to be configured. |
| write | Stores the current configuration in permanent memory. |
| traps (config-snmp-traps) level commands | |
| authentication password <text> | Sets password used for authentication for traps. |
| authentication protocol md5 | Uses MD5 for authentication for traps. |
| authentication protocol sha | Uses SHA for authentication for traps. |
| clrscrn | Clears the screen. |
| community <text> | Sets the SNMP trap community string. <text> = name of the trap community string to be set. |
| default authentication protocol | Restores to default SNMPv3 authentication method: MD5 for traps. |
| default community | Restores the SNMP trap community to default: public |

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| default privacy protocol | Restores to default SNMPv3 privacy encryption method: DES for traps. |
| default security | Restores to default SNMPv3 security method: Authentication, No Privacy for traps. |
| default version | Restores to default SNMP version v2c for traps. |
| exit | Exits to the next higher level. |
| no authentication password | Clears authentication password for traps. |
| no primary destination | Deletes the primary SNMP trap host. |
| no privacy password | Clears privacy password for traps. |
| no secondary destination | Deletes the secondary SNMP trap host. |
| no username | Clears SNMPv3 username for traps. |
| primary destination <text> | Sets the primary SNMP trap host. <text> = IP address or hostname of SNMP trap receiver. |
| privacy password <text> | Sets password used for privacy encryption for traps. |
| privacy protocol aes | Uses AES for privacy encryption for traps. |
| privacy protocol des | Uses DES for privacy encryption for traps. |
| secondary destination <text> | Sets the secondary SNMP trap host. <text> = IP address or hostname of SNMP trap receiver. |
| security authentication and privacy | Authentication and Privacy for traps. |
| security authentication but no privacy | Authentication, No Privacy for traps. |
| security no authentication and no priv | No Authentication, No Privacy for traps. |
| show | Shows the current configuration. |
| show history | Displays the last 20 commands entered during the current CLI session. |
| username <text> | Sets SNMPv3 username for traps. |
| version snmpv1 | Uses SNMPv1 for traps. |
| version snmpv2c | Uses SNMPv2c for traps. |
| version snmpv3 | Uses SNMPv3 for traps. |
| write | Stores the current configuration in permanent memory. |
| trusted authorities (ssl-auth) level commands | |
| add | Adds an Authority Certificate. |
| clrscm | Clears the screen. |
| exit | Exits to the ssl level. |
| no intermediate authority <cert> | Removes an Intermediate Authority Certificate. <cert> = index displayed by "show authority" command. |
| no trusted authority <cert> | Removes a Trusted Authority Certificate. <cert> = index displayed by "show authority" command. |
| show | Displays Authority Certificate Information. |
| show history | Displays the last 20 commands entered during the current CLI session. |
| write | Stores the current configuration in permanent memory. |
| tunnel 1 (tunnel:1) level commands | |
| accept | Enters the accept level for this tunnel. |
| auto show statistics | show connection statistics |
| clear counters | Zeros all tunnel counters |

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| clrscrn | Clears the screen. |
| connect | Enters the connect level for this tunnel. |
| disconnect | Enters the disconnect level for this tunnel. |
| exit | Exits to the enable level. |
| line <line> | Enters the line level. <line> = number of the line (serial port) to be configured. |
| modem | Enters the modem level for this tunnel. |
| no clear counters | Unzeros all tunnel counters |
| packing | Enters the packing level for this tunnel. |
| serial | Enters the serial level for this tunnel. |
| show history | Displays the last 20 commands entered during the current CLI session. |
| show statistics | show connection statistics |
| terminal <line> | Enters the configure-terminal level. <line> = number of the terminal line (serial port) to be configured. |
| terminal network | Enters the configure-terminal level for the network. |
| tunnel <line> | Enters the tunnel level. <line> = number of the tunnel line (serial port) to be configured. |
| write | Stores the current configuration in permanent memory. |
| tunnel 2 (tunnel:2) level commands | |
| accept | Enters the accept level for this tunnel. |
| auto show statistics | show connection statistics |
| clear counters | Zeros all tunnel counters |
| clrscrn | Clears the screen. |
| connect | Enters the connect level for this tunnel. |
| disconnect | Enters the disconnect level for this tunnel. |
| exit | Exits to the enable level. |
| line <line> | Enters the line level. <line> = number of the line (serial port) to be configured. |
| modem | Enters the modem level for this tunnel. |
| no clear counters | Unzeros all tunnel counters |
| packing | Enters the packing level for this tunnel. |
| serial | Enters the serial level for this tunnel. |
| show history | Displays the last 20 commands entered during the current CLI session. |
| show statistics | show connection statistics |
| terminal <line> | Enters the configure-terminal level. <line> = number of the terminal line (serial port) to be configured. |
| terminal network | Enters the configure-terminal level for the network. |
| tunnel <line> | Enters the tunnel level. <line> = number of the tunnel line (serial port) to be configured. |
| write | Stores the current configuration in permanent memory. |
| tunnel 3 (tunnel:3) level commands | |
| accept | Enters the accept level for this tunnel. |
| auto show statistics | show connection statistics |

| | |
|---------------------------------------|---|
| clear counters | Zeros all tunnel counters |
| clrscrn | Clears the screen. |
| connect | Enters the connect level for this tunnel. |
| disconnect | Enters the disconnect level for this tunnel. |
| exit | Exits to the enable level. |
| line <line> | Enters the line level. <line> = number of the line (serial port) to be configured. |
| modem | Enters the modem level for this tunnel. |
| no clear counters | Unzeros all tunnel counters |
| packing | Enters the packing level for this tunnel. |
| serial | Enters the serial level for this tunnel. |
| show history | Displays the last 20 commands entered during the current CLI session. |
| show statistics | show connection statistics |
| terminal <line> | Enters the configure-terminal level. <line> = number of the terminal line (serial port) to be configured. |
| terminal network | Enters the configure-terminal level for the network. |
| tunnel <line> | Enters the tunnel level. <line> = number of the tunnel line (serial port) to be configured. |
| write | Stores the current configuration in permanent memory. |
| xml (xml) level commands | |
| clrscrn | Clears the screen. |
| exit | Exits to the enable level. |
| secret xcr dump | Dump XML configuration containing secrets to the console |
| secret xcr dump <group list> | Dump specified XML configuration containing secrets to the console |
| secret xcr export <file> | Save XML configuration containing secrets to a file |
| secret xcr export <file> <group list> | Save specified XML configuration containing secrets to a local file |
| show history | Displays the last 20 commands entered during the current CLI session. |
| write | Stores the current configuration in permanent memory. |
| xcr dump | Dump XML configuration to the console |
| xcr dump <group list> | Dump specified XML configuration to the console |
| xcr export <file> | Save XML configuration to a file |
| xcr export <file> <group list> | Save specified XML configuration to a local file |
| xcr import <file> | Load XML configuration from a local file |
| xcr import <file> <group list> | Load specified XML configuration from a local file |
| xcr list | List XML Configuration Record groups to the console |
| xsr dump | Dump XML Status Records to the console |
| xsr dump <group list> | Dump specified XML Status Records to the console |
| xsr export <file> | Save XML Status Record to a file |
| xsr export <file> <group list> | Save specified XML Status Record to a local file |
| xsr list | List XML Status Record groups to the console |